

**27<sup>TH</sup> INTERNATIONAL  
CONGRESS FOR  
CONSERVATION BIOLOGY**

**4<sup>TH</sup> EUROPEAN CONGRESS  
FOR CONSERVATION  
BIOLOGY**



**ICCB  
ECCB  
2015**

**MISSION  
BIODIVERSITY:  
CHOOSING  
NEW PATHS FOR  
CONSERVATION**

**MONTPELLIER,  
FRANCE  
2-6 AUGUST 2015**



Society for Conservation Biology



# MONTPELLIER, FRANCE

## 27<sup>TH</sup> INTERNATIONAL CONGRESS FOR CONSERVATION BIOLOGY

## 4<sup>TH</sup> EUROPEAN CONGRESS FOR CONSERVATION BIOLOGY

The International Congress for Conservation Biology and European Congress for Conservation Biology (ICCB-ECCB) is a forum for addressing conservation challenges and for presenting new research and developments in conservation science and practice. ICCB-ECCB connects our global community of conservation professionals and is the major networking outlet for anyone interested in conservation.

The meeting theme, Mission Biodiversity: Choosing new paths for conservation, is a response to indications that many traditional methods for conserving biodiversity have proven unsuccessful. It emphasizes that rapid and ongoing biophysical and societal changes affect the way we do science and practice conservation today. At ICCB-ECCB we will ask very different questions than what we asked years ago. Increasingly we work with people from different disciplines such as computer science, economics, and social science, among others. We face different challenges like new pathogens and invasive species, new drivers of habitat loss (e.g. oil palm in West Africa), and the illegal trade of species and their parts on the internet.

To address these challenges and others, we are developing new methods and tools to use with on-the-ground conservation, like drones and new remote-sensing technology for monitoring and conservation enforcement, and citizen science projects for collecting data and engaging the public. The theme for ICCB-ECCB reflects these changes and our need to keep up with and anticipate changes for better conservation science and practice.



Society for Conservation Biology

### ABOUT THE SOCIETY FOR CONSERVATION BIOLOGY

SCB is a global community of conservation professionals with members working in more than 100 countries who are dedicated to advancing the science and practice of conserving Earth's biological diversity. The Society's membership comprises a wide range of people interested in the conservation and study of biological diversity: resource managers, educators, government and private conservation workers, and students.

SCB publishes the flagship peer-reviewed journal of the field, *Conservation Biology*, and the cutting-edge online journal, *Conservation Letters*. The Society provides many benefits to its community, including local, regional, and global networking, an active conservation-policy program, and free online access to publications for members in developing countries. SCB also administers a postdoctoral program, the David H. Smith Conservation Research Fellowship Program, sponsored by the Cedar Tree Foundation.



# CONGRESS HISTORY

2013 BALTIMORE, MARYLAND, USA

11 AUCKLAND, NEW ZEALAND

10 EDMONTON, ALBERTA, CANADA

09 BEIJING, CHINA

08 CHATTANOOGA, TENNESSEE, USA

07 PORT ELIZABETH, SOUTH AFRICA

06 SAN JOSE, CALIFORNIA, USA

05 UNIVERSIDADE DE BRASILIA, BRASILIA, BRAZIL

04 COLUMBIA UNIVERSITY, NEW YORK, NEW YORK, USA

03 UNIVERSITY OF MINNESOTA, DULUTH, MINNESOTA, USA

02 UNIVERSITY OF KENT AT CANTERBURY, UNITED KINGDOM

01 UNIVERSITY OF HAWAII, HILO, HAWAII, USA

00 UNIVERSITY OF MONTANA, MISSOULA, MONTANA, USA

1999 UNIVERSITY OF MARYLAND, COLLEGE PARK, COLLEGE PARK, MARYLAND, USA

98 MACQUARIE UNIVERSITY, SYDNEY, AUSTRALIA

97 VICTORIA UNIVERSITY, VICTORIA, BRITISH COLUMBIA, CANADA

96 BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND, USA

95 COLORADO STATE UNIVERSITY, FORT COLLINS, COLORADO, USA

94 UNIVERSITY OF GUADALAJARA, JALISCO, MEXICO

93 ARIZONA STATE UNIVERSITY, TEMPE, ARIZONA, USA

92 VIRGINIA TECH, BLACKSBURG, VIRGINIA, USA

91 UNIVERSITY OF WISCONSIN-MADISON, MADISON, WISCONSIN, USA

90 UNIVERSITY OF FLORIDA, GAINESVILLE, FLORIDA, USA

89 UNIVERSITY OF TORONTO, TORONTO, ONTARIO, CANADA

88 UNIVERSITY OF CALIFORNIA, DAVIS, DAVIS, CALIFORNIA, USA

87 MONTANA STATE UNIVERSITY, BOZEMAN, MONTANA, USA



In 2015, ICCB takes place in Montpellier, France where Agropolis International, our partners in this Congress, gathers many teams, departments, research units and laboratories working in the fields of agriculture, food, biodiversity, the environment and societies with 2,700 researchers and more than 600 Ph.D students. The biodiversity research community of Montpellier represents an exceptional group, with 31 research units pooling over 1,200 scientists and 400 Ph.D candidates. Ecology, evolution and social science research that is carried out spans all biodiversity science fields, with substantial interest in terrestrial and marine environments in Mediterranean and tropical regions.





Society for Conservation Biology



## ICCB-ECCB HOURS

### Sunday 2 August

- Exhibition Set up: 8:00-16:00
- Registration: 14:00-20:30

### Monday 3 August

- Registration & Exhibition: 7:30-19:30
- Congress: 9:00-19:30 pm

### Tuesday 4 August

- Registration & Exhibition: 7:30 am to 20:00
- Congress: 8:30 am to 19:30

### Wednesday 5 August

- Registration & Exhibition: 8:00-19:30
- Conference: 8:30-19:30

### Thursday 6 August

- Registration: 8:30-19:30
- Exhibition: 8:30 am to 15:30 / dismantling: 15:30-18:30
- Conference: 9:00 am to 7:30 pm

## SCB MEMBERS' MEETING

### SCB Members' Meeting and Student Awards Presentation



Society for Conservation Biology

*Don't miss the most important meeting of the year for SCB members!*

6 August  
17:15-18:30  
Berlioz Auditorium

Come help decide the future direction of SCB, meet the SCB Board of Governors, learn how you can get involved, and participate in a discussion on the results of the SCB Members Survey

Not a member? Come find out what we're all about at the Members' Meeting! We'd love to get to know you and for you to see what makes SCB the best society for you!



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## WELCOME TO MONTPELLIER



Society for Conservation Biology

Bonjour!, and welcome to Montpellier and the 27<sup>th</sup> International Congress for Conservation Biology and the 4<sup>th</sup> European Congress for Conservation Biology (ICCB-ECCB). SCB is excited to host nearly 2,000 participants from 98 countries, our largest meeting ever!

Just as Montpellier is steeped in the history of human habitation in the Mediterranean Basin, it is also home to many researchers and university students who are concerned about the loss of global biodiversity and have entered careers exploring science based, conservation-oriented solutions. We look forward to exploring the aquatic, terrestrial and agricultural systems of this historic region as we address the most pressing challenges for biodiversity and examine new paths for achieving conservation success.

The imperative of the Congress theme “Mission Biodiversity: Choosing New Paths for Conservation” has never been more important to sustaining life on Earth.

The theme is indicative of the changing face of the field of conservation biology. While the fundamental reason for forming the SCB – to overcome the biodiversity crisis – is still relevant, much has changed since SCB was founded in 1985. Conservation biology has matured into a highly interdisciplinary field, integrating the social, economic and ecological sciences and increasingly focusing on the impacts of conservation interventions on wildlife and on human well-being. This Congress will highlight the relevance of these disciplinary synergies with sessions such as conservation sociology and psychology, citizen science, and conservation and traditional knowledge, to name a few.

SCB continues to advocate for the integration of science into policy and management, while advancing new tools and methods of engagement with the communities where SCB members work and live. The presentations in this Congress will demonstrate how far we have come since our first meeting in 1987. Today our work is as much a response to environmental crises as it is an innovative approach that enables ecosystems to recover, governments to be proactive in the protection and management of resources, and scientists to use their data, skills and knowledge to engage in communications and public discourse.

On behalf of the Local Organizing Committee and the SCB Board and Staff, we urge you to engage with one another, with journalists and with the Montpellier community while you are here. And don't forget to take advantage of all the delicacies the south of France has to offer—Camembert, baguettes, croissants and wine, and so much more. Encore une fois, bienvenue à Montpellier!

*James Watson, SCB President 2015-2017*  
*Geri Unger, SCB Executive Director*



*James Watson, SCB President*



*Geri Unger, SCB Executive Director*







## SCB EUROPE WELCOMES YOU TO ICCB-ECCB

**Piero Visconti, President of SCB Europe**

It is with great pleasure that I welcome you to the first ever joint meeting of the International Congress for Conservation Biology and the European Congress for Conservation Biology (ICCB-ECCB).

I am delighted that we have put together such an exciting and diverse programme with more than 900 talks and 740 posters and delegates from 98 countries. The congress features 10 parallel sessions every day, and 146 sessions in total over the four days!

The conference programme is packed with dozens of workshops and round table discussions, making it unique for its large offerings of interactive sessions. We expect these to be conducive to networking and partnerships between conservation professionals and students, and we look forward to seeing the outcomes of conservation initiatives conceived in Montpellier. Make sure you take advantage of the opportunities to engage in our lunch-time and evening sessions.

Don't forget to follow @ICCB\_ECCB for live updates on the conference and the hashtag #ICCB2015 for live tweets of talks and events. Finally, stay up to date with us by following @SCBEurope.

The challenges and opportunities faced by conservation in Europe will feature prominently in the scientific programme. SCB Europe is extremely active at the science/policy interface and welcomes everyone interested in conservation in Europe to participate in our social meeting on Wednesday evening at 18.30. The Section board will be presenting exciting opportunities available for SCB Europe members to foster their career, and make an impact in conservation. Come along to hear more about it, and to help SCB make a difference for conservation in Europe.

I am honoured to have chaired the Scientific Committee and to represent the conference host Section. I am grateful to the 70 members of the Scientific Committee, and the Europe Section Board, who volunteered so much of their time and fundamentally contributed to making this conference a success.

I wish you a productive and successful conference.

Piero Visconti  
Chair of the Scientific Committee  
President of SCB Europe



*Piero Visconti, President,  
SCB Europe Section*



# SCB AND EUROPE SECTION BOARDS AND SCB STAFF

## SCB Board of Governors

Stephen Awoyemi	Richard Kingsford
Karen Beard	Rurik List
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Ahimsa Campos-Arceiz	Rodrigo Medellín
Carlos Carroll	Mike Mascia
Kate Christen	Chris Parsons
John Cigliano	Nathalie Pettorelli
Heather DeCaluwe	Sarah Reed
Eddie Game	Piero Visconti
Jacqueline Grant	James Watson
Nigella Hillgarth	

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## SCB Board of Governors Committee

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Ron Abrams  
Emily Darling  
Leo Douglas  
Bengt Gunnar Jonsson  
David Johns  
Carolyn Lundquist  
Sadie Ryan  
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## SCB Europe Section Board of Directors

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Executive Director



# ICCB-ECCB ORGANIZING COMMITTEE

## Executive Committee

Geri Unger, SCB Executive Director  
Chris Parsons, SCB Conference Committee Chair  
Piero Visconti, SCB Europe President, Scientific Committee Chair

## Meeting Partners



Bernard Hubert, President of Agropolis International  
Jean-François Silvain, President of the French Foundation for Research on Biodiversity (FRB)

## Conference Coordinator

Laure Cugniere

## Organisation Representatives

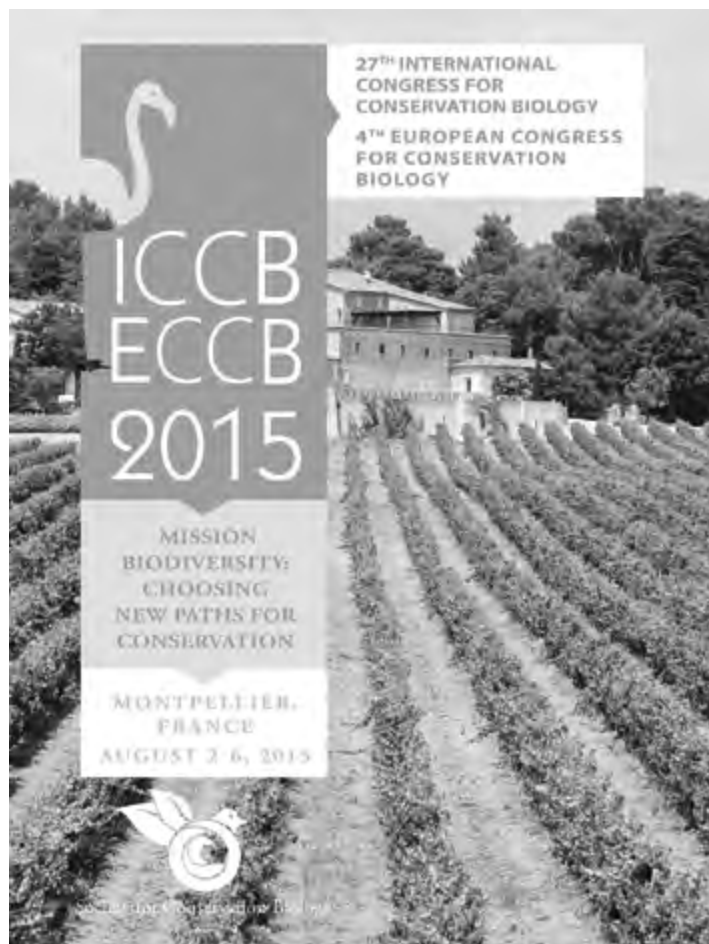
Lauren Bailey, SCB Development Coordinator  
Olivier Gimenez, Senior Scientist, French National Center for Scientific Research (CNRS)  
Matt Herbert, SCB Membership & Communications Assistant  
Lauren Krizel, SCB Operations Manager  
Raphael Mathevet, French National Center for Scientific Research (CNRS), SCB Europe  
Nathan Spillman, SCB Marketing & Communications Manager

## Meeting Management

Celine Brignon, Europa Organisation  
Isabelle Chaffaut, Agropolis International  
Vincent Grimaldi, Europa Organisation  
Bertrand Pantz, Europa Organisation  
Anne-Marie Le Bastard, French Foundation for Research on Biodiversity (FRB)  
Nathalie Villemejeanne, Agropolis International

## Other Volunteers

Many others contributed to the organization of ICCB-ECCB, including the following members of the Social Media Committee: Bajomi Bálint, Cheli Cresswell, Laure Cugniere, Stephanie Januchowski-Hartley, Aidin Niamir, Nathan Spillman, Piero Visconti. Sarah Dalrymple was instrumental in organizing the Student Awards Competition and Aidin Niamar expertly organized the ICCB-ECCB Travel Awards.







## ACKNOWLEDGMENTS FROM THE SCIENTIFIC COMMITTEE

The 27<sup>th</sup> International Congress for Conservation Biology and 4<sup>th</sup> European Congress for Conservation Biology is the largest organized meeting in the history of SCB. The scientific program features a record 60 symposia, including more than 400 talks; 76 contributed sessions, containing ~425 presentations; and more than 700 poster presentations. In total, the Scientific Committee reviewed close to 2,500 abstracts. ICCB-ECCB also includes more than 30 lunchtime and evening roundtables and workshops and 15 pre-congress and post-congress training sessions. Needless to say, a program of this size would not have been possible without the contributions of our Scientific Committee! Their hard work is appreciated and we would like to recognize them here.



### **Piero Visconti**

Chair, ICCB-ECCB  
Scientific Committee

### **Co-Chairs**

Edward Game  
Raphaël Mathevet  
Marit Wilkerson

### **Abstract and Proposal Reviewers**

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Jean-Cristophe Vie

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There are undoubtedly individuals not listed here who contributed their time and effort to make this conference successful, including those who are volunteering at the congress. To anyone we may have missed: your hard work is greatly appreciated and we are fortunate to have you as part of the team that put this congress together.



# SCB SERVICE AWARDS

The Society for Conservation Biology is pleased to honor seven individuals for their outstanding contributions to advancing the science and practice of conserving Earth's biological diversity. Recipients of the 2015 awards were nominated by members of SCB, selected by the Awards Committee, and approved by the Board of Governors.



**The awards will be presented at the Opening Ceremony on Sunday, 2 August at 18:00 in Le Corum (Pasteur room).**

## Early Career Conservationist Award

Honors the achievements in conservation by professionals early in their careers (no more than 10 years since leaving school).

**Stacy Jupiter.** Stacy Jupiter is the Melanesia Program Director for the Wildlife Conservation Society, based out of Suva, Fiji, where she previously directed WCS's Fiji Country Program. Stacy's work in Oceania focuses on understanding the impacts of human activities on linked tropical coastal ecosystems and ecosystem services, and the effectiveness of local management in achieving conservation, livelihood and well-being outcomes. In working with local communities and governments, Stacy deeply recognizes the importance of incorporating

*“It is a great honour to be recognized for my work in Oceania, but in truth I have mostly just been a conduit delivering information to local communities and governments faced with tough decisions about managing a myriad of threats affecting their biodiversity and livelihoods. It has been a privilege to interact with these decision-makers across the Pacific who are the true champions of biodiversity and stewards of the Earth's resources.”*

— Stacy Jupiter, Melanesia Program Director for the Wildlife Conservation Society

local knowledge and traditional practice and beliefs into management planning.

## Edward T. LaRoe III Memorial Award

Recognizes the innovative application of science to resource management and policy.

**Sue Miller-Taei.** For more than 30 years, Sue Miller Taei has lived and worked in the South Pacific region, where she's designed and led regional and site conservation initiatives for cetaceans, dugongs, turtles, invasive species, birds, large and small scale protected areas. In addition, Sue worked with Pacific Island states notably as a lead technical adviser for the region's first large scale marine protected area – the 400,000 sq km Phoenix Islands Protected Area in Kiribati. Since 2005, Sue has led the development of Conservation International's Pacific Islands Marine programme and is currently the executive director of the New Zealand and Pacific Islands and Ocean Programme based at the University of Auckland.

## Distinguished Service Awards

Recognizes individuals, groups or institutions for distinguished service in any field associated with conservation biology and whose work has furthered the mission of SCB.

**IUCN Red List Committee.** Accepting this award is Mike Hoffman, a senior scientist with the IUCN Species Survival Commission.

For more than 50 years, the IUCN Red List of Threatened Species has served as the world's most comprehensive source of information on the conservation status of plant, animal and fungi species. The Red List is a rich compendium of information on species taxonomy, ecology, geographic distribution, population trends, threats, ongoing and required conservation actions. This information is captured in individual 'assessments' which indicate whether a species is threatened or not. There are now over 74,000 species listed. The Red List is used to inform and influence many different sectors of society. It enables biodiversity needs to be factored into decision-making processes, including:

informing policy, measuring trends and impact, influencing resource allocation, improving awareness and education, scientific research. It is fair to say that without the voluntary work of the Red List committee and the many thousands of experts in the Red List specialist groups, doing effective species conservation would be impossible.

**Elsa Cabrera.** Elsa Cabrera is the founder and CEO of Centro de

Conservacion Cetacea, Chile. She is recognized for outstanding achievements in marine conservation, through the adoption of a community-based conservation model, a whale sanctuary in Chile, and conservation policies at international fora.

**Kerry Sink.** Kerry Sink is the Marine Program Manager at the South African National Biodiversity Institute. She was chosen for this award for absolutely outstanding leadership and self-sacrifice in mainstreaming marine biodiversity conservation research into South Africa's development planning, policy, management and industrial arenas.

**John Woinarski.** John Woinarski heads the Biodiversity Conservation division of Australia's Northern Territory Government environment department. He was given the award for his monumental contributions to knowledge and management of the north Australian biota. Most recently his work was instrumental in revealing the catastrophic decline in north Australian mammals and implementing strategies to reverse it.





## ICCB-ECCB SPONSORS



### GOLD SPONSORS

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[wiley.com](http://wiley.com)



**The Région Languedoc-Roussillon** is the official council for the Languedoc Roussillon region in southern France. The council manages and administers policies that affect economic, social and cultural development in the region.

[laregion.fr](http://laregion.fr)

### SILVER SPONSORS



**The Rufford Foundation.** Rufford Small Grants for Nature Conservation (RSGs) are aimed at small conservation programmes and pilot projects.

[ruffordsmallgrants.org](http://ruffordsmallgrants.org)



**Montpellier Méditerranée Métropole.** With 31 towns and more than 400,000 inhabitants, Montpellier Méditerranée Métropole participates in extensive communal grouping movement, urban and suburban, engaged in all of France. [montpellier3m.fr](http://montpellier3m.fr)



**LabEx CeMEB (Centre Méditerranéen de l'Environnement et de la Biodiversité).** The LabEx CeMEB (Mediterranean Centre for the Environment and Biodiversity) is a collection of nine research units in the Montpellier area. The research focuses on the dynamics and functioning of biodiversity and ecosystems in the context of marked environmental change, particularly induced by human activities. [labex-cemeb.org](http://labex-cemeb.org)



**Fonds Français pour l'Environnement Mondial (FFEM).** The FFEM (the French Global Environment Facility/Fonds Français pour l'Environnement Mondial) has been working to promote protection of the global environment in developing countries since it was established by the French government in 1994. [ffem.fr](http://ffem.fr)





## ICCB-ECCB SPONSORS (CONTINUED)

### BRONZE SPONSORS



**NASA** uses the vantage point of space to increase our understanding of our home planet, improve lives, and safeguard our future. We monitor Earth's vital signs from land, air and space with a fleet of satellites and ambitious airborne and ground-based observation campaigns. NASA develops new ways to observe and study Earth's interconnected natural systems with long-term data records. The agency freely shares this unique knowledge and works with institutions around the world.

[nasa.gov](http://nasa.gov)



**CNRS INEE.** The National Centre for Scientific Research is a public research organization (public scientific and technological, under the supervision of the Ministry of National Education, Higher Education and Research). It produces knowledge and puts this knowledge at the service of society. CNRS is active in all fields of knowledge, based on over 1,100 research units and service. With 20 Nobel laureates and 12 of the Fields Medal, the CNRS has a long tradition of excellence. Every year CNRS is awarded the gold medal, considered the highest French scientific distinction. [cnrs.fr/inee](http://cnrs.fr/inee)



**Vodokanal of St. Petersburg's** mission is to provide high-quality water and wastewater services to customers, while taking care of the environment and creating a responsible attitude to water resources. [vodokanal.spb.ru/en](http://vodokanal.spb.ru/en)



**Agropolis Fondation** is a French scientific foundation established in 2007 to promote and support high-level research and higher education (training-through-research) as well as to broaden international research partnerships in agricultural sciences and sustainable development research. It supports projects with fellowships, doctoral and post-doctoral grants and other awards that enable leading and promising international scientists to work with the Foundation's scientific network in Montpellier thereby facilitating knowledge exchange and international partnerships. [agropolis-fondation.fr/fr/accueil](http://agropolis-fondation.fr/fr/accueil)



**The City of Montpellier** is the host city to the 2015 ICCB-ECCB. Located in the south of France, it is the economic and cultural capital for the Languedoc Roussillon region. [montpellier.fr/](http://montpellier.fr/)

# OXFORD

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AGIR pour la  
BIODIVERSITÉ

**Agir pour la Biodiversité.** The French MAB Committee leads a working group on issues of education and training in areas of interest biosphere reserves: biodiversity, sustainable development, land management. Teachers from primary, secondary and agricultural education, the official representatives of educational services of biosphere reserves, representatives of associations, researchers will share their experiences.

[agirpourlabiodiversite.fr/](http://agirpourlabiodiversite.fr/)



**InBIO**—Research Network In Biodiversity and Evolutionary Biology—is an Associate Laboratory that results from a collaborative partnership between the Research Center in Biodiversity and Genetic Resources (CIBIO) and the Center for Applied Ecology Prof. Baeta Neves (CEABN), with the mission of conducting top level basic and applied research on biodiversity and evolution.

[inbio.pt/homepage](http://inbio.pt/homepage)



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The Royal Society is a self-governing Fellowship of many of the world's most distinguished scientists drawn from all areas of science, engineering, and medicine. The publishing society

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[royalsocietypublishing.org](http://royalsocietypublishing.org)



Institut de recherche  
pour le développement

### **Institut de recherche pour le développement - IRD.**

The Institut de recherche pour le développement (IRD) is a French research organization, original and unique on the European development research stage. Emphasizing interdisciplinarity, the IRD has focused on research for over 65 years on the relationship between man and its environment. Its research, training and innovation activities are intended to contribute to the social, economic and cultural development around the world.

[en.ird.fr/](http://en.ird.fr/)



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/ engineering and health, economy and environment, law and information technology, etc.). [umontpellier.fr](http://umontpellier.fr)



**NHBS** began as the Natural History Book Service in London in 1985 with a catalogue of around 500 ornithology books. Our bi-annual newspaper-style catalogues of natural history books are a thing of the past, but are still fondly remembered by many of our customers. We offer the world's largest selection of wildlife, science and conservation books – our book catalogue includes more than 122,000 individual titles, from large and small publishers, in many different languages, and sourced from all over the world.

[nhbs.com](http://nhbs.com)



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CIRAD, the French agricultural research and international cooperation organization working for the sustainable development of tropical and Mediterranean regions.

[cirad.fr/en/home-page](http://cirad.fr/en/home-page)

**Numerous anonymous sponsors also made generous contributions but wished not to be recognized. We thank them for their support!**

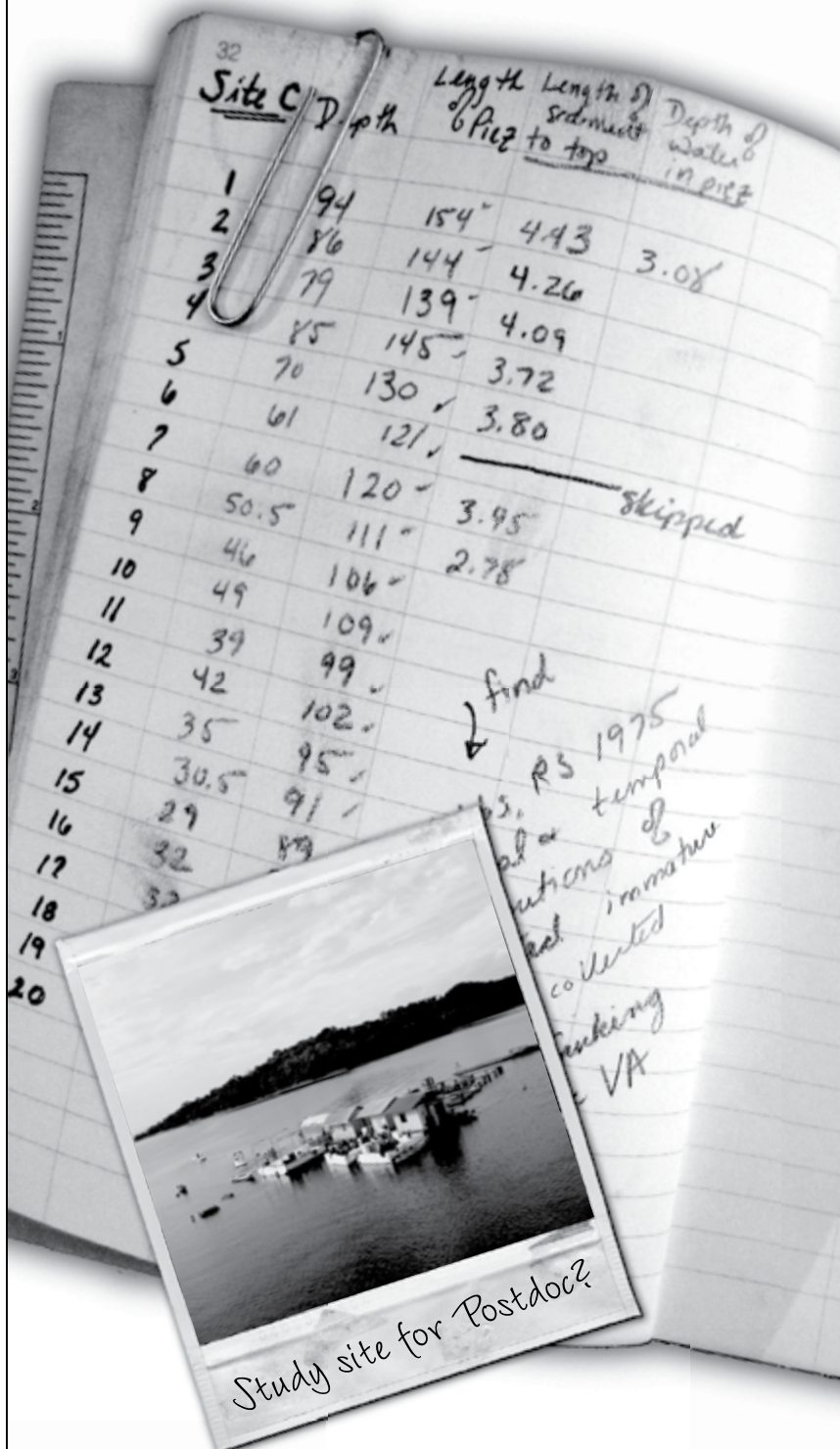


# Smith Fellows



David H. Smith Postdoctoral Fellowship Program | [www.smithfellows.org](http://www.smithfellows.org)

A partnership between the Cedar Tree Foundation  
and the Society for Conservation Biology



→ Apply now!

Past Smith Fellows conducted research in these conservation biology topic areas:

- Invasives
- Fire Ecology
- Freshwater Ecology
- Marine Ecology
- Climate Change
- Ecoregional Planning
- Avian Ecology
- Social Science
- Genetics
- Forestry

due: 11 September 2015

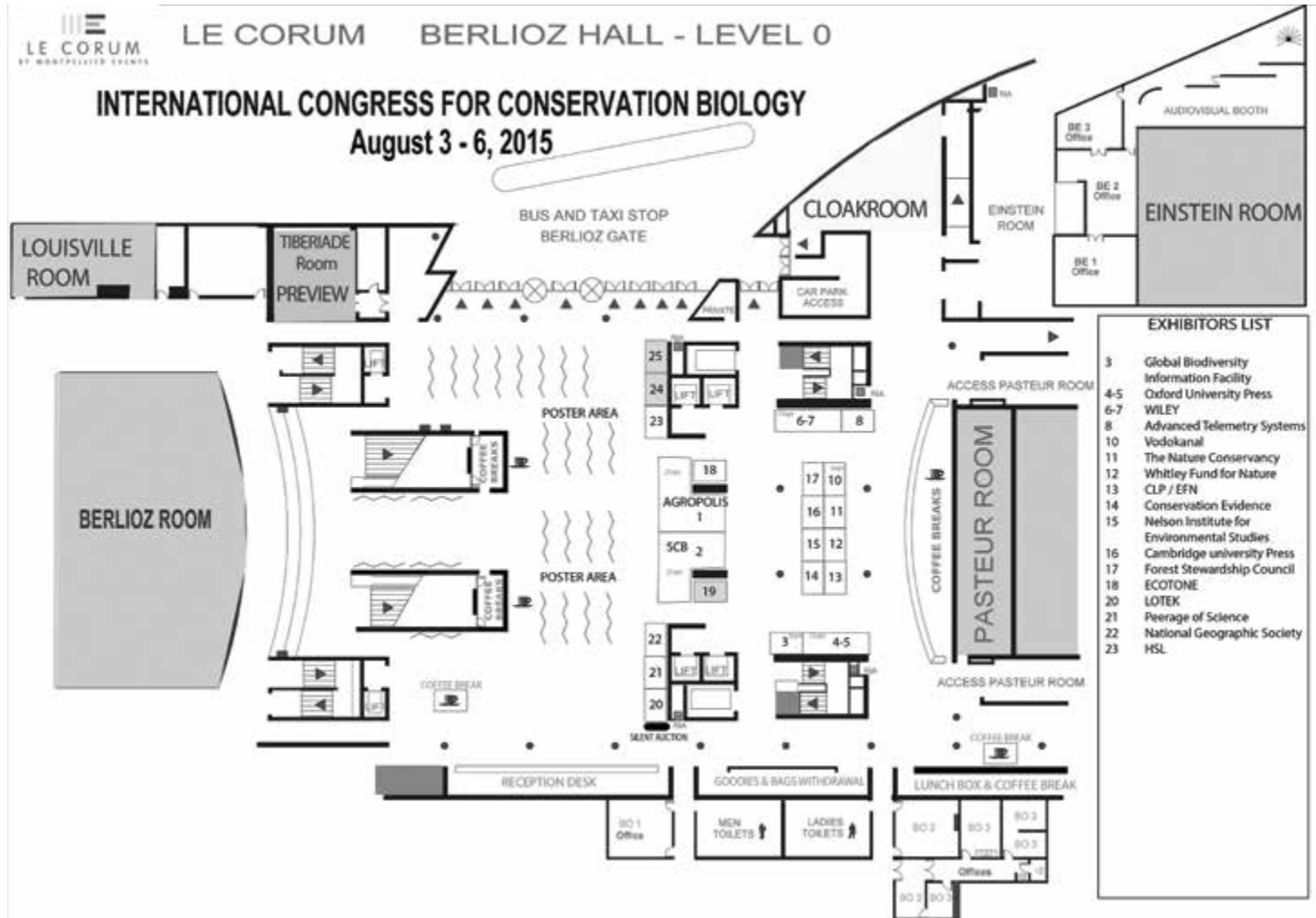
The Smith Fellows Program provides two years of post-doctoral support to outstanding early-career scientists affiliated with a United States institution and can begin in early to mid 2016. Applications for the Smith Fellows Class of 2016 are due **11 September 2015**. Visit [www.smithfellows.org](http://www.smithfellows.org) for proposal guidelines and direct questions to [smithinfo@smithfellows.org](mailto:smithinfo@smithfellows.org).





#ICCB2015   

# EXHIBIT HALL MAP



## ICCB-ECCB EXHIBITORS



We welcome the following exhibitors to the 27th ICCB, and thank them for their continued support:



### **Agropolis International/French Foundation for Research on Biodiversity** Booth 1

The Association Agropolis International was founded in Montpellier in 1986 by the research and higher education institutes working in the field of agriculture, food, biodiversity and environment, with the support of government and local authorities. This platform is open to the development of the mediterranean and tropical regions; it also gathers a large range of stakeholders and partners involved in economic development.

[agropolis.org](http://agropolis.org)

FRB, the French Foundation for Research on Biodiversity, is a science-society interface addressing the scientific challenges in biodiversity areas.

Thanks to the joint work of its scientific council and stakeholders advisory council, FRB has established strategy and priorities for the French Research on biodiversity and regularly launches calls for projects on major subjects. [fondationbiodiversite.fr](http://fondationbiodiversite.fr)



Society for Conservation Biology

### **Society for Conservation Biology** Booth 2

The Society for Conservation Biology (SCB) is a global professional organization dedicated to promoting the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity. The Society's membership includes resource managers, educators, government and private conservation workers, and students.

[conbio.org](http://conbio.org)



### **Advanced Telemetry Systems (ATS)** Booth 8

ATS offers innovative wildlife tracking products designed for researchers world-wide. Our customized product line includes: VHF transmitters, satellite collars, GPS collars & loggers, receivers/dataloggers, programmable archive tags, acoustic tracking systems and more. Visit [www.atstrack.com](http://www.atstrack.com) to live chat with a consultant or to receive a same-day product quotation. [atstrack.com](http://atstrack.com); @atstelemetry; [contact@atstrack.com](mailto:contact@atstrack.com).

### **Cambridge University Press** Booth 16

Cambridge University Press dates from 1534 and is part of the University of Cambridge. Playing a leading role in today's global market place, we have over 50 offices around the globe, and we distribute our products to nearly every country in the world. We publish titles written by authors in over 100 different countries.



### **Conservation Evidence** Booth 14

A free, reliable information resource designed to support decisions about nature conservation. Our aim is to break down the barrier between science and practice, so that where relevant science can inform a decision, conservation practitioners, natural resource managers and policy makers routinely use it. We also publish new evidence in our online journal Conservation Evidence. [conservationevidence.com](http://conservationevidence.com)



### **The Conservation Leadership Programme (CLP)** Booth 13

CLP is a partnership of three leading biodiversity conservation organisations - Wildlife Conservation Society, Fauna & Flora International, and BirdLife International. Drawing upon the expertise of conservation professionals globally, CLP directs project funding and training to early career leaders from developing countries who are tackling priority conservation challenges. For 30 years CLP has been providing important career stepping stones to over 2,500 individuals who now form an extensive global network of conservation practitioners.

[conservationleadershipprogramme.org](http://conservationleadershipprogramme.org); @CLPawards; [clp@birdlife.org](mailto:clp@birdlife.org)



## ICCB-ECCB EXHIBITORS (CONTINUED)



**Ecotone**

**Booth 18**

Ecotone is an association of professional ornithologists, ecologists and specialists in environmental protection. We put together projects and analyses in the field of environmental protection and management. We produce various kinds of GPS telemetry equipment for birds and mammals. Our wildlife trackers are used on all continents including Antarctica. We can help you in planning, preparing and organizing fieldwork and research projects. Our knowledge and experience can help us to understand



[ecotone-telemetry.com](http://ecotone-telemetry.com)

**Forest Stewardship Council® (FSC®)**

**Booth 17**

FSC is a global, non-profit organization dedicated to the promotion of responsible forest management worldwide. FSC is one of the leading sources for forest conservation, using certification to engage markets and driving recognition of the value of forests to improve economic, social and environmental practices in forests worldwide. [fsc.org](http://fsc.org)



**Global Biodiversity Information Facility (GBIF)**

**Booth 3**

GBIF is a global information system on biodiversity. Biodiversity, extensively studied, is still too little known. Tools and biodiversity Research findings lack visibility and interoperability. The computerization of the natural history collections and natural observations is an advanced but fragmented process. GBIF is a program that tries to gather all this data and share them to researchers and the general public. Thus biodiversity will be better known, better designed and better used. GBIF makes it easier for researchers studying biodiversity prepare their research, compare and relate them with previous work.



**Lotek**

**Booth 20**

Fish & wildlife monitoring systems allow researchers in over 100 countries worldwide to track animals, birds and fish of almost any size, in almost any environment. Our craft is technology, but our passion is the environment. We're committed to providing innovative solutions for a sustainable future. [lotek.com](http://lotek.com)



**The National Geographic Society**

**Booth 22**

National Geographic has been inspiring people to care about the planet since 1888. It is one of the largest nonprofit scientific and educational institutions in the world. Its interests include geography, archaeology and natural science, and the promotion of environmental and historical conservation. [nationalgeographic.com](http://nationalgeographic.com)



**The Nelson Institute for Environmental Studies**

**Booth 15**

The Nelson Institute is a world-class institution sustaining excellence in interdisciplinary research, teaching, and service at the University of Wisconsin-Madison. We are home to four research centers, and host undergraduate and graduate degrees and certificates, including the Environmental Conservation Professional MS Program. [nelson.wisc.edu](http://nelson.wisc.edu)



**Oxford University Press**

**Booths 4-5**

Oxford University Press is a department of the University of Oxford. The Press publishes books and journals in all the Life Sciences disciplines, with a particular reputation for quality in ecology, evolutionary biology and conservation biology. [global.oup.com](http://global.oup.com)



## ICCB-ECCB EXHIBITORS (CONTINUED)



Protecting nature. Preserving life.

### The Nature Conservancy

Booth 11

TNC is the leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. We pursue non-confrontational, pragmatic solutions to conservation challenges. Everything we do is rooted in good science — aided by our hundreds of staff scientists. [nature.org](http://nature.org); @nature\_org



### Vodokanal

Booth 10

Vodokanal St. Petersburg supplies potable water to the population of 5 million people and to tens of thousands of city companies and organizations. [vodokanal.spb.ru](http://vodokanal.spb.ru)



### Whitley Fund for Nature

Booth 12

The Whitley Fund for Nature is a UK registered charity offering awards and grants to outstanding nature conservationists around the world. We locate and recognize some of the world's most dynamic

conservation leaders and support projects founded on good science, community involvement and pragmatism. Above all, we champion passionate individuals who are committed to precipitating long-lasting conservation benefits on the ground. [whitleyaward.org](http://whitleyaward.org)

## WILEY

### Wiley

Booths 6-7

Wiley is the leading society publisher. Our scientific, technical, medical and scholarly business publishes on behalf of more societies and membership associations than anybody else, and offers libraries and individuals 1,250 online journals, thousands of books and e-books, reviews, reference works, databases, and more. [wiley.com](http://wiley.com)



### WWF's Russell E. Train Education for Nature Program (EFN)

Booth 13

EFN provides financial support to conservation leaders to obtain the skills needed to address conservation challenges in their home countries. Since 1994, EFN has awarded over 2,000 grants to individuals and organizations to pursue graduate studies, attend training courses, and train local communities. [worldwildlife.org/efn](http://worldwildlife.org/efn); [efn@wwfus.org](mailto:efn@wwfus.org); [facebook.com/educationfornature](https://facebook.com/educationfornature)

## MARINE SECTION & FRESHWATER WORKING GROUP SOCIAL

Le Comte Brasserie & Cheese Bar  
31 Rue de Chio, 34000 Montpellier  
Tuesday, 4 August, 19:30

The Marine Section and the Fresh Water Working Group invite members and those interested in becoming members to our first ever joint social! We'll start with a fantastic wine and cheese tasting at a local cheese shop and then migrate out to the great local nightlife scene. The first 25 people to sign up get in FREE for the tasting (email Leslie Cornick to sign up)! After that tickets will be €60 so that we can raise funds for more great events! Maximum capacity for the tasting is 50 people so sign up early! Our theme is The Life Aquatic. We'll have great beanies and wine glasses with our new joint logo for sale throughout the congress and at the social. Proceeds will benefit the Freshwater Working Group and the Marine Section.



## REDUCING CONGRESS WASTE

### A Brief Explanation of ICCB-ECCB 2015 Attendee Gifts

SCB makes every attempt to make wise decisions regarding consumption, waste and its ecological footprint. We strive to partner with organizations that support and contribute to sustainability and conservation. We also encourage our members and Congress attendees to consider these issues in their daily lives, and more specifically when attending our Congresses. This year, we have three sustainably-produced attendee gifts generously donated by our partners:



**Travel Mugs.** The Rufford Foundation, a longtime supporter of the ICCB and regional SCB Congresses, has provided travel mugs this year. Made of recycled plastic, they are intended for use during coffee breaks in place of disposable paper and styrofoam cups, which will not be available at the coffee stations. Attendees are welcome to keep or return their mugs after the meeting.



**Conference Bag.** One of our public European sponsors donated our stylish blue bags for ICCB-ECCB 2015. A description (in French) of the bag's recycled plastic origins dons one side. Attendees are encouraged to use the bag during the Congress, and are welcome to take it home as a souvenir or return it to the SCB Registration Table at the end of the meeting for reuse.

**USB Key.** One of ICCB-ECCB 2015's French public sponsors generously made USB keys available to Congress attendees, where you will find the entire Scientific Program uploaded. SCB makes every effort to reduce paper waste, therefore we only print a small number of programs to sell. The USB Key allows SCB to provide attendees with the critical Congress information while keeping our consumption and waste at a minimum. Additionally, a small fee was paid on every key for environmentally-appropriate disposal of an electronic device. Attendees are welcome to keep the USB key or return it to the SCB Registration Table at the end of the meeting.



## Call for papers

# *Bothalia - African Biodiversity & Conservation*

We are calling upon all researchers in the field of Biodiversity to join *Bothalia* in celebrating its 94th year of publication! In 2014 access to the full-text historical archives was made accessible online. Now the journal is seeking submissions of research articles of relevance to the broad field of conservation and management of biodiversity in Africa for online, open access publication.

*Bothalia - African Biodiversity & Conservation* is affiliated to the South African National Biodiversity Institute (SANBI) and publishes papers focusing on the science required to sustain ecological infrastructure and species that support and benefit the people of Africa.

Specifically, *Bothalia - African Biodiversity & Conservation* covers the generation of new knowledge providing a foundation for assessment, monitoring or management of biodiversity; the assessment of various elements of biodiversity; innovation in science- or evidence-based decision-making for biodiversity in Africa; cross-cutting fields (human capital development in the sector and biodiversity information management and dissemination); and strategic frameworks for research or practice.

Double-blind peer-reviewed, approved articles are published on the journal's website as soon as ready for publication, and the journal is accredited by the South African Department of Higher Education and Training and listed in Thomson Reuters Science Citation Index Expanded.

## Submission instructions

To ease you into contributing to the journal, visit [www.abcjournal.org](http://www.abcjournal.org) and view the instructions for authors. Other relevant information about the journal's policies and review process can be found under the 'About' section on the website.

We look forward to your contributions!



[www.abcjournal.org](http://www.abcjournal.org)  
[submissions@abcjournal.org](mailto:submissions@abcjournal.org)

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Prof. Michelle Hamer

**Financial support and affiliation:**

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South African National Biodiversity Institute

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## PRACTICAL INFORMATION

Find information below on the city of Montpellier, the Congress venue and hours, registration, wireless internet, ICCB-ECCB volunteers, media details, and more.

### Welcome to Montpellier!



Montpellier, the eighth largest city in France, is conveniently located in the Languedoc-Roussillon region on the coast of the Mediterranean Sea. Montpellier boasts a

cosmopolitan atmosphere, a relaxed lifestyle typical of the South of France, a culture rich in art and history, and 300 days of sunshine per year!

Explore all that Montpellier has to offer at [www.ot-montpellier.fr/en](http://www.ot-montpellier.fr/en).

#### Office de Tourisme de Montpellier

Place de la Comédie / Esplanade Charles de Gaulle  
30, allée Jean de Lattre de Tassigny  
34 000 Montpellier  
Tel.: +33 (0)4 67 60 60 60 Fax.: +33 (0)4 67 60 60 61

#### Le Corum – ICCB-ECCB Venue

The Corum Conferences Center  
Esplanade Charles De Gaulle  
BP 2220  
34000 Montpellier

#### ICCB-ECCB Volunteers

Volunteers can be easily identified by their BLUE ICCB-ECCB t-shirts. Please do not hesitate to ask them for assistance as they are here to help and direct you.

Volunteers: Please check in at the registration desk on the 0 Level, Main Exhibition Hall. Check in with for scheduling and other details.

### Registration and Information Booths

#### Registration Desk

The registration desk will be located on the 0 Level, in the main Exhibition Hall across from the Berlioz Gate entrance and next to the Berlioz Auditorium. At registration you can pick up your badge, registration materials and attendee gifts.

#### ICCB-ECCB Hours

##### Sunday 2 August

- Exhibition Setup: 8:00 - 16:00
- Registration: 14:00 - 20:30

##### Monday 3 August

- Registration & Exhibition: 7:30 - 19:30
- Congress: 9:00 - 19:30 pm

##### Tuesday 4 August

- Registration & Exhibition: 7:30 am to 20:00
- Congress: 8:30 am to 19:30

##### Wednesday 5 August

- Registration & Exhibition: 8:00 - 19:30
- Conference: 8:30 - 19:30

##### Thursday 6 August

- Registration: 8:30 - 19:30
- Exhibition: 8:30 am to 15:30 / dismantling: 15:30 - 18:30
- Conference: 9:00 am to 7:30 pm

#### Information Booth

An information booth will be set up in the main Exhibition Hall. An ICCB-ECCB volunteer will be available at the registration desk to help with any conference-related enquiries.



## PRACTICAL INFORMATION (CONTINUED)

### Message Board/Job Board

Located near the registration desk, look for the message/job board. Congress participants can post messages to colleagues about get-togethers or meetings. We also encourage advertising job opportunities of any level, including graduate student openings. Please limit messages/ads to one piece of paper as we will not be able to accommodate or distribute multiple brochures or pamphlets on the message board.

### Internet in the Corum

Wireless internet access will be available throughout Le Corum, with the exception of the Berlioz Auditorium and 3rd floor conference rooms.

### Press

#### Media Representatives

We request that any media representatives contact Matt Herbert, membership and communications assistant for SCB at [mherbert@conbio.org](mailto:mherbert@conbio.org) or 1 (605) 759-8911. For French and European media representatives, please contact Nathalie Villemejeanne at [villemejeanne@agropolis.fr](mailto:villemejeanne@agropolis.fr).

The **Press Office** is located in Sully 3B in the Corum. Interviews with presenters and SCB staff can be scheduled through Matt Herbert or Nathalie Villemejeanne.



### Getting Around Montpellier

#### Transportation by Bus and Tramway

Visitors can buy a "one trip ticket" (€1.5) or a "ten trips ticket" (€10) from machines at tram stations or from a newspaper shop (there is one at the railway station) to travel by bus or tramway with the "TAM" label.

The ticket validity is one hour after the first check (without changing direction) BUT you have to put the ticket in the machine each time you change transport.

### Telephone and Emergency Numbers

The country code for France is 33 and the Montpellier area code is 04. To call France from another country, you need to dial the international code (usually 00), followed by the country code for France (33), then the phone number without the initial zero. For example: 00 33 4 67 04 75 75

To make an international call from France, dial 00, followed by the country code, the area code (minus the first zero) and the telephone number of the person you are trying to reach.

### Buying prepaid SIM cards

Prepaid phone cards can be bought at phone shops, supermarkets and newspaper shops

### French electrical plugs & sockets

Check if you need to bring a Euro-adaptor for French electrical plugs & sockets

### Emergency Numbers (free)

15: SAMU/Medical Emergency Department and Ambulance Service  
17: Police  
18: Fire Brigade (also for medical emergency)  
112: European Emergency Number

### Health Centers

#### Medical Care

The nearest major hospital to the Corum is:

#### Hôpital Lapeyronie (CHRU)

371 Av. du Doyen Gaston Giraud  
(Tramway 1 "Lapeyronie")  
Phone: 04 67 33 95 00 or dial 15.

#### Private Clinic

Polyclinique Saint-Roch  
43 Rue du Faubourg Saint-Jaumes  
Phone: 0 826 88 88 82

### Currency Exchange

#### Banks and Currency Exchange

You can visit any major bank for currency exchange. Banks are generally open Monday to Friday, 9:00-16:30 with a break at lunch time. ATM cash machines are available throughout the



## PRACTICAL INFORMATION (CONTINUED)

city, including in the Corum conference center on Level 0. Most should allow you to withdraw money from your account back home but note that this usually involves a fee. Credit cards are widely accepted.

### Exchange Offices

Nova Cambios, 11 rue de la Loge (Tramway "Comédie"). Hours: Monday to Saturday, 10am-7pm. **Zero Commission for Attendees of ICCB Congress!**  
Phone: 04 99 62 97 62. Email : ag306@novacambios.com

Travelex, Railway Station Gare Montpellier Saint Roch (ground floor), Place Auguste Gibert (Tramway "Gare Saint Roch")  
Hours: Monday to Friday: 8:15-17:45; Saturday & Sunday: 10:15-17:15.  
Phone: 04 99 63 74 52  
Email: GareMontpellier@travelex.com

## Dining and Congress Breaks

### Lunch Options

If you did not purchase a boxed lunch with your ICCB-ECCB registration you will still have great nearby options to grab a bite to eat at lunch time breaks. A number of local restaurants are located throughout Montpellier, particularly in the city center. Most lunch prices start at 12€.

### Dinner

A number of local restaurants are located throughout Montpellier, particularly in the city center. Most dinner prices start at 18€.

### Appetizers at ICCB-ECCB Evening Events

Light appetizers will be served at the Opening Ceremony, poster sessions and the Career Fair. Dinner is not provided at these events.

### Congress Breaks

A morning coffee break will be held from 10:00 - 10:30 each day. Afternoon refreshment breaks will be held from 15:00-15:30. Hot beverages will not be served at the afternoon breaks.

Breaks will be held in the Main Exhibition Hall, and an additional break will be held on the 3rd floor.

## SCB JOURNALS AT ICCB-ECCB

### An Editor's Forum on Publication of Conservation Science: Questions and Answers

Wednesday, 4 August, 12:00-1:30 pm  
Le Corum, Room Antigone 1

Editors of the leading conservation journals explain the process of publication and share their insights into what makes a successful paper in general and in particular to their journals. Panel members will take questions from and discuss with the audience larger topics, including peer review, publishing ethics, open access, and smaller topics, such as turnaround times, authorship, and journal scope. This event will be most informative for students and conservation scientists who are relatively new to scientific publishing. But, broad-ranging issues often arise through audience questions that prompt lively discussions between seasoned professionals and early career attendees. Feel free to bring your lunch.



### Conservation Biology Workshop: Improving geographic representation in Conservation Biology

Thursday, 6 August, 12:00-1:30pm  
Le Corum, Joffre C/D

The subjective nature of the editorial process in scientific journals opens the door to personal bias, including gender, cultural, ethnic, and geographical bias. Editors of Conservation Biology have taken several steps to alleviate bias, including - among others - double-blind review, assistance with the grammar and structure of manuscripts, and a Publication Partnership Program in which scientists with experience in writing scientific papers in English partner with authors who want additional input. The workshop aims to communicate these and other novelties in the editorial process to prospective authors of Conservation Biology.





## SPECIAL EVENTS



### Career Fair

**Tuesday, 4 August, 6:30-8:00 pm**  
**Le Corum, Exhibition Hall**

Employers and faculty will congregate in the main Exhibition Hall to meet with students and early-career professionals regarding graduate programs, postdoctoral positions and employment in the conservation sector. Exhibitors are encouraged to bring literature and handouts. Students and professionals should have résumés and business cards on hand.

### “Modeling and Scenarios of Biodiversity” with FRB Program

**Wednesday, 5 August, 6:30-7:30 pm**  
**Le Corum, Room Sully 1**

The Fondation pour la Recherche sur la Biodiversité (FRB), in partnership with the Fonds Français pour l'Environnement Mondial (FFEM), is organizing a scientific session around the theme of modeling and scenarios of the future of biodiversity. This will be illustrated with their partnership on the 2013 call for research proposals in Sub-Saharan Africa.

Event Speakers:

- Claude Garcia, Forest Management and Development (ForDev) CIRAD / ETH Zurich
- Stephen Awoyemi, Conservation Policy & Campaign Officer/Head Of Abuja Office, Nigerian Conservation Foundation
- Paul N'goran, WWF Coordinateur Regional Bio-monitoring - Afrique Centrale
- Midoko Iponga Donald, IRET/CENAREST Gabon
- Tchatat Mathurin, CSFSE/IRAD – Cameroun
- Fabien Quetier, Biotope
- Doyle McKey, Scientific and Technical Committee, FFEM
- Jean-Francois Silvain, FRB President
- Pierre-Edouard Guillain, FRB Director

### Montpellier Assets in Agroecology and Agrobiodiversity Research

**Wednesday, 5 August, 6:30-7:30 pm**  
**Le Corum, Room Sully 2**

This session will provide ICCB participants with highlights on the research conducted by the Montpellier research community in agroecology and agrobiodiversity, at the nexus between biodiversity and agriculture. Research projects dealing with wild and domestic biodiversity conservation and related agricultural practice will be presented, that address issues such as adaptation to climate change, globalization, genetic resource diversity, food security, innovation processes, agro-ecological transition etc. This session is organized by the LabEx Argo and the LabEx CeMEB, two clusters of research labs in Montpellier.

Event Speakers:

- E. Dounias
- Y. Thomas
- T. Winkel
- Y. Vigouroux

### Future and Perspectives of the EU Nature Conservation Directives

**Tuesday, 4 August, 6:30-7:30 pm**  
**Le Corum, Room Joffre A/B**

The 1979 Birds Directive and the 1992 Habitats Directive form the cornerstone of EU conservation policy. In many respects, the EU nature conservation directives can be considered a model for integrative approaches towards nature conservation. The directives integrate species and area protection, provide for a strong legal background and at the same time reach out to stakeholders and the public. However, in spite of the underlying strong conceptual and legal basis provided by the directives, the EU has failed to reach the 2010 biodiversity target to halt or even slow the loss of biodiversity in its territory. The round table discussion builds on the afternoon Natura 2000 symposium and is targeted to involve ICCB-ECCB participants in order to broaden the perspective on status and future of the EU nature conservation directives. The panel includes representatives from the EU, European NGOs, national governments and the SCB Europe Policy Committee.



## SOCIAL EVENTS



### ICCB-ECCB Opening Ceremony and Awards Presentations

Sunday, 2 August, 18:00-20:00

Le Corum

We kick-off ICCB-ECCB a special SCB Awards Ceremony to honor six scientists for their extraordinary achievements in conservation. The awards ceremony will be followed by a networking happy hour on the top floor of Le Corum. The Opening Ceremony will also include brief remarks from the presidents of SCB, the Europe Section, Agropolis International and representatives of local authorities. The Welcome and Awards Ceremony will take place in Pasteur. We'll move to the top floor lobby for the Networking Happy Hour, which includes complimentary drinks and hors d'oeuvres.

### Nature Photo Exhibition

Sunday, 2 August to Thursday, 6 August

Le Corum, Antigone 2

Thanks to some of Montpellier's students and the support of the GRAPPE Network, three photography exhibits will take place at the Corum during the conference: 1.) Nature in the City; 2.) Jungle Law, and 3.) From Farm to the Table.

### Hyper Nature Exhibition

Sunday, 2 August to Thursday, 6 August

Le Corum, Exhibition Hall

Using the "Hyper focus" process, Philippe Martin creates quasi-3D images merging dozens of photographic shots and giving it a new sensation of depth. This technique allows you to discover the incredible biodiversity on Earth as you have never seen it before. Take time to discover his images in the Exhibition Hall throughout the conference.

### Nature en Chantier: Oiseaux Imaginaires

Sunday, 2 August to Thursday, 6 August

Le Corum, Exhibition Hall

The artist, Jacques Subileau, will be exhibiting imaginary bird creations. Each creation will be linked to original poetry text and music. The artist may also be present to explain his process and guide the curious through his work.

### Nature Walk with Guillaume Papuga

Monday evening, 3 August

Marais de Lattes

Join Guillaume Papuga (email for booking: Guillaume.PAPUGA@cefe.cnrs.fr) for an evening walk/bird watching session le Marais de Latte in Montpellier. This session will be free and auto-organized, but participants will have to buy a tram ticket. **Capacity 25 participants.**

### Cafe Debates

Le Dôme Brasserie

Monday, 3 August & Tuesday 4 August at 20:30

In the French tradition, join your fellow attendees for discussion and debate on important questions for conservation at two evening debates at Le Le Dôme Brasserie on Monday, 3 August and Tuesday 4 August.

#### Monday, 3 August

The first debate topic is **What did we miss? Nature Conservation Facing Modernity.** ICCB-ECCB issued an ultimatum to scientists: are our conservation strategies good enough? And what if we had missed a fundamental solution to stop nature's degradation? What did we refuse to see or apply to allow coexistence of human activities and biodiversity? Those questions exceed the scientific framework and must be allowed to inform the main political and ethical conflicts. We will give the floor to the audience to follow up on the ICCB-ECCB plenary talks on the necessity to reform our view of nature. The organizers of Monday's debate are Vincent Devictor & Pierre Gaüzère, CNRS UMR ISEM.

#### Tuesday, 3 August

The second debate topic examines the following issues:

- Nature Restoration: How to do Better?
- Should we restore species or functional ecosystems?
- What are the criteria of successful restoration?

The organizers of the Tuesday debate are François Sarrazin, Professeur at Université Pierre et Marie Curie; Bertrand Schatz Senior Researcher CNRS UMR CEFE.



## SOCIAL EVENTS (CONTINUED)

**Le Dôme Brasserie** is located at 2 Avenue Georges Clemenceau, 34000 Montpellier, France. Phone: +33 4 67 92 66 70.

### Fun Runs

*Tuesday, 4 August - Thursday 6 August*

Join us for a morning/evening runs in Montpellier. These sports sessions will be free and auto-organized. Please check the paper board at the registration desk level for auto-organized running sessions.

### Once Upon a Forest Documentary

*Diagonal Cinema, Montpellier*

*Tuesday, 4 August at 20:00*

*Price €5*

Famous French botanist Francis Hallé and Oscar-winner Director Luc Jacquet (March of the Penguins) partnered on the documentary Once Upon a Forest. Visually spectacular, the documentary integrates visual effects to capture the secret life of trees as well as the majesty of some of the world's greatest rainforests. Join Francis Hallé and the SCB for the projection of this modern masterpiece. At the end of the projection, a debate with Francis Hallé will be facilitated by Edmond Dounias, senior researcher IRD UMR CEFÉ. The documentary will be in French with English subtitles while the debate will be in both English and French. Watch the trailer at <https://youtu.be/FEFHVvxLXg>. **Room capacity 350.**

**Diagonal Cinema** is located at 5 Rue de Verdun, 34000 Montpellier, France. Phone: +33 4 67 58 58 10.

### Mercure Art & Culture: “Talks on Biodiversity”

*The Mercure Centre Comedie Hotel*

*Tuesday, 4 August & Wednesday 5 August at 19:00*

The Mercure Centre Comedie Hotel in Montpellier organized a series of scientific presentations (in French) leading up to ICCB-ECCB. They will conclude the series during the congress with the following talks on Tuesday and Wednesday evening during the congress.

#### **Tuesday, 4 August, 19:00**

“Homme et Nature: une Réconciliation est-elle Encore Possible?” by Professor Johan Michaux, Université de Liège and senior scientist at Fonds National de la

Recherche Scientifique belge. This presentation will be followed by a closing cocktail in the patio of the Hôtel. While in the hotel, you may also discover the Photo and Sculpture exhibition “Biodiversity and art” (free access) with the artists Johan Michaux, Sandrina Kinet, Jonathan Lhoir and Visak.

Presentations will be followed by wine tasting and dinner at Côté Terrasse. Free booking: [frederic@mercuremontpellier.fr](mailto:frederic@mercuremontpellier.fr) or +33467998982.

**Hôtel Mercure Montpellier Centre Comédie** is located at 6 Rue de la Spirale, 34000 Montpellier, France.

### ICCB-ECCB Jam Session

*Le Dôme Brasserie*

*Wednesday, 5 August, 21:00*

Do you enjoy good music, play a musical instrument or like to sing? We've organized a jam session with conservation biology practitioners. Come join the fun as biologist musicians play a fun and multicultural jam session in Montpellier!

**Le Dôme Brasserie** is located at 2 Avenue Georges Clemenceau, 34000 Montpellier, France. Phone: +33 4 67 92 66 70.

### Closing Reception

*Thursday, 6 August, 6 pm-1 am*

*Méric Park (Saint Lazare tram station), Montpellier*

Join us for an open-air closing reception dedicated to local culture. Come experience local food thanks to a delicious buffet, meet local producers, shop at our very own open-air farmers' market, savor the best wines from French terroir at our wine bar, listen to live jazz and rock, and dance if you feel like it! There will be something to suit every taste!

Reception fee is included in the registration fee for Conference attendees, ticket are 32€/40\$ for non-attendees. Tickets include: starters, main course and one drink. There will be a bar service for additional drinks and local artisanal products available for purchase at the farmers' market (don't forget your tote bag and some euros, producers won't be able to accept card payment).

The ceremony is organized by the local non-profit





## SOCIAL EVENTS (CONTINUED)

Artist'O'Chap. A young people's organization, Artist'O'Chap has been involved for years in environmental actions with a strong emphasis on the relationship between art, education and science as well as supporting sustainable alternatives in agriculture and food provision. Innovative decision process and collaboration in collective action is their philosophy. The closing ceremony will also include a silent auction, with proceeds going to benefit SCB Chapters.

The Méric parc will be available for free by the City of Montpellier, which has developed a sustainable urban model that contributes to biodiversity protection. Since 2010, Montpellier has adopted a biodiversity plan with a new park and garden policy, conservation of local species, communication and public awareness. Since 2011, Montpellier is member of the "Advisory Committee on Cities and Biodiversity" of the Convention on Biological Diversity. Thanks to its projects and realizations, Montpellier has been selected in 2011 as European and French capital of Biodiversity.

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## SCB GROUPS BUSINESS MEETINGS & SOCIALS

All SCB Working Groups and Sections will hold business meetings at ICCB-ECCB. See below for the complete schedule.

### SCB SECTIONS

#### Asia Section

Room: Joffre C/D

Monday, 3 August, 12:00-13:30

#### North America Section

Room: Barthez

Monday, 3 August, 12:00-13:30

#### Latin America & Caribbean Section

Room: Barthez

Tuesday, 4 August, 18:30-19:30 pm

#### Oceania Section Business Meeting

Room: Joffre C/D

Tuesday, 4 August, 18:30-19:30

#### Europe Section (includes social)\*

Room: Antigone 1

Wednesday, 5 August 18:30-19:30

This meeting includes a social event with food and drinks. A follow up session to the business meeting will take place on Thursday over lunchtime in Sully 2

#### Marine Section Business Meeting

Room: Joffre A/B

Thursday, 6 August, 12:00-13:30

### SCB WORKING GROUPS

#### Religion and Conservation Working Group Business Meeting

Room: Joffre 5

Monday, 3 August, 12:00-13:30

#### Freshwater Working Group Business Meeting

Room: Sully 1

Monday, 3 August, 12:00-13:30

#### Social Sciences Working Group Business Meeting

Room: Joffre A/B

Tuesday, 4 August, 12:00-1:30 pm

#### Conservation Marketing Working Group Business Meeting\*

Room: Rondelet

Wednesday, 5 August, 12:00-13:30 pm

\*This is the initial meeting of the Conservation Marketing Working Group and is open to all ICCB-ECCB participants who are interested in joining and hopes to kick-start the work of SCB's newest working group.



## PRE- AND POST-CONGRESS TRAINING SESSIONS

Several training sessions will take place immediately before and after ICCB-ECCB. Most sessions are held at Agropolis International, but a few take place at hotels in Montpellier. For a map to Agropolis, please visit [agropolis.org/practical/acces.php](http://agropolis.org/practical/acces.php).

### TWO-DAY SESSIONS Saturday & Sunday 1-2 August

#### **Using the open standards for the practice of conservation to plan & monitor the effectiveness of conservation projects**

*Location: Agropolis International. Room: Passiflore*

8:15 – 17:15

*Organizers: V. Swaminathan, Foundations of Success; F. Cybulla, Global Change Management; I. Tilders, Foundations of Success*

#### **Airborne lidar for conservation ecology**

*Location: Agropolis International. Room: Bambou*

8:15 – 17:15

*Organizers: A. Zlinszky, Centre for Ecological Research, Hungarian Academy of Sciences; S. Levick, Max Planck Institute for Biogeochemistry*

### SATURDAY, 1 AUGUST

#### **Near real-time land change and phenology monitoring using the earth observation monitor data processing middleware**

*Location: Agropolis International. Room: Arbose*

13:00 – 17:00

*Organizers: C. Hüttich; Friedrich-Schiller-University Jena; J. Eberle, Friedrich-Schiller-University Jena*

#### **Hierarchical models for conservation biologists made easy**

*Location: Agropolis International. Room: Argane*

8:15 – 17:15

*Organizers: P. Solymos, University of Alberta; S.R. Lele, University of Alberta*

#### **Conservation genetics for tree species**

*Location: Agropolis International. Room: Hibiscus*

8:15 – 17:15

*Organizers: R. Jalonen, Bioversity International; J. Loo, Bioversity International; M. Bozzano, Bioversity International; J. Koskela, Bioversity International*

#### **Camera trapping for animal population sampling**

*Location: Hotel (TBD)*

8:00 – 17:00

*Organizers: L. Tallents, University of Oxford; R. Amin, Zoological Society of London*

#### **When ANOVAs are not enough: New and advanced methods to analyze your data with R**

*Location: Agropolis International. Room: Badiane*

8:30 – 17:30

*Organizers: A.J. Voinopol-Sassu, University of Canterbury; O. Burge, University of Canterbury*

#### **Remote sensing for conservation: An introduction to acquiring and using satellite remote sensing data for terrestrial conservation**

*Location: Agropolis International. Room: Amande*

8:30 – 12:30

*Organizers: A. Leidner, NASA/USRA; L. Bastin, Joint Research Centre of the European Commission; Z. Szantoi, Joint Research Centre of the European Commission; G. Buchanan, Royal Society for the Protection of Birds*

### SUNDAY, 2 AUGUST

#### **Supercharge your science!**

*Location: Mercure Hotel*

9:00 - 13:00

*Organizers: C. Bradshaw, University of Adelaide; W. Laurance, James Cook University*

#### **Beyond the “science-policy gap” – building capacity to effectively co-produce knowledge on biodiversity conservation and ecosystem services**

*Location: Agropolis International. Room: Argane*

8:15 – 17:15



## PRE- AND POST-CONGRESS TRAINING SESSIONS (CONTINUED)

Organizers: C. Nesshoever, UFZ-Helmholtz-Centre for Environmental Research; C. Wyborn, Luc Hofmann Institute; L. Van Kerkhoff, The Australian National University

### Methods for conservation social science

Location: Agropolis International. Room: Badiane  
8:15 – 17:15

Organizers: D. Wald, Arizona State University; Thomas Wagner, Colorado State University; A. Hjarding, University of North Carolina Charlotte

### The zonation conservation prioritization framework and software – hands on workshop

Location: Agropolis International. Room: Hibiscus  
8:30 – 17:30

Organizers: A. Moilanen, University of Helsinki; V. Veitch, University of Helsinki; A. Kukkala, University of Helsinki; P. Kullberg, University of Helsinki

## FRIDAY, 7 AUGUST

### Conservation biology service-learning pedagogy for educators and practitioners

Location: Agropolis International. Room: Hibiscus  
8:15 – 17:15

Organizer: Jessa Madosky, Warren-Wilson College

### IPBES Stakeholder Meeting

8:30 – 17:45

Location: Agropolis International. Room: Amphitheater Louis Malassis (morning); Passiflore (afternoon)

Organizer: Bege Jonsson

## FRIDAY AND SATURDAY, 7-8 AUGUST

### Using the IUCN Red List categories and criteria to assess extinction risk of species for global and national red lists

Location: Mercure Hotel

8:00 – 17:00

Organizers: Pollock, C., IUCN; Hilton-Taylor, C., IUCN

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The advertisement features a collage of black and white photographs showing various wildlife and conservation projects, including a dog, a turtle, a butterfly, an elephant, a bird, a whale, and a nest.





## WORKSHOPS AND ROUNDTABLES

There will be more than 30 lunchtime and evening workshops and roundtables at ICCB-ECCB.

### MONDAY, LUNCHTIME 12:00 – 13:30

#### **IPBES Roundtable Discussion**

Room: Antigone 1

#### **Integrated innovative approach in conservation planning and monitoring**

Room: Antigone 3

#### **The role of zoos in conservation: Building new partnerships**

Room: Rondelet

#### **Improving forest resource governance through ecosystem service certification**

Room: Sully 2

#### **Promoting socially just ecosystem management: What is it and how do we do it?**

Room: Sully 3

### TUESDAY LUNCHTIME, 12:00 – 13:30

#### **Walking the talk: Why we need to be consistent with our actions to be successful conservationists**

Room: Antigone 1

#### **Conserve or perish? Developing metrics to quantify conservation impact**

Room: Antigone 3

#### **Risk & Reward: Learning from past failures and mistakes to achieve conservation success**

Room: Rondelet

#### **Developing a wiki metadatabase for the biodiversity threat mapping community**

Room: Barthez

#### **European overseas: New frontier for biodiversity research**

Room: Joffre CD

#### **Addressing conservation biology issues from ethical perspectives—secular and religious**

Room: Joffre 5

#### **A Mediterranean basin SCB/IALE/ISOMED Initiative: Targeting goals and action plan**

Room: Sully 1

#### **Integrating conservation genetics into policy: Practical issues, Q & A, and consensus building**

Room: Sully 2

#### **Paths towards a broader international conservation community**

Room: Sully 3

### TUESDAY EVENING, 18:30 – 19:30

#### **Roundtable risk & reward output discussion**

Room: Rondelet

#### **Future and perspective of the EU Nature Conservation Directives**

Room: Joffre A/B

#### **Communicating biodiversity conservation to traditional medicine communities**

Room: Joffre 5

#### **Synergies of faith and conservation: Exploring pathways of measurable action**

Room: Sully 1

#### **Essential biodiversity variables for conservation needs**

Room: Sully 2

### WEDNESDAY LUNCHTIME, 12:00 – 13:30

#### **Editor's forum on publication of conservation science: Questions & answers**

Room: Antigone 1

#### **"Population matters" asks for input about human population from conservation biologists**

Room: Joffre A/B



## WORKSHOPS AND ROUNDTABLES (CONTINUED)

**Economic ecology, or ecological economics?  
Alternatives to monetary valuation of biodiversity for  
decision-making**

Room: Joffre C/D

**Interdisciplinary field courses: Challenges &  
opportunities for training in conservation science**

Room: Joffre 5

**The role of citizen sciences and collaborative research  
in conserving bio cultural diversity**

Room: Sully 1

**SCB works through local chapters: Boots-on-the-  
ground conservation research, policy, and education**

Room: Sully 2

**Boundary organisations to connect conservation  
science, policy and practice**

Room: Sully 3

### WEDNESDAY EVENING, 18:30 – 19:30

**Developing a pan-African curriculum for master's  
program in conservation biology**

Room: Antigone 3

**Strengthening local chapters through global  
connections**

Room: Barthez 1

**Green infrastructure, connectivity, and the  
agricultural landscape**

Room: Barthez 2

**Ecological economics and sustainability science  
working group business meeting**

Room: Joffre C/D

**"Modeling and scenarios of biodiversity" with FRB  
program**

Room: Joffre 5

**Montpellier assets in agroecology and  
agrobiodiversity research**

Room: Sully 1

**Conservation poetry slam**

Room: Sully 2

**Tools, approaches and pathways to reframing  
conservation for future change**

Room: Sully 3

### THURSDAY LUNCHTIME, 12:00 – 13:00

**Camera trapping for conservation: Presenting the ZSL  
camera trapping and data analysis tool**

Room: Antigone 1

**The path worth taking: Working with the private  
sector for biodiversity conservation**

Room: Antigone 3

**Barriers to biodiversity in fluvial ecosystems**

Room: Barthez 1

**Can evidence-based evaluation help us understand  
how capacity development contributes to meeting  
biodiversity conservation goals?**

Room: Barthez 2

**Improving conservation practice through evaluative  
thinking**

Room: Joffre 5

**Degrowth: A new opportunity for biodiversity  
conservation?**

Room: Sully 1





## PLENARY TALKS

ICCB-ECCB features four great plenary talks, two each on Monday and Thursday.

### **MONDAY, 3 AUGUST, 9:00 - 10:00, BERLIOZ AUDITORIUM**

*Speaker: Anne Larigauderie*

#### **IPBES: Biodiversity Science for Decision Making**

The first plenary of ICCB-ECCB will provide an update on progress in the implementation of the second year of work of the Intergovernmental Platform on Biodiversity & Ecosystem Services (IPBES), including on the on-going assessments of biodiversity and ecosystem services. Her talk will also highlight different ways for scientists to get involved in the platform.

#### **About the Speaker**

Anne Larigauderie is the first Executive Secretary of IPBES, the Intergovernmental science policy Platform on Biodiversity and Ecosystem Services. Anne is interested in the role that science can play to inform decision making. She is trained as a plant ecologist and spent the first part of her career doing research on the response of plant communities to climate change in various ecosystems in France, the U.S. and Switzerland.

### **MONDAY, 3 AUGUST, 18:30 - 19:30, BERLIOZ AUDITORIUM**

*Speakers: Peter Kareiva and Clive Spash*

#### **New Paths for Conservation: A Debate with Peter Kareiva and Clive Spash**

Two thought leaders in conservation discuss and debate the changing face of conservation biology and new paths for protecting biodiversity. The plenary starts with ten-minute talks from Clive Spash and Peter Kareiva before moving to the debate stage where Gyorgy Pataki will moderate a lively discussion that will include questions from the audience.

#### **Plenary Format**

The plenary starts with Peter Kareiva's talk *Conservation that Changes Everything*. Clive Spash will follow with *Environmental Values in Conservation: Ethics, Economics and Pragmatism*. The debate portion of the plenary is titled *New Paths for Conservation* and will be moderated by Gyorgy Pataki.

#### **About the Speakers**

Peter Kareiva is the chief scientist and vice president of The Nature Conservancy, where he is responsible for maintaining the quality of over 600 staff engaged in conservation science in 36 countries around the world. He is the author of more than 150 scientific publications and author or editor of eight books, including a textbook on conservation science.

Clive Spash is Professor and Chair of Public Policy and Governance, Department of Socio-Economics at Vienna University of Economics and Business. An economist who writes, researches, and teaches on public policy with an emphasis on economic and environmental interactions, Clive formerly served as president of the European Society for Ecological Economics. He has published more than 100 peer-reviewed journal articles and book chapters. His main interests are interdisciplinary research on human behaviour, environmental values, and the transformation of the world political economy to a more socially and environmentally just system.

Gyorgy Pataki is an associate professor in the Department of Environmental Economics and Technology at Corvinus University of Budapest. Gyorgy is also a member of the Multidisciplinary Expert Panel of IPBES as a representative of Hungary.



## PLENARY TALKS (CONTINUED)

**THURSDAY, 6 AUGUST, 9:00 - 10:00,  
BERLIOZ AUDITORIUM**

*Speaker: Ana Rodrigues*

### **Historical Human Impacts on Marine Mammals: A Tale of Loss and Hope**

Marine mammals have experienced the full gamut of human attention, from overexploitation resulting in extinction to passionate conservation efforts. Ana's talk will provide an overview the past and present of human interactions with marine ecosystems through the lens of marine mammals, as an illustration of the challenges and opportunities to the ocean's conservation in a human-dominated world.

#### **About the Speaker**

Ana Rodrigues is a researcher at the Centre d'Ecologie Fonctionnelle et Evolutive, Centre National de la Recherche Scientifique (CNRS). Her research interests lie at the interface of ecology and biological conservation, with the study of spatial biodiversity patterns as the unifying theme. Her research focuses on two main components: Investigating the implications of biodiversity patterns for conservation and understanding the processes that underpin today's biodiversity patterns.

**THURSDAY, 6 AUGUST, 18:30 - 19:30,  
BERLIOZ AUDITORIUM**

*Speaker: Carl Jones*

### **Using Species Conservation to Drive the Restoration of Ecosystems**

Carl will discuss the rebuilding of communities through multiple introductions of species, as well as ecological replacements for extinct species. He will focus on Mauritius and the reintroduction of plants, reptiles and birds to restore island ecosystems.

#### **About the Speaker**

Carl Jones is the chief scientist at Durrell Wildlife Conservation Trust. He has worked in Mauritius since 1979 on the conservation of birds, plants, reptiles and the restoration of island ecosystems. He has been working on the application of captive breeding and horticultural techniques to wild populations as a way of increasing productivity and survival in animals and plants. This species work has been effective in driving the restoration of forest habitat and small islands.

## THE BALTIC RINGED SEAL FOUNDATION



*Baltic Ringed Seal Foundation is a non-profit non-governmental organization founded in 2014 with the active support of SUE "Vodokanal of Saint Petersburg"*

*Its main goal is to preserve and protect the rarest subspecies of marine mammals of Saint Petersburg and Leningrad Region, the Baltic ringed seal of the Gulf of Finland. Nowadays, these animals are at the edge of extinction, with only 200 individuals left in the wild. If no measures are taken as soon as possible, the fauna of Russian part of the Gulf of Finland will lose these marine mammals within the next few decades.*

## OUR TEAM ▶

### **CEO of the Foundation, Vyacheslav Alexeyev**

*Zoologist, veterinarian, marine mammals specialist. Honorary member of the Marine Mammals Council, member of Interdepartmental Commission for Ichthyology of Russian Federal Fishing Agency. Member of International Association for Aquatic Animal Medicine.*

### **Science and Research Associate of the Foundation, Elena Andriyevskaya**

*Biologist and zoologist, marine mammals specialist, member of European Association for Aquatic Mammals.*



Vyacheslav Alexeyev and Elena Andriyevskaya have acquired vast experience in marine mammal rehabilitation. They have been rescuing grey and ringed seals since 2007, pioneering in this sphere in Russia. They have already rescued and returned to nature over five dozens seal pups. Alexeyev and Andriyevskaya have developed the unique methodology of rehabilitation of Baltic and Ladoga ringed seal and Baltic grey seal pups. They are the only rehabilitation specialists in the world who have the initial experience in rescuing Ladoga ringed seal, the freshwater subspecies of ringed seal.

#### **LEARN MORE:**

[www.vodokanal.spb.ru/en/helping\\_the\\_pinnipeds/](http://www.vodokanal.spb.ru/en/helping_the_pinnipeds/)

Along with the rehabilitation project, the Foundation team is also involved in environmental research of Baltic ringed seal habitat, study the interaction of seals and local fisheries and develop practical measures aimed at conservation of marine mammals.







Society for Conservation Biology

## SCB CHAPTER EVENTS

### Chapter Members Leader Field Trip

*Grotte de Clamouse/St. Guilhem le Desert  
Sunday, 2 August, 09:00-17:00*

After meeting up at the registration table at le Corum at 9:00 AM (please be punctual!), we will bus it to Grotte de Clamouse for a cave visit and tour of the nearby village of St. Guilhem le Desert. Wear comfortable walking shoes and bring some water and cash. This is a great way to connect with Chapter members from all over the globe!

Please contact organizer Rebecca McCaffery if you plan to attend: [amphibecs@gmail.com](mailto:amphibecs@gmail.com).

### Chapters Workshop

*Le Corum, Room Barthez  
Wednesday, 5 August, 12:00-13:30*

### SCB Works Through Local Chapters: Boots-On-The-Ground

Conservation Research, Policy, and Education” This event will highlight on-the-ground research and conservation projects being conducted by Chapters around the globe. At the end, we will discuss how to maintain momentum and deepen the impact of these efforts by SCB’s grassroots.

### Chapters Roundtable

*Le Corum, Room Barthez  
Wednesday, 5 August, 18:30-19:30*

### Strengthening Local Chapters Through Global Connections

This is an opportunity for Chapter leaders & members to learn from each other about successfully running local SCB Chapters. We will discuss prearranged topics in a low-key, roundtable format facilitated by the Chapter Committee.

### Chapters Business Meeting

*Le Corum, Sully 3  
Thursday, 6 August, 12-13:30*

Join Chapters leaders & members and SCB global leadership for lunch and a discussion of chapter business and issues facing chapters. You will also learn more about how forming a chapter may benefit you, your organization and your region.

### Chapters Social

*Meeting point outside the Le Corum, Room Barthez  
Wednesday, 5 August, 19:30*

We will meet outside the Chapter roundtable room and venture out into Montpellier for the evening for dinner and refreshments. Whether you’re a current Chapter member or just a fan, let’s enjoy the evening together!

### Chapter Posters

*Le Corum, Antigone 2  
Sunday, 2 August to Thursday, 6 August*  
Check out posters highlighting Local Chapter involvement in conservation around the main registration area!

### Chapters Silent Auction

*Closing reception, 19:30-20:00  
Méric Parc, Montpellier*  
Participate in one of the most popular parts of our congress’ closing events and go home with your choice of items such as local crafts, books, and other one-of-a-kind items donated by SCB members. Leave a little room in your luggage!





# ICCB-ECCB STUDENT AWARDS COMPETITION

**Berlioz Auditorium • Monday, 3 August**

Session 1: 13:30-15:00 • Session 2: 15:30-17:00

SCB is proud to honor 12 student finalists who will participate in the 2015 ICCB-ECCB Student Awards Competition for Best Oral Presentation. Selected from a pool of more than 700 student abstracts, the finalists will present their talks in front of a panel of judges in two afternoon sessions for the chance to named ICCB-ECCB Student Award Winners.

Winners will be honored for their achievements at the SCB Members' Meeting on Thursday, 6 August from 17:15-18:30 in the Berlioz Auditorium.

A panel of five will judge the contest: Carolyn Lundquist, chair of the SCB Awards Committee; Shonda Foster, coordinator of the Smith Fellows program; Mark Burgman, editor-in-chief of Conservation Biology; Eddie Game, editor-in-chief of Conservation Letters; and Krithi Karanth, previous Student Award Finalist and Winner (2008) and Asia Regional editor for Conservation Biology. Both sessions will be chaired by Sarah Dalrymple, SCB Europe.

## 2015 Student Award Finalists

See [\*Monday session \(pages 93-114\)\*](#) for the speaker lineup for each session.

**Liam Bailey** Climate windows: assessing climate sensitivity using R package climwin

**Soraia Barbosa** Genomics informing conservation strategies: which populations should be reconnected in an endangered rodent?

**João Carlos Campos** Derivation of a high resolution land-cover map of the Western Sahara-Sahel transition zone for local biodiversity conservation

**Kiran Dhanjal-Adams** Optimizing disturbance management for wildlife protection

**Alia Dietsch** Scaling the divide: social values and biodiversity conservation in a dynamic world

**Paul Elsen** Global mountain topography and the fate of montane species under climate change

**Claire Feniuk** Making space for nature: balancing food production and biodiversity conservation in Europe

**Amy Hinsley** Heterogeneity in consumer preferences for orchids in international trade and the potential for the use of market research methods to study demand for wildlife

**Pen-Yuan Hsing** Monitoring wild mammals in county durham with a citizen science web platform

**Josil Philomena Murray** Can REDD+ deliver biodiversity benefits? Spatial patterns of carbon, biodiversity and REDD+ projects in Indonesia

**Michela Pacifici** Ecological and biological characteristics explain the response of species to recent climatic changes

**Tal Polak** Optimal planning for mitigating the impacts of roads on wildlife: A multiple species approach





Society for Conservation Biology

## **SCB EUROPE SECTION BUSINESS MEETING AND SOCIAL**

**Room: Antigone 1**

**Wednesday, 5 August, 18:30-19:30**

What's your vision on European Conservation science, policy and education? Join us to make it happen!

This event is for everyone aiming to increase the impact of their work and strengthen conservation science and practice in Europe.

We will start with a brief presentation of the outstanding achievements of SCB Europe Section in the last three years, which include highly influential papers and policy briefs, lobbying for conservation of important places in Europe, supporting students and early-career professionals through funding and training, communicating scientific findings to decision makers to promote evidence-based environmental decisions.

This brief introduction will summarise existing and potential new opportunities that the Section offers to SCB members in Europe, including professional training and networking, science/policy engagement, and awards and support for research and conservation.

After setting the scene, the floor will be yours: a facilitated group technique will help to share your ideas and visions, requests and contributions towards SCB and the Europe Section in order to build capacity and foster diversity within the European conservation community.

### **Come along if you:**

- Have innovative ideas in the science-education-practice-policy interface in Europe waiting to be launched
- Are looking for a professional environment for conservation science in Europe to help them realize these ideas
- Want to express your views on how SCB-ES should look like in 2 to 10 years
- Are a conservation student or professional searching for support in your career in conservation science
- Want to know more about the Europe Section and see if it fits in your perspective regarding European conservation.

Free food and drinks will be available for all of those that stick around!

This meeting includes a follow-up session over lunch on Thursday, 6 August in Sully 2.





Society for Conservation Biology

## **ICCB-ECCB MEETING CODE OF CONDUCT**

SCB works to promote a welcoming environment at ICCB-ECCB that is safe, collaborative, supportive, and productive for all attendees, including volunteers, exhibitors, and service providers, and that values the diversity of views, expertise, opinions, backgrounds, and experiences reflected among the Congress' ~2,000 attendees. To that end, we expect everyone to abide by the following Code of Conduct:

### **EXPECTED BEHAVIOR**

- Treat everyone with respect and consideration.
- Communicate openly and thoughtfully with others and be considerate of the multitude of views and opinions that are different than our own.
- Be respectful in your critique of ideas.
- Be mindful of your surroundings and of your fellow participants. Alert SCB staff if you notice a dangerous situation or someone in distress.
- Respect the rules and policies of Le Corum and all venues associated with ICCB-ECCB.

### **UNACCEPTABLE BEHAVIOR**

- Harassment, intimidation or discrimination in any form.
- Physical or verbal abuse of any attendee, speaker, volunteer, exhibitor, SCB staff member, service provider or other meeting guest.
- Disruption of talks in Le Corum or at other events organized by SCB.

Examples of unacceptable behavior include, but are not limited to inappropriate comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin; inappropriate use of nudity and/or sexual images in public spaces or in presentations, threatening or stalking any attendee, speaker, volunteer, exhibitor, SCB staff member, or service provider.

### **CONSEQUENCES**

- Anyone requested to stop unacceptable behavior is expected to comply immediately.
- SCB staff (or their designee) or security may take any action deemed necessary and appropriate, including immediate removal from the meeting without warning or refund.
- SCB reserves the right to prohibit attendance at any future meeting.

### **REPORTING UNACCEPTABLE BEHAVIOR**

If you are the subject of unacceptable behavior or have witnessed any such behavior, please immediately notify an SCB staff member or SCB volunteer in a leadership position.







## POSTER SESSION: MONDAY, 3 AUGUST 17:15-18:30



### DISCIPLINES / BIOGEOGRAPHY

- 1 **Migratory connectivity of the Ortolan bunting**  
*Caroline Moussy*
- 2 **Biodiversity monitoring in mountain ecosystems: A multi-taxa approach**  
*Emanuel Rocchia*
- 3 **Integrating potential for microrefugia in projections of current and future species distributions over large geographic extent**  
*Eric Meineri*
- 4 **Integrating genetic and stable isotope analyses to infer the population structure of the snowfinch (*montifringilla nivalis*) in western Europe**  
*Jaime Resano Mayor*
- 5 **Known unknowns: Global patterns of conservation data deficiency**  
*Lucie Bland*
- 6 **Areas of endemism on regional scale reflect influences of adjacent phytogeographic domains: A case study on woody flora of the northeastern Cerrado of Brazil**  
*Leandro Tavares Azevedo Vieira*
- 7 **Island biogeography of birds: Testing core assumptions of MacArthur and Wilson 50 years on**  
*Luke Kelly*
- 8 **Ecological niche modeling as a tool for prediction of an extinct mammal: The case of *Thylacinus cynocephalus* (*tylacinae*)**  
*Lucas Goncalves Da Silva*
- 9 **Taxonomically-defined sampling extent improves the performance of species distribution models**  
*Aidin Niamir*
- 10 **In search of snakes: Conservation and distributional modelling of a declining island population of grass snakes (*Natrix natrix*)**  
*Robert Ward*

### DISCIPLINES / COMMUNICATIONS, OUTREACH AND EDUCATION

- 11 **How scientific researches can change conservation priorities? The decade-long research of Eurasian blind mole-rats (*rodentia: spalacinae*) in the Carpathian basin**  
*Attila Németh*





- 12 Educommunicative strategies for the appropriation of the conservation of amphibians and butterflies from northeastern Colombia**  
*Catalina Camargo*
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- 231 Biodiversity loss associated with oil palm plantations in Malaysia: Serving the need versus saving the nature**  
*Selvakumar Dhandapani*





- 232 Mammals species biodiversity of gema hutan lestari (ghl) logging concession, Buru island, Mollucas-Indonesia**  
*Sepus Marten Fatem*
- 233 Environmental and biodiversity impacts of variable retention forestry in Tierra del Fuego (Argentina)**  
*Stefan Schindler*
- 234 Ash dieback may influence biodiversity of epiphytic and epixylic cryptogams in European close-to-natural forest**  
*Sylwia Wierzcholska*
- 235 Species reports by the public as a basis for species projection in forest scenario analysis**  
*Tord Snäll*
- 236 Landscape dynamics across species in mediterranean oak forests: Anthropogenic versus environmental drivers**  
*Vanda Acácio*
- 237 How religion can inform forest management for bird conservation: The case of sacred groves in Greece**  
*Vassiliki Kati*
- 238 Effect of forest patch isolation and forest patch size on natural forest arthropod diversity within KwaZulu-Natal timber production areas**  
*Inam Yekwayo*
- 239 Differential effects of forest proximity on fruit set of tropical tree crops depends on pollination guilds**  
*Tuanjit Sritongchuay*
- 240 Harvest of logging residues for bioenergy - implications for saproxylic insect diversity**  
*Victor Johansson*
- 241 Gains and losses for biodiversity in the large-scale reforestation under China's grain-for-green program: Regional insights from southwest China**  
*Jackson Frechette*
- 242 Testing a new method for an unbiased abundance estimate of mountain gorillas (*Gorilla beringei beringei*) in the Virunga massif, Central African**  
*Jena Hickey*
- 243 Does livestock benefit snow leopards**  
*Rishi Sharma*
- 244 A novel and low cost method to calculate population survival using inverse modelling** Eva Gracia Martinez
- 245 Recovery time after reforestation depends on the mobility and feeding habits: Case study for ground-dwelling arthropods**  
*Bence Tajthi*
- 246 Lessons in conservation: Teaching and training materials for capacity development in conservation**  
*Ana Luz Porzecanski*





- 247 High plant and arthropod diversity in grassland and savanna field margin habitats of South Africa**  
*Monique Botha*
- 248 Changes of the grass and woody component on the plateau areas of Mountain Zebra National Park: 1980 – 2015**  
*Brand Bokkie*
- 249 Understanding variation and costs of human-wildlife conflict at ecosystem level: Lessons from North Luangwa, Zambia**  
*Andrea Wallace*

## **THEMATIC POSTER - NATIVE SEEDS FOR PLANT CONSERVATION AND GRASSLAND RESTORATION IN EUROPE: A MISSION FOR SCIENCE AND POLICY**

- 250 Conservation planning**  
*Constantino Bonomi*
- 251 The nasstec training programme & nasstec outputs: Research and technology transfer to industry**  
*A. Ruggiero*
- 252 Reaching out to society: Explaining the importance of native seeds**  
*Stephanie Frischie*
- 253 Challenges of grassland restoration in Europe: a biogeographical approach to species selection**  
*Emma Ladouceur*
- 254 Policy and certification for native seed restoration in Europe**  
*Holly Abbandonato*
- 255 Dormancy and germination: Their impact on seed production and plant establishment**  
*Laura Lopez Del Egado*
- 256 Best practices in seed storage to improve longevity**  
*Malaka Wijayasinghe*
- 254 Seed quality in large-scale production: The *Rhinanthus minor* case study**  
*Maria Marin*
- 255 Standardising a methodological approach to characterise wild legume seed germination and seedling performance for conservation and restoration purposes: Species of lathyrus and astragalus as models**  
*Erica Dello Jacovo*





## POSTER SESSION: TUESDAY, 4 AUGUST 17:15-18:30



### ECOSYSTEMS / FRESHWATER CONSERVATION

- 1 **Recent range contraction of the endangered Pyrenean desman (*Galemys pyrenaicus*) in the French Pyrenees**  
*Anais Charbonnel*
- 2 **A new threat to Pennsylvania's (USA) most diverse stream: The invasion of round gobies into a new watershed**  
*Casey Wilson*
- 3 **Can amphibians be used as umbrellas for biodiversity conservation in ponds?**  
*Christiane Ilg*
- 4 **Different land uses alter the assimilation of  $^{15}\text{N}$  and  $^{13}\text{C}$  by macroinvertebrates in neotropical savanna streams**  
*Diego Marcel Parreira De Castro*
- 5 **Prioritizing freshwater habitats for conservation in India**  
*Madhushree Muni*
- 6 **Linking current state of fish populations and their diversity to changes in environmental conditions occurring in the middle flow of syrdarya river (central Asia)**  
*Nadir Mamilov*
- 7 **Conservation of freshwater pearl mussel (*Margaritifera margaritifera*) as the flagship species for oligotrophic catchment areas: Achievements and failures of 30 year action plan in the Czech Republic**  
*Ondrej Prokop Simon*
- 8 **Predation of *Atherina boyeri* upon the endangered fish *Economidichthys trichonis*: The role of the purse seine fishery lights**  
*Anastasia Tzavali*

### ECOSYSTEMS / CONSERVATION AT THE LAND-WATER INTERFACE

- 9 **Assessing the ecological constraints on mangrove forest resilience to sea level rise globally**  
*Clare Duncan*
- 10 **Interactive effects of buffer width and wetland hydroperiod on amphibian reproductive output**  
*Jessica Veysey Powell*
- 11 **Water reservoirs and their implications in the cinegetic mammals distribution in the semi-arid: Contributions to the conservation of the Serra da Capivara National Park, southeastern Piauí, Brazil**  
*Marcia Chame*







**12 Vulnerability of turtle nesting beaches over the next 50-100 years**

*Nathalie Butt*

**13 Destabilisation of coastal dunes for conservation of biodiversity in Israel**

*Tania Bird*

**ECOSYSTEMS / MARINE CONSERVATION**

**14 Environmental and spatial variables influencing the catch of smooth hammerhead sharks (*Sphyrna zygaena*) within the shark meshing program off the coast of New South Wales, Australia**

*Alexander Wray-Barnes*

**15 The limitations of no-take marine reserves in protecting coral reefs from reduced water quality**

*Amelia Wenger*

**16 Spatial prioritization in coastal ecosystems responding to climate change**

*Debbie Chamberlain*

**17 Using population connectivity measures of fishery-targeted coral reef species to inform marine reserve design**

*Erin Eastwood*

**18 Studies on some aspects of reproductive biology of cuttlefish *sepia officinalis* in the southern Moroccan Atlantic (Boujdour, Cap Blanc)**

*Fatima Mzaki*

**19 Cryopreservation for long-term conservation of coral diversity: A case study with *Pocillopora damicornis***

*Lionel Feuillassier*

**20 Conservation needs for the vermetid reefs in the Mediterranean Sea**

*Giulio Franzitta*

**21 Differential spatial and temporal distribution of adult loggerhead in western Mediterranean Sea: Implications for conservation and management**

*Jose Carlos Baez*

**22 A before-after-control-impact (baci) study of the Sapodilla Cayes marine reserve in Belize**

*John Cigliano*

**23 Using electrical engineering to aid marine conservation**

*Jonathan Fink*

**24 Twenty two years of monitoring hawksbill turtle (*Eretmochelys imbricata*) nesting at Redang Island, Terengganu, Malaysia**

*Juanita Joseph*

**25 The role of depth in diversity indices and marine protected area resilience**

*Kelly Thomasson*





- 26 The old men and the sea - utilizing historical data and local knowledge of fishermen toward shark conservation**  
*Mareike Dornhege*
- 27 Periodically harvested closures: Potential optimal fisheries management strategy**  
*Paul Carvalho*
- 28 Reversing the decline of shark populations in Raja Ampat, eastern Indonesia**  
*Purwanto Purwanto*
- 29 Uncovering the world's biggest fish, the whale shark, now in Peru**  
*Rossana Maguino*
- 30 Epipelagic mesozooplankton diversity and distribution in atlantic coast of southern Morocco (Cape Blanc 21°n - Cape Boujdor 26°30'n)**  
*Laila Elarraj*
- 31 Assessing the quality of the great barrier reef's current protected areas in terms of connectivity and habitat quality**  
*Joan Wolter*
- 32 Has sustainability pelagic fisheries in the Black Sea Turkish coast ever been achieved?**  
*Tomris Deniz*
- 33 Variation in ecosystem response following marine protected area establishment in Raja Ampat MPA network, Indonesia**  
*Nur Ismu Hidayat*

## ECOSYSTEMS / WETLAND CONSERVATION

- 34 Lack of peatland specialists of multiple indicator groups informs future conservation planning in the western Balkans peatbogs**  
*Andreja Brigic*
- 35 Surrounding agriculture practices may impact pond biodiversity: The example black-headed gulls colonies**  
*Charlotte Francesiaz*
- 36 The use of rice fields by wintering ducks: Searching for mutual benefits to ducks and farmers**  
*Claire Pernollet*
- 37 Wetland restoration and aquatic beetles: Community and species level responses**  
*Cristiana Cerrato*
- 38 Glacier retreat effect on peat land pool metacommunities in the high Bolivian Andes**  
*Estefania Quenta Herrera*
- 39 Avian species diversity and physico-chemical parameters of water bodies in university of Lagos, Nigeria**  
*Fatsuma Olaleru*





**40 Habitat management varying in space and time: The effects of burning and grazing on wetland amphibians**

*Béla Mester*

**41 Spring wetlands - Their role in nutrient cycling and maintaining local biodiversity**

*Kamila Tichá*

**42 Macroinvertebrate diversity and community structure in woodland pools and ditches and their response to artificial drainage in Estonia**

*Maarja Vaikre*

**43 Innovative corporate-community partnership in rehabilitation and co-management of mangrove wetland in central Philippines**

*Abner Barnuevo*

## ISSUES / CLIMATE CHANGE AND OCEAN ACIDIFICATION

**44 Habitat associations drive species vulnerability to climate change in boreal forest**

*Adriano Mazziotta*

**45 Measuring protected areas representativeness under climate change scenarios: A case study of the Colombian Caribbean region**

*Clara Matallana*

**46 The geographical range of British birds expands during 15 years of warming**

*Dario Massimino*

**47 Land-use affects the rate and pattern of range expansion in British moths**

*Jenny Hodgson*

**48 Do long-lived shorebirds change their nest preference in response to extreme climatic events?**

*Liam Bailey*

**49 Changes in two decades in the bird and plant communities in two highland Andean localities potentially threatened by climate change**

*Loreta Rosselli*

**50 Costs and opportunities for preserving coastal wetlands under sea level rise**

*Rebecca Kate Runting*

**51 Hopping from the frying pan into the fire: The future of *Telmatobufo bullocki* under climate change**

*Virginia Moreno-Puig*

## METHODS / ADAPTIVE MANAGEMENT AND MONITORING

**52 Cause-specific mortality of atlantic cod and predicted survival under alternative management scenarios**

*Albert Fernandez-Chacon*





- 53 Dynamics in species associations change surrogate selection for monitoring management**  
*Ayesha Tulloch*
- 54 Fish forever: how many, for how long? Measuring conservation and social results across five countries in a global small-scale fisheries initiative**  
*Janelle Mueller*
- 55 Monitoring selectivity patterns: A tool to manage ungulate-related conservation problems**  
*Krisztián Katona*
- 56 How to adapt protected area management to challenges of climate change?**  
*Akos Malatinszky*
- 57 Linking woodlark abundance to forest management practice**  
*Viktoria Takacs*

## **METHODS / PROTECTED AREA PLANNING AND DESIGN**

- 58 Beyond traditional protected areas: Conservation landscapes to ensure ecologically-relevant and cost-efficient land protection**  
*Alienor Chauvenet*
- 59 Systematic conservation planning in the high andes: A case-study in the Tunari National Park, Bolivia**  
*Constance Fastré*
- 60 Spatial priorities for carnivore conservation under land use change**  
*Enrico Di Minin*
- 61 Islands in the sky: Science, symbolism, and the conservation impact of montane expeditions across tropical pacific islands**  
*Christopher Filardi*
- 62 A global analysis of the correlation between management effectiveness and the biological performance of terrestrial protected areas**  
*Jonas Geldmann*
- 63 The effectiveness of the protected area network in Madagascar**  
*Johanna Eklund*
- 64 Is bigger better? Understanding the efficiency of expanding protected areas**  
*Laurel Fink*
- 65 Human impact and the sustainable conservation of large mammals in the Deng Deng National Park**  
*Mercy Nambu Diangha*
- 66 Forecasting future diversity and distributions of butterfly species under climate change in Japan**  
*Misako Matsuba*
- 67 Widespread species are relatively uninformative in conservation planning**  
*Munemitsu Akasaka*







- 68 4.03 priority areas for conservation of atlantic forest endemic birds under climate change scenarios**  
*Mariana Vale*
- 69 Quiet areas in Europe**  
*Nefta-Eleftheria Votsi*
- 70 Protected area asset management**  
*Pau Jepson*
- 71 The perceived cost and benefits of the Virunga-Bwindi massif**  
*Sarah Tolbert*
- 72 Efficient expansion of global protected areas requires simultaneous planning for species and ecosystems**  
*Tal Polak*

## **METHODS / CONSERVATION CAPACITY BUILDING**

- 73 The butterfly highway: Connecting people and nature**  
*Angelique Hjarding*
- 74 The problem of spatial fit in social-ecological systems: Detecting mismatches between ecological connectivity and land management in an urban region**  
*Arvid Bergsten*
- 75 Capacity building in biodiversity monitoring**  
*Dirk Schmeller*
- 76 A crash-course in conservation entrepreneurship**  
*Falko Buschke*

## **METHODS / CONSERVATION GIS**

- 77 Incorporating environmental and social co-benefits into REDD+ spatial planning**  
*Adam Formica*
- 78 Can the Natura 2000 network adequately conserve crop wild relatives?**  
*Elena Torres*
- 79 Parks in human-dominated landscapes: Relative vulnerability to climate and land use changes**  
*Esther Stroh*
- 80 "We know the borders, we use GPS": Performative projections in the creation of Tanzanian wildlife management areas**  
*Jevgeniy Bluwstein*
- 81 A novel approach for assessing shifting cultivation dynamics in a regional conservation hotspot - insights from north-eastern Madagascar**  
*Julie Gwendolin Zaehring*





- 82** **Current and potential distribution of threatened amphibians from the eastern Cordiller in Colombia and its implications for conservation**

*Monica Albornoz*

- 83** **Connecting the dots: Connectivity mapping for tigers in central India**

*Trishna Dutta*

## **METHODS / CONSERVATION ON PRIVATE LANDS**

- 84** **Population growth rate of target bird species shows positive associations with a higher-level agri-environment scheme in Wales**

*Daria Dadam*

- 85** **Influence of exurban residents' environmental values, management objectives and regional land-use context on private land activities and behaviors**

*Heidi Kretser*

- 86** **Advancing innovative conservation tools by improving knowledge of decision-making on private lands**

*Jessica Balukas*

- 87** **Complexity and uncertainty in the application of private land conservation revolving funds**

*Mathew Hardy*

- 88** **Incorporating the effects of multiple future threats on declining mammals to identify spatial priorities for private land conservation incentives**

*Cristina Romero*

- 89** **Analysis of an ecological quality indicator used on industrial sites**

*Pauline Balducci*

## **METHODS / ECOLOGICAL RESTORATION AND RECONSTRUCTION**

- 90** **Investigating the scale dependent role of herbivory and seed limitation in determining successions in European abandoned landscapes**

*Andrea Perino*

- 91** **Life+ Ripisilvanatura: An ecological engineering, adaptive approach to the recovery of southern Mediterranean riparian habitats of European community importance through the control of exotic invasive species**

*Francisco Robledano*

- 92** **One plan to help them all: Spatial habitat restoration planning for multiple species in metapopulations**

*Hawthorne Beyer*

- 93** **Decision tools from evidence synthesis: Supporting woodland eucalypt restoration**

*Libby Rumpff*





- 94** **Effect of peat characteristics on p, n, and doc mobilization from re-wetted peat soils - A laboratory column study for the impacts of restoration on forestry-drained peatlands**  
*Markku Koskinen*
- 95** **Positive effects of ecological restoration on a rare and threatened group of insects: The flat bugs (*aradidae*)**  
*Ruaridh Hägglund*
- 96** **Reducing emissions from the forests under REDD+: A case study state forestry department of Pahang, Malaysia experience**  
*Abdul Khalim Abu Samah*
- 97** **Protected areas management and conservation under future climatic uncertainty: A case study in Chobe National Park, Botswana (sub saharan Africa)**  
*Boipelo Tshwene-Mauchaza*
- 98** **Putting a buzzword to work: How data, representation, and stakeholder perspectives influence the interpretation of resilience for coral reef management**  
*Clare Fieseler*
- 99** **Improving the evidence base of conservation interventions: What role should randomised control trials have?**  
*Edwin Pynegar*
- 100** **Analyzing social values and perceptions to better adapt biological conservation strategies in two Mediterranean deltas**  
*Lisa Ernoul*
- 101** **Linking conservation knowledge and policy - a spatially integrated data application for conservation management**  
*Gal Vine*
- 102** **Incorporating functional diversity in ecological indicators of conservation in Brazilian savanna**  
*Juliana Freitas*
- 103** **Curbing 'inevitable' illegality in protected areas: A collaborative approach**  
*Maarten P G Hofman*
- 104** **Fragmentation, fire and the possum: Spatially explicit modelling in New Zealand's largest Ramsar wetland**  
*Olivia Burge*
- 105** **Recovery of resident large mammal populations in the western Serengeti: Species responses to increased protection, habitat management and community outreach**  
*Peter Goodman*
- 106** **Towards a blue economy in Seychelles: Marine spatial planning and a debt swap**  
*Helena Sims*





## METHODS / INVENTORY AND MONITORING

- 107**    **Balancing economic costs and the ability to detect change in survival for optimising capture-recapture survey design of long-lived birds**  
*Alexandre Millon*
- 108**    **Current status of striped hyena in southeastern Turkey: Preliminary findings of the recent conservation efforts**  
*Ali Onur Sayar*
- 109**    **Estimating true abundance of a Nile crocodile population using a binomial mixture model from replicated counts: A case study in the Kunene river system, Namibia**  
*Arnaud Lyet*
- 110**    **White nose syndrome, wind turbines, and bats of the Delmarva peninsula**  
*Aaron Hogue*
- 111**    **Monitoring of translocated populations using passive integrated transponders and camera traps**  
*Léo Bacon*
- 112**    **Monitoring fisher (*pekania pennanti*) and other forest carnivores across a large geographic area using camera traps and hierarchical models of detection/non-detection data**  
*Brett Furnas*
- 113**    **Improving camera trap performance enhances long-term ecological studies**  
*Chia Luen Tan*
- 114**    **Molecular identification of the wood thrush diet and validation of a protocol for studies of avian diets**  
*Dana Nicole Mccoskey*
- 115**    **A novel butterfly monitoring scheme in Greece**  
*Elli Tzirkalli*
- 116**    **Shall surveys for occupancy estimation continue after the first detection?**  
*Gurutzeta Guillera-Arroita*
- 117**    **Assessment of threatened fish species with an electrified benthic frame trawl in the Danube River - Experiences of the third joint danube survey (jds3)**  
*Ágnes Irma György*
- 118**    **Mind the gap - Putting invertebrates on the conservation agenda**  
*Axel Hochkirch*
- 119**    **Challenges and lessons from predictive ecological modeling for designing an integrative biodiversity monitoring program**  
*J-B. Mihoub*
- 120**    **Inferring opportunities for species interaction from camera trap data**  
*Jeremy Cusack*





- 121 Lake Lerma salamander (*Ambystoma lermaense*) occupancy in the natural protected area Cienegas de Lerma, México**  
*Karla Pelz Serrano*
- 122 French observatory of littoral natural heritage: A collaboration between managers and scientists to develop an efficient marine protected areas management strategy**  
*Marion Caille*
- 123 The Swiss breeding bird atlas 2013-2016**  
*Martin Spiess*
- 124 Use the spotlighting for monitoring endangered Chilean chinchilla**  
*Martin A. H. Escobar*
- 125 Prioritizing biodiversity monitoring in Bolivia**  
*Miguel Fernandez*
- 126 Recording small, medium and large terrestrial mammals with vertically-oriented cameras to guide management strategies across urban-forest edges in Australia**  
*Nelida Villasenor*
- 127 Sensitivity and cost-efficiency of environmental DNA sampling for detecting an aquatic invader (*Lissotriton v. vulgaris*) in Melbourne, Australia**  
*Reid Tingley*
- 128 The structure of an electronic database on carmine scale insects of eastern Kazakhstan and western China**  
*Roman Jashenko*
- 129 Monitoring the effectiveness of silver fir forest restoration: Effects of scale and type of response variable**  
*Simona Maccherini*
- 130 Occupancy and abundance estimation in the presence of detection error: What can we do with a single survey?**  
*Peter Solymos*
- 131 Large mammal diversity in the province of Kastamonu, Turkey: Camera-trapping for an intact assemblage**  
*Anil Soyumert*
- 132 Noticing the elephant in the forest: Combining occupancy analysis with social survey for rapid assessment of forest elephant status**  
*Stephanie Brittain*
- 133 Conservation status of the endangered nubian dragon tree *Dracaena ombet* in Gebel Elba National Park, Egypt**  
*Usama Mohammed*
- 134 Reliability and refinement of the higher taxa approach for bee richness and composition assessments**  
*Yael Mandelik*







- 135 Balancing economic costs and the ability to detect change in survival for optimising capture-recapture survey design of long-lived birds**

*Alexandre Millon*

## **METHODS / LAND USE PLANNING FOR CONSERVATION**

- 136 The challenge of addressing wildlife and human demands: Incorporating mammals conservation and biofuels development in land use planning**

*Cintia Camila Silva Angelieri*

- 137 Thresholds of change in a multi-use conservation landscape of South Africa: Historical land-cover, future transformation and environmental decision-making in the Kruger to Canyons Biosphere Reserve**

*Kaera Coetzer*

- 138 Accounting for land-use intensity and mammal traits in species-area relationships**

*Laura Kehoe*

- 139 Why and how might genetic and phylogenetic diversity be reflected in the identification of key biodiversity areas?**

*Jaime García Moreno*

## **METHODS / POPULATION VIABILITY ANALYSIS**

- 140 Do sex differences influence the accuracy of population viability analysis? The example of survival rates in sparrowhawk (*Accipiter nisus*) in two populations in the UK**

*Alix Aliaga*

- 141 Evaluation of potential puaiohi management activities via population viability analysis**

*Jean Fantle-Lepczyk*

- 142 Population viability analysis of rhinos *Rhinoceros unicornis* in Nepal: Assessing impacts of antipoaching and translocation strategies**

*Hemanta Kafley*

- 143 Implications of model and data uncertainty for conservation decision-making under the IUCN Red list**

*Pamela Rueda-Cediel*

- 144 PVA: do population viability measures correlate?**

*Mario Trouillier*

- 145 Restoring a viable population of lynx in the french vosges mountains: Insights from a spatially explicit individual-based model**

*Laetitia Blanc*

## **METHODS / CONSERVATION MODELING**

- 146 Ecospace - A unified framework for understanding variation in biodiversity**

*Ane Kirstine Brunbjerg*





- 147 Decline of European large mammals under global change scenarios**  
*Carlo Rondinini*
- 148 Can satellite-derived ecosystem functional traits anticipate species shifts?**  
*Domingo Alcaraz-Segura*
- 149 Emergence of landscape carrying capacity for common buzzards from radio-tracking and land-cover mapping**  
*Eduardo Arraut*
- 150 Modelling fine scale habitat associations of medium-to-large forest mammals in the Udzungwa Mountains of Tanzania using camera trapping**  
*Emanuel Martin*
- 151 Conserving Asian elephant's post-mortem - A review of age determinant techniques assessing the use of dentition, skull morphology and cranial suture scheduling**  
*Eloise Stephenson*
- 152 Compiling Red lists: could SDM's contribute to better assessments?**  
*Frank Breiner*
- 153 Modelling biodiversity scenarios in Madagascar under both the effects of climate change and anthropogenic deforestation**  
*Ghislain Vieilledent*
- 154 Development and application of the Danish high nature value (hmv) farming indicator**  
*Jesper Bladt*
- 155 The influence of scale on delineating regional flow patterns for resilient landscapes**  
*Karen Beazley*
- 156 Multi-species translocation strategies are highly interaction-type specific**  
*Michaela Plein*
- 157 Habitat suitability modelling of amphibians and reptiles in fire-prone regions uncover contrasted responses according to species-specific biogeographic affinities**  
*Neftalí Sillero*
- 158 Maximizing the utility of maxent: Exploring the influence of bias mask, feature types, and statistical test selection on model parsimony**  
*Shannon Bale*

## **METHODS / RECOVERY OF ENDANGERED SPECIES**

- 159 Making a difference: The impact of seed conservation and translocation on threatened plant recovery**  
*Anne Cochrane*
- 160 Evaluating threatened species recovery plans: Proposed framework and universal lessons for monitoring and evaluation**  
*Alex Ortega-Argueta*





- 161 Augmentation of the critically endangered species, *Aloe saundersiae***  
*Brigitte Church*
- 162 Conservation of *gentiana lutea* L. (*Gentianaceae*) in sardinia through a multidisciplinary approach**  
*Caterina Angela Dettori*
- 163 Reproductive and early life history aspects of an endemic endangered freshwater fish of the Chilean highlands**  
*Consuelo Macaya Solís*
- 164 Quantifying population recovery after forest fires: A multi-methodological approach**  
*Dominique Potvin*
- 165 Impact of forest exploration on natural regeneration of an endangered amazon species *Virola surinamensis* (rol.) warb: Consequences for conservation**  
*Fatima Piña-Rodrigues*
- 166 Conservation of a keystone species: Black tailed prairie dog recovery in northwestern Mexico**  
*Alejandro Marin*
- 167 Captive breeding and reintroduction of amphibians - how far have we come?**  
*Gemma Harding*
- 168 Anthropogenically altered landscapes negatively affect resting sites but create favourable foraging habitat for otters in the Alps**  
*Irene C. Weinberger*
- 169 The effect of nest box cleaning on the breeding success of red-footed falcons (*Falco vespertinus*)**  
*Anikó Kovács-Hostyánszki*
- 170 A continental approach to orchid conservation and restoration**  
*Gary Krupnick*
- 171 A comparison of soft and hard reintroductions of the critically endangered wyoming toad (*Anaxyrus baxteri*)**  
*Luke Linhoff*
- 172 A 5-years integrated project for the conservation of *limodorum trabutianum* batt. (*orchidaceae*): The example of the marturanum park (Latium, Italy)**  
*Sara Magrini*
- 173 Physiological stress in reintroduced tiger populations: How does it affect conservation outcomes?**  
*Manjari Malviya*
- 174 Importance of monitoring methods in a restoration program of an endangered diadromous fish: Case study on *Acipenser sturio* sustained population**  
*Marie-Laure Acolas*





- 175 A 20 years monitoring of the brown bear population in the Pyrenees, from 1994 to 2013: Results and perspectives**  
*Nicolas Bombillon*
- 176 Leveraging non-traditional funding to fill critical information gaps in endangered species recovery: A case study on Mexican spotted owls and the collaborative forest restoration program**  
*Quentin Hays*
- 177 Parasitic flies in artificial red-footed falcon's nest boxes**  
*Zoltán Soltész*
- 178 Using multiscale prioritization criteria to optimize electrocution mitigation: An example for the endangered bonelli's eagle *Aquila fasciata***  
*Antonio Hernandez-Matias*

## **METHODS / RISK ASSESSMENT AND UNCERTAINTY**

- 179 Population trends of 3 amphibians from the Napo River, Peru: How do these compare with climate change vulnerability assessments**  
*Marcy Sieggreen*
- 180 A novel biodiversity footprint based on extinction risks to evaluate the effect of international wood trade**  
*Shota Nishijima*
- 181 Esenias-tools: Regional initiative to conserve biodiversity**  
*Ahmet Uludag*

## **METHODS / SCIENTISTS, STAKEHOLDERS, AND MANAGERS: BRIDGING THE GAP**

- 182 Biodiversity knowledge in voluntary conservation**  
*Anna Salomaa*
- 183 Setting and realizing a conservation research agenda for Hungary: Outcomes of a participatory approach**  
*Barbara Mihók*
- 184 Information needed for decision makers to take action on climate change adaptation for smallholder farmers-the case of central America and Mexico**  
*Camila Donatti*
- 185 Science for nature and people initiative - Multidisciplinary teams solving problems at the nexus of conservation and human well-being**  
*Craig Groves*
- 186 An ecosystems approach to managing vegetation along Britain's transport corridors**  
*Helen Davies*





- 187 Inter-governmental, multi-donor, and academic coordination to implement a transparent national forest monitoring system in Bangladesh**  
*Karl Wurster*
- 188 Coming to terms with assisted migration**  
*Maria Hällfors*
- 189 The importance of Sapo conservation centre to the people and biodiversity of the Sapo National Park, Liberia**  
*Mary Molokwu*
- 190 Naturetrade: Creating a marketplace for ecosystem services**  
*Peter Long*
- 191 Heated debate but little evidence: Using systematic reviews to build bridges between stakeholders**  
*Sini Savilaakso*
- 192 The loire nature resources center as a researchers - Conservation practitioners linking tool**  
*Stéphanie Hudin*
- 193 Stakeholder attitudes and opinions regarding the management of large mammals in the Carpathians**  
*László Szemethy*

## METHODS / SPATIAL ECOLOGY AND CONSERVATION

- 194 Effects of highway noise on glucocorticoid levels of the gulf coast toad (*Incilius valliceps* in central Texas)**  
*Aaron Haynes*
- 195 How does habitat change at landscape scale affect functionality of species interactions?**  
*Ana-Johanna Voinopol-Sassu*
- 196 Trait-dependent responses of butterflies to the connectivity of semi-natural elements in agricultural landscapes**  
*Anne Villemey*
- 197 Modelling pollinator communities in heterogeneous landscapes**  
*Arvid Bolin*
- 198 Do estimates of landscape resistance reflect animal movement?**  
*Briana Abrahms*
- 199 Diversity of diurnal butterflies (*Papilionoidea*) in a high Andean landscape from northeastern Colombia and its importance for conservation**  
*Diego Carrero-Sarmiento*
- 200 Modelling hybridization with density-dependent range expansion and its implications for conservation**  
*Claudio Quilodrán*







- 201 Snapping turtle (*Chelydra serpentina*) home range analysis in an open river system: Implications for conservation and harvest regulations**  
*Benjamin Colteaux*
- 202 Range size doesn't matter, it's how you use the habitat**  
*Corinne Kendall*
- 203 Movement ecology of the globally endangered Egyptian vulture *Neophron percnopterus* in the middle east and north Africa**  
*Evan Buechley*
- 204 Spatially explicit densities of two generalist predators at two mixed-grass prairie landscape: Implication for quail conservation in the Great Plains**  
*Fidelis Atuo*
- 205 High elevation endemics and climate change: The future of rare lichens in the southern Appalachians**  
*Jessica Allen*
- 206 Use of lidar data to plan forest management measures for bat conservation**  
*Jeremy Froidevaux*
- 207 Marine spatial planning makes room for offshore aquaculture in crowded waters**  
*Joel Stevens*
- 208 Considerations of scale in jaguar and puma resource selection models based on scat locations in southern Mexico**  
*Jennifer Day*
- 209 Should I stay or should I go? Conservation implications of individual variation in brown pelican migratory strategies**  
*Juliet Lamb*
- 210 Setting conservation priorities in dynamic migratory networks**  
*Kiran Dhanjal-Adams*
- 211 Extinction debt of epiphytic plants - can management waive the debt?**  
*Kristoffer Hylander*
- 212 Preserving past evolutionary diversity into the future**  
*Laura Pollock*
- 213 Climate refugia and biodiversity conservation in an era of anthropogenic climate change**  
*Laura Coristine*
- 214 Using landscape and bioclimatic features to predict the distribution of lions, leopards and spotted hyaenas in Tanzania's ruaha landscape**  
*Leandro Abade*





- 215 A spatially-explicit model of ecological traps in heterogeneous landscapes**  
*Lina Maria Sanchez Clavijo*
- 216 Ecology and conservation of an endangered carnivorous marsupial in a semi-arid environment: Invasive predator impact**  
*Lorna Hernandez Santin*
- 217 Effect of climate change on richness and diversity of bird communities in Mediterranean basin: An implementation of the sesam framework**  
*Manuela D'Amen*
- 218 Geographical ontogenetic and sex based separation of the endangered green and golden bell frog (*Litoria aurea*)**  
*Melanie James*
- 219 The role of landscape changes in shaping alpine species distribution**  
*Michele Zurlo*
- 220 Home range and habitat selection of the lesser kestrel (*Falco naumanni*) in Thessaly, Greece: A first step towards concrete conservation measures**  
*Panagiotis Kordopatis*
- 221 Habitat preference modelling reveals potential conflict for space between aquaculture and endemic Chilean dolphins**  
*Tilen Genov*
- 222 Comparing biogeographic patterns of butterflies, orthopterans and vascular plants in the Swiss western prealps**  
*Valeria Bucher*
- 223 Sampling design may distort the estimations of mark-recapture models for *Carabus hungaricus***  
*Zoltán Elek*
- 224 Spatial distribution estimates of assamese macaque (*Macaca assamensis*) in south and south-east Asia based on a first open access ensemble model-prediction**  
*Ganga Ram Regmi*
- 225 To drink or not to drink? Elephant movement strategies as surface water availability declines in a semi-arid savanna**  
*Hugo Valls Fox*
- 226 The use of tidally driven, hydrodynamic features by foraging coastal bottlenose dolphins**  
*Sam Cox*
- 227 Climate refugia and biodiversity conservation in an era of anthropogenic climate change**  
*Laura Coristine*





## **METHODS / USE OF TRADITIONAL ECOLOGICAL KNOWLEDGE IN CONSERVATION DESIGN AND PLANNING**

- 228 Plant phylogenetic diversity as a tool to identify priority areas for conservation**  
*Danilo Silva*
- 229 Indigenous methods, knowledge and voice: A Mi'kmaw first nation approach to learning about fire's relationships to the land**  
*Shalan Joudry*
- 230 Participatory establishment of fish conservation zones in the Mekong river**  
*Samuel Leslie*
- 231 Integrating cultural technology in conservation planning**  
*Martin Nganje*

## **THEMATIC POSTER EXHIBITION: CONCEPTS OF FARM DESIGN: SEARCHING FOR 'THE RIGHT' BIODIVERSITY FOR CONSERVATION IN EXISTING AND EXPANDING FARMING AREAS, AND 'RESTED' AREAS INTENDED FOR RENEWED AGRICULTURAL ACTIVITIES**

- 232 Analog forestry, building a balance between production and conservation**  
*Lorena Gamboa*
- 233 Looking for spatial synergies: Land use configuration and livelihood diversity on permaculture farms in the USA**  
*Rafter-Sass Ferguson*
- 234 Farm design within coffee farms in Costa Rica and Cuba: Management systems for quality, environmental conservation and regeneration (within rested areas), and disease management**  
*Melissa Vogt*
- 235 Analog forestry, permaculture and agro ecology – where they meet and where they diverge.... how can they complement each other toward conservation intentions and toward ideas of 'the right biodiversity'?**  
*Melissa Vogt*





**POSTER SESSION:  
WEDNESDAY, 5 AUGUST  
17:15-18:30**



**DISCIPLINES / CONSERVATION GENETICS**

- 1     **Coral reef connectivity in Palau: A population genetics approach to coral reef management in warming seas**  
*Annick Cros*
  
- 2     **Fine-scale genetic structure in an African antelope species distributed across a landscape of fragmented forests**  
*Andrew Edward Bowkett*
  
- 3     **DNA metabarcoding for diet and parasitic estimation of markhor (*Capra falconeri*) in Chitral, Pakistan**  
*Amna Arshad Bajwa*
  
- 4     **Landscape genetics of jaguars from Belize**  
*Angelica Menchaca*
  
- 5     **Non-invasive genetics of the Eurasian lynx of the Western Carpathians**  
*Barbora Turbakova*
  
- 6     **Genetic diversity in ringed seals (*Pusa hispida*) from the Baltic Sea and the adjacent lakes**  
*Bethany Cole*
  
- 7     **Assessing the spatial extent of wolf-dog hybridization in real-time and at a population level using non-invasive DNA sampling**  
*Carolina Pacheco*
  
- 8     **Phenotypic diversity of Philippine abaca**  
*Catherine Hazel Aguilar*
  
- 9     **Determination of genetic variation of sand gazelles in Turkey and newly improved conservation acts**  
*Dilan Saatoglu*
  
- 10    **Evidence of a fine-scale genetic structure for the endangered Pyrenean desman (*Galemys pyrenaicus*) in the French Pyrénées**  
*François Gillet*
  
- 11    **Signs of erosion in the Iberian lynx genome**  
*José A. Godoy*
  
- 12    **Seeds of destruction? Measuring sperm health in bird species with recent population bottlenecks**  
*Helen Ruth Taylor*





- 13 **Towards implementation of a global plan of action for conservation, sustainable use and development of forest genetic resources**  
*Judy Loo*
- 14 **Building an immunome for the Gopher tortoise: Is there a genetic basis to upper respiratory tract disease?**  
*Jean Elbers*
- 15 **Grasping albatross diet without grasping albatross: A non-invasive DNA diet analysis method to encompass the whole diet**  
*Julie Mcinnes*
- 16 **Genetic variation at MHC and toll-like receptor genes and their relationship to disease in endangered red wolves and sympatric coyotes**  
*Kristin Brzeski*
- 17 **Phylogenomics method for ranking populations of the endangered anadromous Atlantic salmon (*Salmo salar*) for conservation management**  
*Lauréline Faye*
- 18 **Genetic landscape with sharp allele frequency shifts in Swedish moose (*Alces alces*)**  
*Lovisa Wennerström*
- 19 **Genetic and ecological studies on the coastal plant *Malcolmia littorea* (L.) r. br. (Brassicaceae) across Europe: Identification of priorities for its conservation**  
*Marcello De Vitis*
- 20 **Genome-wide SNP data reveal fine-scale population structure of Indian tigers**  
*Meghana Natash*
- 21 **Characterization of MHC Class II supertypes in the New Zealand endemic Hochstetter's frog**  
*Mette Lillie*
- 22 **Population genetics of Pallas's cats (*Otocolobus manul*) in Mongolia**  
*Melina Giakoumis*
- 23 **Population genetic analysis of an endangered species, *Rhododendron aureum*, and its congeneric species, *R. brachycarpum*, Ericaceae**  
*Myounghai Kwak*
- 24 **Cryopreservation for long-term conservation of Date palm (*Phoenix dactylifera* L.) diversity**  
*Mohammad Salma*
- 25 **Peculiar reproduction in Iberian lynx (*Lynx pardinus*): What stands behind *Corpora lutea* persistence?**  
*Olga Amelkina*
- 26 **Genetic diversity and population structure of the Orphan leafless vanilla *Humblotii* rchb. f. (Orchidaceae, Vanilloideae) at the scale of the Comoro Archipelago (Indian Ocean)**  
*Laurent Rodolphe Gigant*







- 27 Population estimation and genetic inferences of Markhor (*Capra falconeri*) in Chitral, Pakistan using non-invasive sampling**  
*Saher Islam*
- 28 An Australia-wide conservation genetic study of little penguins (*Eudyptula minor*): Augmenting population genetics at neutral loci with an adaptive immune gene, MHC**  
*Sandra Vogel*
- 29 Genetic characterization of the relict population of the European sturgeon, *Acipenser sturio*: Insights into breeding and conservation programs**  
*Séverine Roques*
- 30 The range expansion of the Kuhl's pipistrelle bat in Israel: What can be learnt from the population's genetics?**  
*Shirli Bar-David*
- 31 The relationship between population size, effective number of breeders and the environment in brook trout**  
*Thais Bernos*
- 32 Landscape genetics of grey wolves at the range edges in central Europe**  
*Vendula Woznicová*
- 33 Population genetic structure of *Acacia tortilis* trees in Israel and implications for their conservation**  
*Yael Rodger*
- 34 Evolutionary history of the endangered Mediterranean tortoise *Testudo hermanni hermanni*: Genetic structure, historical demography and conservation issues**  
*Saliha Zenboudji*
- 35 Threatened Fossorial skinks pose an interesting challenge to conservation strategies: The case of *Scelotes gronovii* and *Scelotes kasneri* (Lacertilia: Scincidae) from the Western Cape Coast, South Africa**  
*Neil Heideman*
- 36 Simulations based on molecular-genetic data in detection of expansion *Salmo trutta allochthonous* population in the Neretva River's tributaries**  
*Naris Pojskic*
- 37 The population genetic analysis of an endangered Korea fir (*Abies koreana*) and conservation implication**  
*Jina Lim*

**DISCIPLINES / CONSERVATION MEDICINE**

- 38 A ticking time bomb? Lyme disease implications for conservationists**  
*Holly Donohoe*
- 39 Using contact networks to predict infectious disease risk in social mammals**  
*Julie Rushmore*





- 40 Trypanosomiasis and Leishmaniasis in bats: Evaluating the environmental disturbance influence in the Greater Lacandona ecosystem**  
*Luis Viquez-R*
- 41 Detailed monitoring of a small but recovering population reveals sublethal effects of disease and unexpected interactions with supplemental feeding**  
*Simon Tollington*
- 42 Infection from dogs: Emerging threat to wild carnivores**  
*Vratika Chaudhary*
- 43 Prevalence of intestinal parasitic infections in free-ranging red panda *Ailurus fulgens*, cuvier 1825 (Carnivora: Ailuridae: Ailurinae) in Nepal**  
*Tirth Ghimire*

## DISCIPLINES / ECOLOGICAL RESTORATION

- 44 Are we restoring enough? Simulating the impacts of climate change, boreal forest management and restoration on future habitat suitability for a threatened woodpecker**  
*Anouschka Hof*
- 45 Effects of environmental variables on the spatial distribution of coniferous species in the northwestern Algeria**  
*Faouzia Ayache*
- 46 Differential importance of pasture size and grazing continuity for the conservation of dung beetles**  
*Joern Buse*
- 47 Reintroducing Tasmanian devils to mainland Australia can restore top-down control in areas where dingoes have been extirpated**  
*Daniel Hunter*
- 48 Integrating climate-ready rehabilitation and restoration in old stable landscapes for a more sustainable forest future: An example from the Jarrah Forest, south-western Australia**  
*Grant Wardell-Johnson*
- 49 Optimal conservation outcomes require both restoration and protection**  
*Hugh Possingham*
- 50 Dark diversity illuminates the dim side of restoration prioritisation**  
*Jesper Erenskjold Moeslund*
- 51 Continental-scale rewilding of an invaded ecosystem: Australia**  
*Menna Jones*
- 52 Opportunities and constraints for the restoration of the Atlantic Forest**  
*Morena Mills*
- 53 Ecosystem services as a rationale for ecological restoration in Australia**  
*Virginia Matzek*





- 54 Impact of soil properties on the distribution and abundance of *Isoberlinia doka* in Nigeria**  
*Olayinka Daodu*

**DISCIPLINES / EVOLUTION AND CONSERVATION**

- 55 Is hybridization threat for conservation? Case of Prince Ruspoli's turaco, Ethiopia**  
*Alazar Ruffo*
- 56 Influence of social systems and population dynamics on the evolutionary responses to environmental pressures - A case study in western lowland gorillas**  
*Alice Baudouin*
- 57 The role of buffer zones in the conservation of birds in protected areas: A case study of Sapo National Park, Liberia**  
*Benedictus B.G. Freeman*
- 58 The effect of rock type and landscape proprieties in the population demography, genetic structure, phenotypic divergence and reproductive investment in a neotropical montane orchid**  
*Bruno Leles*
- 59 Understanding the resilience of African rainforest trees, applying new genomic tools to phylogeography**  
*Jérémy Migliore*
- 60 Elephant utilization and impacts on the functional diversity of the Dioecious palm tree *Borassus aethiopum mart.* in the Pendjari National Park, Benin**  
*Kolawole Valère Salako*
- 61 Basal angiosperm species as listening posts for climate change in New Caledonia**  
*Santiago Trueba*
- 62 Extinction risk in migratory birds**  
*Veronica Gama*
- 63 Integrative taxonomy and conservation of the fly orchid group**  
*Nina Joffard*

**DISCIPLINES / BEHAVIORAL ECOLOGY AND CONSERVATION**

- 64 Overwinter site selection of a northern population of western painted turtles (*Chrysemys picta bellii*) in a hydroelectric reservoir environment**  
*Amy Duncan*
- 65 Chipmunk in the city: Effects of urbanization on individual behavior and ecology of eastern chipmunks**  
*Albrecht Schulte-Hostedde*
- 66 Designating new tiger reserves: The case of Sathyamangalam Tiger Reserve in South India**  
*Vinoth B*





- 67 Nest site selection and risk of predation in the ground-breeding woodlark (*Lullula arborea*)**  
*Roman Bühler*
- 68 Ecological effects on primate social network structure and implications for infant survival**  
*Derek Murphy*
- 69 The effects of small livestock farming on the diversity, distribution and activity patterns of wildlife in a semi-arid region of South Africa**  
*Marine Drouilly*
- 70 Feeding ecology of Eurasian lynx from Mediterranean to Caucasian ecosystem: Specialist diet and implications for conservation**  
*Huseyin Ambarli*
- 71 Ecology and conservation of endangered dholes in Southeast Asia**  
*Jan Kamler*
- 72 Habitat selection of the Great Basin spadefoot (*Spea intermontana*) on the terrestrial landscape**  
*Jo-Anne Hales*
- 73 Observer effects and the risk-disturbance hypothesis in Samango monkeys**  
*Katarzyna Nowak*
- 74 Foraging behavior of three sympatric equid species in the Mongolian Gobi: A stable isotope approach**  
*Martina Burnik Sturm*
- 75 Importance of bear management for conservation of Eurasian lynx**  
*Miha Krofel*
- 76 Distribution and habitat preference of red panda (*Ailurus fulgens fulgens*) in Jumla District, Nepal**  
*Saroj Panthi*
- 77 Psychophysical assessment of Giant panda hearing sensitivity: Implications for conservation and management**  
*Megan Owen*
- 78 From behavioral ecology to conservation: Investigating the social structure of provisioned lemon sharks (*Negaprion acutidens*) as a tool for managing shark-feeding activities**  
*Pierpaolo Brena*
- 79 Tracking the movements of a small and threatened New Zealand native frog**  
*Patricia Ramirez*
- 80 Spatial ecology of female *Trimeresurus macrops* in natural and human-disturbed forest of Sakaerat Biosphere Reserve, Thailand**  
*Pongthep Suwanwaree*
- 81 Browsing by hares on forest vegetation in response to supplementary food**  
*Sara Öhmark*





- 82 Update on the status of the endangered short-beaked common dolphin (*Delphinus delphis*) in the central Mediterranean Sea**  
*Sylvia Frey*
- 83 Sensory ecology of nectar-feeding bats: Olfaction and echolocation**  
*Tania Paulina Gonzalez Terrazas*
- 84 The modern conservation biology initiatives in the Democratic Republic of Congo (DRC): The example of the conservation of bonobos by the NGO Mbou-Mon-Tour (MMT)**  
*Valentin Omasombo Wotoko*
- 85 All snakes are created equal, but some are more equal than others: Examining the causes of inter-individual heterogeneity in dispersal-related performance**  
*Mathew Vickers*
- 86 Flight initiation distance and genetic variation**  
*Yiting Jiang*
- 87 Supplementary feeding stations to sustain Griffon vulture populations: A risk of ecological trap?**  
*Julie Fluhr*
- 88 Artificial salines as alternative habitats for shorebird conservation in the northeastern Brazil**  
*Vitor De Oliveira Lunardi*
- 89 When to explore a new habitat? A microcosm experiment to examine how habitat and travel route conditions affect exploration by terrestrial isopods**  
*Sasindu Gunawardana*
- 90 Coastal wildlife reserve of Tibau do Sul (refauts): Nursery of Guiana dolphin, *Sotalia guianensis*, in Rio Grande do Norte, Brazil**  
*Diana Lunardi*

**2. ECOSYSTEMS / 2.04 URBAN AREA CONSERVATION**

- 91 Fine-scale urbanization affects Odonata species diversity in ponds of a megacity (Paris, France)**  
*Martin Jeanmougin*

**ECOSYSTEMS / URBAN AREA CONSERVATION**

- 92 Predicting future Emerald ash borer *Agrilus planipennis* (Coleoptera) invasion into Texas using dispersal rates and distribution of *Fraxinus texensis***  
*Katalina Salas*
- 93 Emerging threats and opportunities for urban environments**  
*Margaret Stanley*
- 94 Spectral characteristics of avian communal roosting in urban habitats of Delhi, India**  
*Manoj Singh*







- 95** **Bird community composition along an urbanization gradient in a Mediterranean city**  
*Olga Tzortzakaki*
- 96** **Stressed in the city: Why common species are important**  
*Paul Lintott*
- 97** **The relationship between white-tailed deer (*Odocoileus virginianus*) population density, foraging pressure on vegetation, and fecal cortisol levels**  
*Pamela Millan*
- 98** **Biodiversity surveys guide urban development strategies to conserve nature in the city**  
*Sarah Reed*
- 99** **Effects of urbanization on ground-dwelling arthropods: A multi-taxa approach**  
*Béla Tóthmérész*

## ECOSYSTEMS / DISTURBANCE ECOLOGY

- 100** **Response composition of epiphytic lichens differs among tree taxa**  
*Åsa Ranlund*
- 101** **A 3000 ha spatial explicit fire history illustrating the mosaic structure of boreal landscapes in northern Europe**  
*Bengt Gunnar Jonsson*
- 102** **Managing co-occurring disturbances for the conservation of forest vegetation and small vertebrate fauna**  
*Claire Foster*
- 103** **Landscape-scale effects of prescribed fire and wolves on elk utilization of aspen in the Canadian Rocky Mountains**  
*Cristina Eisenberg*
- 104** **Wood fungi decomposition increased by heat shock**  
*Fredrik Carlsson*
- 105** **Immediate bird responses to windstorm disturbance: A case study from Bussaco National Forest, central Portugal**  
*Milene Matos*
- 106** **Impacts of disturbance on an endangered montane lizard in southeastern Australia**  
*Sarsha Gorissen*
- 107** **Divergent responses of birds, mammals and reptiles to landscape-scale wildfire**  
*Tim Doherty*
- 108** **Impacts of water use and global climate change on aquatic vertebrate biodiversity in the Draa Basin, southeastern Morocco**  
*Soumia Loulida*





**ISSUES / ALIEN AND INVASIVE SPECIES**

- 109 Morphometrics and urban adaptations of Asian pied myna (*Sturnus contra*) in Rawalpindi City, Pakistan**  
*Sakhawat Ali*
- 110 Diversity in invasion: Variation in the invasive ecology of Australian *Potamopyrgus antipodarum* clones**  
*Adrian Dusting*
- 111 Pushing the boundaries on island rodent eradications in the tropics: Ship rat eradication on Cayo Centro, Banco Chinchorro, México**  
*Araceli Samaniego-Herrera*
- 112 Evaluate range-expansion models for calculating nonnative species' expansion rate**  
*Åsa Berggren*
- 113 Restricting an introduced vertebrate's access to invasion hubs reduces both their abundance and impact on a native predator**  
*Benjamin Feit*
- 114 Invasive ants and island conservation: The increasing need, management record, and future prospects**  
*Ben Hoffmann*
- 115 Impact of introduced Anurans on Newfoundland ecosystems**  
*Dion Kelly*
- 116 Eradication of invasive mammals on islands could prevent 40% of island vertebrate extirpations globally**  
*Erin McCreless*
- 117 What evidence is there to support the creation of a predator free 'mainland island' in Mauritius to prevent the extinction of a critically endangered passerine?**  
*Gwen Maggs*
- 118 Are human-related processes or just natural predisposition the drivers of invasion? An Australian perspective**  
*Hernan Caceres*
- 119 Experimental study of the negative effect of the invasive exotic shrub *Frangula alnus* on the growth of planted understory tree seedlings**  
*Caroline Hamelin*
- 120 Recognition of invasive alien predators by tadpoles of the agile frog (*Rana dalmatina*)**  
*Attila Hettyey*
- 121 Sentinels of global changes: The French Pacific Island territories as exceptional sites for research and management of invasive alien species**  
*Jean-Yves Meyer*
- 122 Rad-sequencing and SNP genotyping to examine adaptation in globally invasive parakeets**  
*James Taylor*





- 123 Towards a regional strategy on invasive plants species (Provence-Alpes-Côte d'Azur, France)**  
*Katia Diadema*
- 124 *Sinanodonta woodiana* as a good surrogate species in environmental assessment**  
*Nora Kováts*
- 125 Context-dependent effect of invasive alien species on native plant communities**  
*Magdalena Lenda*
- 126 Hunting for aliens: A conceptual framework to assist stakeholder engagement in the management of invasive non-native species**  
*Marie Pagès*
- 127 Science leads governance for the control of invasive lionfish in Belize**  
*Meira Mizrahi*
- 128 Invasive mammals impact at a biodiversity hotspot scale: The case of feral cat on the New Caledonian Archipelago**  
*Pauline Palmas*
- 129 Birds be safe: Can a novel cat collar reduce avian mortality by domestic cats (*Felis catus*)?**  
*Susan Willson*
- 130 Complex interactions between long standing introduced rats and native plants in a New-Caledonian rainforest**  
*Quiterie Duron*
- 131 An optimal approach to managing two-species competition: Stopping the *Gambusia* fish invasion of Edgbaston Mound Springs**  
*Sam Nicol*
- 132 Moss invasion effects on coastal dune arthropods**  
*Jens Schirmel*
- 133 Toward a better assessment of invasive rodent impacts on island endemic reptiles. A pilot study in New Caledonia**  
*Martin Thibault*
- 134 Gap characteristics from lidar remote sensing data in an alluvial forest**  
*Katalin Varga*
- 135 Heggehog as an island invader: A genetic perspective**  
*Barbora Černá Bolfíková*
- 136 Social perception of alien species in the Tuscan Archipelago National Park (Italy)**  
*Jacopo Cerri*
- 137 Using multiscale prioritization criteria to optimize electrocution mitigation: An example for the endangered Bonelli's eagle *Aquila fasciata***  
*Antonio Hernandez-Matias*





**ISSUES / CONSERVATION IN HOTSPOTS**

- 138 How well do we know our biodiversity? A case study of mammals of Colombia**  
*Andrés Felipe Suárez-Castro*
- 139 “Hotspots” to “reddspots”: Optimising carbon, jaguars and biodiversity conservation**  
*Alan Eduardo De Barros*
- 140 Fallow hunters: Spatio-temporal dynamics of large mammal hunting in a shifting cultivation landscape in Arunachal Pradesh, India**  
*Anirban Datta-Roy*
- 141 Amphibian distribution and conservation in the eastern Himalaya**  
*Barkha Subba*
- 142 Climate change mediates risk of global biodiversity loss due to land-cover change**  
*Chrystal Mantyka-Pringle*
- 143 Population estimates of an endangered game bird in the overhunted Brazilian Atlantic Forest hotspot**  
*Christine Steiner S. Bernardo*
- 144 Along a gradient from forest to oil palm plantation: Influence of habitat modification on afro-tropical birds**  
*Elleni Vendras*
- 145 European overseas, new frontier for biodiversity research?**  
*José Azevedo*
- 146 Distribution pattern of woody endemic plant species in Georgia (the South Caucasus)**  
*Mariam Kikvidze*
- 147 Density, diet, and prey selection of the Indochinese leopard in eastern Cambodia**  
*Susana Rostro-García*
- 148 Understanding wildlife-people interactions through multidisciplinary approaches for appropriate pathways to conservation in the Darjeeling Himalayas, India**  
*Sunita Pradhan*
- 149 Habitat use by mountain ungulates in a subalpine habitat in Sikkim Himalaya, India**  
*Tanushree Srivastava*
- 150 Status and food habits of the endangered dhole *Cuon alpinus* in Khangchendzonga, Sikkim, India**  
*Tawqir Bashir*
- 151 Conserving God’s own country: Biodiversity in agroforestry landscapes of Kerala, India**  
*Theraesa Coyle*
- 152 Sycamore pastures in the northern Alps: A hotspot of biodiversity**  
*Thomas Kiebacher*





- 153 Amphibian diversity in agroforestry systems practiced in northeast India - A biodiversity hotspot**  
*Yashmita Ulman*
- 154 Temporal shifts in communities of orchids in Corsica: Role of vegetation changes in a 27-year long interval using bayesian multispecies site-occupancy model**  
*Hélène Vogt Schilb*
- 155 Evaluating conservation needs in a West African biodiversity hotspot and an Ebola epicentre**  
*Clement Tweh*

## ISSUES / OVEREXPLOITATION OF NATURAL RESOURCES

- 156 Floristic homogenization caused by overexploitation of the endangered tropical palm tree *Euterpe edulis mart***  
*Dalva Maria Silva Matos*
- 157 Can forest certification save *Pericopsis elata* (Harms) van meeuwen in Cameroon?**  
*Shu Gideon Neba*
- 158 The consumption of wild meat in Madagascar: Food security, drivers of consumption, and popularity as a food item**  
*Kim Reuter*
- 159 Biomass increases go under cover: Woody vegetation dynamics in South African rangelands**  
*Penelope Mograbi*
- 160 Disentangling the net: The socio-ecological dynamics of mosquito net fishing**  
*Rebecca Short*
- 161 Assessing the sustainability of wildlife harvesting: Commercial and subsistence hunting of endemic pigeons in the tropical island of São Tomé**  
*Ricardo De Lima*
- 162 Degradation in a critical watershed of northern Haiti: The river Haut du Cap and Cap-Haitien Bay**  
*Samantha Oester*
- 163 Reaping the last harvest: Post-depletion timber value of Amazonian forest stands**  
*Vanessa Richardson*
- 164 Social-ecological modeling for environmental sustainability**  
*Takuya Iwamura*

## ISSUES / CHEMICAL POLLUTION

- 165 Deltamethrin induced cytotoxicity and oxidative damage to the freshwater ciliate *Paramecium tetraurelia***  
*Rima Amamra*
- 166 Effect of chemical stressors on crayfish food cue response**  
*Brianna Henry*





- 167 Physiological and biochemical responses of ciliate model *Paramecium* sp. to Dithiocarbamates and Triazoles fungicides**  
*Meriem Djekoun*
- 168 Determination of trace metals levels in seawater and zooplankton in the Moroccan Atlantic Coast**  
*Imane Afandi*
- 169 Changing sensitivity to a glyphosate-based herbicide during the tadpole stage in the common toad (*Bufo bufo*)**  
*Zsanett Mikó*
- 170 Characterization of a genotoxicity biomarker in three-spined stickleback and implications for environmental monitoring**  
*Raphael Santos*

**ISSUES / ENERGY POLLUTION (NOISE, LIGHT, THERMAL POLLUTION, ETC)**

- 171 Oil and gas compressor noise impacts fecundity of a threatened species of prairie-grouse**  
*Andrew Gregory*
- 172 A playback experiment on the effects of natural energy extraction noise on wildlife: The phantom natural gas field**  
*Elizeth Cinto-Mejia*
- 173 Light pollution and bats: Is it time to switch off the lights?**  
*Julie Day*

**ISSUES / BIOLOGICAL POLLUTION (SEWAGE, NUTRIENTS ETC)**

- 174 Potential toxicity of a nonsteroidal anti-inflammatory (NSAID) family's salicylate on an alternative biological model: *Paramecium* sp**  
*Fella Kermiche Achaichia*
- 175 Cannibalism and reduced body condition: Why would corn cause reproductive failure in the common hamster (*Cricetus cricetus*)?**  
*Mathilde Louise Tissier*

**ISSUES / PLASTICS AND DEBRIS POLLUTION**

- 176 Assessment and management of marine litter pollution in the Slovenian part of the Adriatic Sea**  
*Elizabeta Gabrijelčič*

**ISSUES / HABITAT DEGRADATION AND FRAGMENTATION**

- 177 Impacts of a road construction on waterbird populations at Asunción Bay, Paraguay**  
*A. Alberto Yanosky*
- 178 3.09 Mollusks assemble diversity in three landscape units of dry forest with different levels of transformation in the Valle del Magdalena in Victoria and La Dorada (Caldas-Colombia)**  
*Angélica Prado-Ospina*







- 179 Tipping points in the collapse of ecosystem function following primary forest degradation**  
*Anthony Waldron*
- 180 The impact of nature management across the annual cycle in long-distance migratory songbirds**  
*Anders P. Tottrup*
- 181 Effect of landscape fragmentation on genetic diversity of a generalist species in Chiapas, Mexico**  
*Arturo Carrillo-Reyes*
- 182 Do least-cost models predict animal movement?**  
*Annika Keeley*
- 183 Wildlife in a human-dominated world: The threat of infrastructural development**  
*Aurora Torres*
- 184 Cultural monuments and nature conservation: The role of Kurgans in maintaining steppe vegetation**  
*Balázs Deák*
- 185 Effects of Hurricanel on riparian bird community structure in southern Belize**  
*Kimberly Smith*
- 186 Changes in species communities of diving beetles (*Coleoptera: Dytiscidae*) within ombotrophic peatland ponds along a human impact gradient**  
*Lars Lønsmann Iversen*
- 187 Cave disturbances and its effects to cave-dwelling bats in a small island in southern Philippines**  
*Ma Nina Regina Quibod*
- 188 Agriculture homogenizes diversity**  
*Murilo Miranda*
- 189 Habitat amount vs. configuration: A test with small mammals of the Atlantic Forest of Brazil**  
*Marcus Vieira*
- 190 Habitat amount determines species' extinction risk threshold**  
*Ricardo Dobrovolski*
- 191 Complex research on biodiversity (flora, bumblebee and common bird fauna) of wood pastures in the North Hungarian Mountains**  
*Dénes Saláta*
- 192 Relation between former forest management and habitat degradation in a riparian oak forest**  
*Marianna Selmeçi*
- 193 Effects of the conservation management on the grassland vegetation of Sár Mountain in Hungary**  
*Boglárka Uj*
- 194 Are mixed troops affected by habitat loss and fragmentation? An example from Colombian primates**  
*Xyomara Carretero-Pinzon*





- 195 Demographic decline and potential vulnerability to extinction in the Souss Valley tortoise, *Testudo graeca soussensis pieh*, 2001 (Chelonii: Testudinidae) in Central Jbilet Mountains, West Central Morocco**  
*Safaa Bendami*
- 196 Effects of quarrying on landscape connectivity: A resistance calibration approach across species, landscapes and time**  
*Aurélie Coulon*
- 197 Impoverished bird functional diversity in tropical forest fragments on human-modified landscapes**  
*Alex Bovo*

**ISSUES / ECOSYSTEM FUNCTIONS AND SERVICES**

- 198 Effects of forest edge on pest control service provided by birds in fragmented temperate forests**  
*Krisztina Bereczki*
- 199 Organic matter decomposition in soil affected rather by abiotic environment than topography and landscape heterogeneity**  
*Gergely Boros*
- 200 3.10 Comparison of carbon sequestration methodologies for use by academic institutions in Texas**  
*Christina Mcglew*
- 201 Biodiversity and ecosystem services: Meta-analysis, mind-mapping and Bayesian belief network modelling to better capture the role of biodiversity on ecosystem services.**  
*Marta Pascual*
- 202 Ecosystem services, income and human well-being among rural communities**  
*Francisco Zorondo-Rodríguez*
- 203 Conservation tillage enhances natural pest control in winter cereal crops**  
*Giovanni Tamburini*
- 204 Mapping ecosystem services at the site level: A proxy-based approach for Rizoelia National Park, Cyprus**  
*Ioannis Vogiatzakis*
- 205 Microbial diversity, insect extinction and ecosystem function in bird's nest ferns**  
*Julian Donald*
- 206 Land use change scenarios and ecosystem services provision in central Chile**  
*Maria Martinez-Harms*
- 207 Managing a boreal forest landscape for providing timber, sequestering carbon and sustaining biodiversity**  
*María Triviño*
- 208 Rethinking the use of PPGIS in exploring perception of ecosystem services - How to assure data validity?**  
*Marcin Rechcinski*





- 209 Commercial ecosystem services: Plantation forest contributions to us carbon sequestration**  
*Matthew Fagan*
- 210 A functional assessment of scavenging in Mediterranean and African savannah habitats**  
*Marcos Moleón*
- 211 Bushmeat compared to other ecosystem services from a tropical forest**  
*Ola Olsson*
- 212 Spatial distribution of ecosystem services as perceived by nature conservation professionals and lay people - An experimental study using facilitated workshops**  
*Agnieszka Olszańska*
- 213 Effects of silvicultural practices on ecosystem services from boreal production forests**  
*Tähti Pohjanmies*
- 214 Evaluation of the network of priority feeding areas for scavengers in Spain: From biodiversity conservation to ecosystem services**  
*Zebensui Morales Reyes*
- 215 Small scale seagrass fisheries in the Philippines, a case study of two coastal barangays**  
*T. E. Angela Quiros*

## ISSUES / HUMAN-WILDLIFE CONFLICT

- 216 Understanding dynamics of human-leopard conflict in Nepal: A comparative study between lowland terai and highland mid-hill**  
*Anil Shrestha*
- 217 Man vs cat: the case of human-big cat interactions in Guyana**  
*Anthony Cummings*
- 218 Integrating social science into conservation science: Examining the language of 'human-wildlife conflict'**  
*Amanda Webber*
- 219 Why puma avoidance of livestock is not enough to minimize conflicts between Aymara subsistence farming and predators in the highlands of northern Chile**  
*Cristian Bonacic*
- 220 People, tigers and the sundarbans: Exploring the human dimensions of human-tiger conflict in Bangladesh**  
*Chloe Inskip*
- 221 Human-wildlife conflict in eastern Turkey: Gaining perspective from community surveys**  
*Mark Chynoweth*
- 222 Conflict between guanaco population and livestock farming in the surrounding of a protected area in Patagonia**  
*Esperanza Irazzo*





- 223 Contribution of snare removal to chimpanzee conservation: The Kanyawara case**  
*Jessica Hartel*
- 224 Power lines and bird collision: Estimating biases associated with carcass detection and persistence**  
*Leyli Borner*
- 225 Understanding how land-use change in the Trans-Mara district, Kenya is driving human-elephant conflict and elephant movement**  
*Lydia Tiller*
- 226 Human-wildlife interaction in Serengeti and Ngorongoro districts of Tanzania: A case study on small mammals**  
*Flora Magige*
- 227 Individual variation in temporal avoidance of traffic impacts survival for an urban carnivore**  
*Maureen Murray*
- 228 Human leopard conflict in capital city of Nepal**  
*Monsoon Pokharel Khatiwada*
- 229 The keys to coexistence: Realizing the potential for integrating large carnivores into multi-use landscapes**  
*Neil Carter*
- 230 Taruka in Chile: Endangered, unknown and unloved**  
*Nicolas Fuentes*
- 231 Economic aspects of brown bear damage ecology in Europe**  
*Nuria Selva*
- 232 Vulture attacks? The importance of considering public awareness and collaboration for a better understanding of vulture/livestock interactions**  
*Olivier Duriez*
- 233 Stakeholder perception of conflicts and ecosystem services of an exotic ungulate**  
*Roberto Pascual*
- 234 Human-canid conflicts on cattle ranches in central Brazil**  
*Stacie Castelda*
- 235 Community-based human-wildlife conflict mitigation: A successful case from Wolong Nature Reserve, China**  
*Wei Liu*
- 236 Negative impact of a marine protected area upon an emblematic Mediterranean raptor population**  
*Flavio Monti*
- 237 Conservation initiatives of snow leopard in Nepal: Sharing decades of experience of WWF, Nepal**  
*Anil Shrestha*





**238 Resolving wolf and sheep conflicts with nonlethal methods and community collaboration**  
*Suzanne Stone*

**239 Effect of the cattle presence on Tehuantepec jackrabbit (*Lepus flavigularis*) microhabitat selection in southern Oaxaca, México**  
*Tamara Rioja*

**240 Human-tiger conflict in Sundarbans, Bangladesh: Understanding patterns and processes**  
*Nasir Uddin*

## ISSUES / WILDLIFE TRADE

**241 Identifying the gaps in access and benefit sharing in the Southeast Asian orchid trade**  
*Amy Hinsley*

**242 Examining community structure and inventory temporal patterns of turtle species sold in the wildlife markets of Guangzhou, China**  
*Amanda Sigouin*

**243 Trade in wild animals (molluscan, reptilian and avian species) for traditional African medicine in Ogun state, Nigeria**  
*Durojaye Soewu*

**244 Trade in endangered species of wildlife: A case of Lagos, Nigeria**  
*Excellence Akeredolu*

**245 Estimated ivory stockpile accumulation in African elephant range states**  
*Kathleen Gobush*

**246 Understanding the negative impact of illegal wildlife trade on local communities in Araniko-Trail, Nepal**  
*Kumar Paudel*

**247 Main features of illegal trade in endangered species worldwide**  
*Lucrecia Souviron Priego*

**248 Using social marketing campaign as educational tool on tiger conservation**  
*Santi Saypanya*

## THEMATIC POSTER EXHIBITION: CONSERVATION AND RESTORATION OF ALKALINE FENS (NATURA 2000 CODE: 7230) IN POLAND

**249 Alkaline fens resources in Poland**  
*Katarzyna Bociąg*

**250 Ecohydrological studies as a base for alkaline fens conservation planning in Poland**  
*Lesław Wołejk*

**251 Drawa forest alkaline fens (history, ecohydrology - Miradz, Cieszynka, Bukowskie Bagno)**  
*Lesław Wołejk*





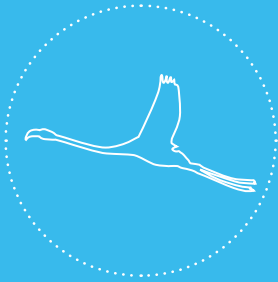
- 252 Alkaline fens conservation in southern Poland (Specific problems: Biodiversity of dispersed small fens)**  
*Dorota Horabik*
- 253 Water conditions of selected alkaline fens in Poland**  
*Robert Stańko*
- 254 Alkaline fens in agrienvironmental schemes in Poland**  
*Filip Jarzombkowski*
- 255 Rospuda fen case: Natura 2000 as protection tool against destructive investments**  
*Filip Jarzombkowski*
- 256 Recovery plan for *Saxifraga hirculus* in northern Poland - limitations and first results –  
katarzyna żółkoś, elżbieta cieślak, joanna bloch - orłowska**  
*Joanna Bloch*
- 257 *Liparis loeseli* in Poland: Distribution, trend, conservation status**  
*Mirosław Szczepański*
- 258 Alkaline fens in Poland as a target of Natura 2000 management planning & impact assessment**  
*Paweł Pawlaczyk*
- 259 Hydro-geological and climatic conditions of development of alkaline spring-fed fens in Poland  
and their significance for the palaeoenvironmental reconstruction**  
*Radosław Dobrowolski*





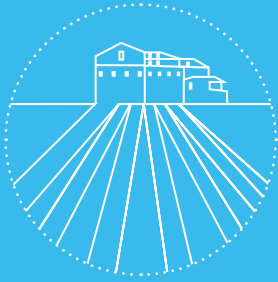


# CONGRESS SCHEDULE



3 AUGUST 2015

MONDAY



4 AUGUST 2015

TUESDAY



5 AUGUST 2015

WEDNESDAY



6 AUGUST 2015

THURSDAY





# MONDAY, 3 AUGUST 2015

# SCHEDULE AT A GLANCE

ROOM:	BERLIOZ	ANTIGONE 1	ANTIGONE 3	RONDELET	BARTHEZ	JOFFRE A/B	JOFFRE C/D	JOFFRE 5	SULLY 1	SULLY 2	SULLY 3
7:30	Open for registration										
9:00-10:00	Plenary: Anne Larigauderie	No sessions scheduled									
10:00 - 10:30	Break										
10:30 - 12:00		SYMP IPBES: where do we stand now?	SYMP Roadless ecology and conservation of roadless areas across scales	SYMP New avenues for resolving conservation conflicts	SYMP Social science for conservation in the Anthropocene: new paths to social-ecological wellbeing	Environmental DNA with its feet on the ground: promises and challenges for terrestrial species conservation.	Miscellaneous Topics I	Traditional knowledge and conservation	Behavioral ecology and conservation	Population dynamics & PVA	Conservation Modeling I
12:00-13:30 (Lunchtime meetings)		IPBES rountable discussion	Integrated innovative approach in conservation planning and monitoring	The role of zoos in conservation: building new partnerships	North America section business meeting	No meeting scheduled	Asia section business meeting	Religion and consevation biology working groupe business meeting	Freshwater working group business meeting	Improving forest resource governance through ecosystem service certification	Promoting socially just ecosystem management: what is it and how do we do it?
13:30-15:00	Student awards	SYMP Network governance and large landscape conservation	SYMP New perspectives on human values and implications for conservation in an era of rapid environmental change	SYMP Habitat fragmentation effects on biodiversity services revisited	SYMP Biodiversity and human development	Alien and invasive species I	Marine conservation I	Population dynamics I	Impacts of humans and disease	Conservation education and outreach	Inventory & monitoring I
15:00-15:30	Break										
15:30 - 17:00	Student awards	SYMP When numbers aren't enough: new pathways to improving conservation practice through evaluative thinking	SYMP Can managing ecosystem services give a win-win for biodiversity and food production?	SYMP Conservation 3.0: new innovations, solvers, and solutions	SYMP Biodiversity and human development	Alien and invasive species II	Marine conservation II	Population dynamics II	SYMP 100 priority questions for biodiversity conservation in mediterranean-type regions of the world	Social science and conservation I	Inventory & monitoring II
17:00-17:15	Break										
17:15-18:30	Poster Session (exhibit hall)										
18:30-19:30	Plenary: Peter Kareiva and Clive Spash	No sessions scheduled									



## MONDAY, 3 AUGUST MORNING SESSIONS

### SYMPOSIUM: **IPBES: WHERE DO WE STAND NOW?**

Room: Antigone 1

Monday, 3 August, 10:30-12:00

*ORGANIZER(S): András Báldi, MTA Centre for Ecological Research; Piero Visconti, SCB Europe*

This symposium present experience gained during the initial years of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Presenters have personal experience as scientific experts at various levels of the platforms' work, and will discuss how scientists can contribute to this important international process.

- 10:30 **IPBES: A new path to bridge the science-policy gap**  
*András Báldi*
- 10:45 **Scenario analysis and modelling of biodiversity and ecosystem services**  
*Carolyn Lundquist*
- 11:00 **IPBES guide on values and valuation**  
*Gyorgy Pataki*
- 11:15 **Stakeholders play a vital role in the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)**  
*Bengt Gunnar Jonsson*

- 11:30 **IPBES: Thematic assessment of pollinators, pollination and food production**

*Anikó Kovács-Hostyánszki*

- 11:45 **Participation in IPBES through UN regions: opportunities and barriers for meps**

*Eszter Kovacs*

### SYMPOSIUM: **ROADLESS ECOLOGY AND CONSERVATION OF ROADLESS AREAS ACROSS SCALES**

Room: Antigone 3

Monday, 3 August, 10:30-12:00

*ORGANIZER(S) Stefan Kreft, Eberswalde University for Sustainable Development*

Conservation policy addressing roads is traditionally based on "road ecology," meaning that conservation accepts to deal with the impacts of existing or planned roads. Although being a key component of modern human development, roads represent a major - and dramatically growing - threat to biodiversity. In contrast, a science focused on the ecosystem benefits of roadless areas is needed to counter the growing effects of roads globally. Building on a first-of-its-kind global map of roadless areas, the goal of this symposium is to explore the ecology and policy of roadless areas conservation. The symposium is designed to discuss roadless areas as conservation objects at global and regional scales.

- 10:30 **The SCB Roadless Areas Initiative**

*Nuria Selva*

- 10:45 **A global map of roadless areas based on the freely available open street map data set**

*Monika Hoffmann*

- 11:00 **Where the roads don't go: ecological characteristics and protection status of the world's roadless areas**

*Pierre L. Ibisch*

- 11:15 **Are roadless areas in the Amazon overestimated?**

*Mariana Vale*





11:30 **We must save our roadless wildplaces - they are our only remaining intact manuals for nature**

*David Wilkie*

11:45 **An outline of a policy for roadless areas conservation across scales**

*Stefan Kreft*

**SYMPOSIUM: SOCIAL SCIENCE FOR CONSERVATION IN THE ANTHROPOCENE: NEW PATHS TO SOCIAL-ECOLOGICAL WELLBEING**

Room: Barthez

Monday, 3 August, 10:30-12:00

ORGANIZER(S): *Phil Levin, NOAA Fisheries Northwest Fisheries Science Center; Kevin St. Martin, Rutgers University*

The unique demands of the Anthropocene make it urgent that we develop new tools for conservation tailored to address both human and environmental needs. There is a growing consensus that the social sciences can offer vital insights into our understanding of social-ecological systems. It is, however, also clear that many of the key concepts of the social sciences remain distant from centers of ecosystem science and policy development, where innovative responses to a changing world are being forged. This symposium convenes a cross-section of environmental social scientists to report on theoretically-informed yet pragmatic research and methods that account for human wellbeing in the context of conservation and natural resource management. The development of protocols to assess human wellbeing to inform conservation pushes both social and natural scientists to rethink key categories, objects and boundaries, as well as the metrics and analytical approaches that best capture the condition of socio-ecological systems experiencing unprecedented change. The papers presented offer a suite of tools and concepts for engaging human wellbeing as dynamically linked to the wellbeing of ecosystems. Taken together, the papers offer a comprehensive approach to assessing human wellbeing for conservation. Furthermore, they suggest the necessity of conceptualizing and prioritizing a shared human and natural wellbeing in conservation science and practice.

10:30 **Leaving Eden: Conservation for a fair and just future in the Anthropocene**

*Phil Levin*

10:45 **Establishing social-ecological boundaries: Foundations for assessment and innovation?**

*Karma Norman*

11:00 **Defining human well-being for conservation and ecosystem-based management**

*Sara Breslow*

11:15 **Tragedy of the excluded: Defining and assessing resource access in marine conservation**

*Margaret Allen*

11:30 **Best available social science for environmental decision-making**

*Melissa Poe*

11:45 **Closing discussion**

**TRADITIONAL KNOWLEDGE AND CONSERVATION**

Room: Joffre 5

Monday, 3 August, 10:30-12:00

10:30 **The role of local knowledge in Yancheng National Nature Reserve Management**

*Yuan Lu, Otago University*

10:45 **The role of tribal colleges in preserving traditional ecological knowledge and biocultural diversity**

*Teresa Newberry, Tohono O'Odham Community College, Sells*

11:00 **'Manngem Thapnee': The crocodile worship ritual of an agrarian community of Indian state of Goa, and its conservation context**

*Manoj Borkar, Biodiversity Research Cell, Carmel College For Women*

11:15 **Potentials and challenges of indigenous knowledge in biodiversity conservation: Case study of Osun Osogbo Sacred Grove, Nigeria**

*Folaranmi Dapo Babalola, University Of Ilorin; Chirwa P.W., Forest Science Postgraduate Programme, University Of Pretoria*

11:30 **Augmenting survey data with community knowledge to inform a recovery strategy for an endangered species in Canada: Identifying**





**important areas of habitat for Peary caribou**  
**Cheryl Johnson**, Environment Canada; Banks S., Environment Canada

- 11:45 **Tambu: A Melanesian model for the sustainability of the Admiralty cuscus (*Spilocuscus kraemeri*)?**  
**John Lamaris**, Wildlife Conservation Society-Papua New Guinea Program; Whitmore N., Wildlife Conservation Society-Papua New Guinea Program; Genolagani J., University Of Papua New Guinea

## ENVIRONMENTAL DNA WITH ITS FEET ON THE GROUND: PROMISES AND CHALLENGES FOR TERRESTRIAL SPECIES CONSERVATION

Room: Joffre A/B  
Monday, 3 August, 10:30-12:00

- 10:30 **Global scale exploration of the potential of terrestrial blood-feeding leeches as a vertebrate monitoring tool**  
**Ida Schnell**
- 10:45 **Blow flies as urban wildlife sensors**  
**Constanze Hoffman**
- 11:00 **Targeted detection of mammalian species using Carrion fly - derived DNA**  
**Grit Schubert**
- 11:15 **Where are the major elephant poaching hotspots in Africa and what should we do about them?**  
**Samuel Wasser**, University Of Washington
- 11:30 **DNA bushmeat: A reference framework for the DNA-typing of African forest bushmeat**  
**Philippe Gaubert**, Ird; Dernat R., Universite De Montpellier; Antunes A., Ciimar
- 11:45 **Noninvasive genetic tracking of Asiatic black bears (*Ursus thibetanus*) at its range edge in Iran**  
**Gholam Hosein Yusefi**, Cibio/Inbio - Research Center For Biodiversity And Genetic Resources, Mohitban Society, Biology Education Center, Uppsala University; Khalatbari L., Cibio/Inbio - Research Center For Biodiversity And Genetic Resources, Mohitban Society; Costa V., Cibio/

*Inbio - Research Center For Biodiversity And Genetic Resources; Fahimi H., Mohitban Society; Sehhatiasabet M.E., Department Of Environment; Beja Pereira A.G., Cibio/Inbio - Research Center For Biodiversity And Genetic Resources*

## MISCELLANEOUS TOPICS

Room: Joffre C/D  
Monday, 3 August, 10:30-12:00

- 10:30 **The importance of floodplains as potential drought refugia for terrestrial birds**  
**Ralph Mac Nally**
- 10:45 **Roadless areas in the service of the european natura 2000 network**  
**Maria K. Psaralexi**
- 11:00 **Widespread species are relatively uninformative in conservation planning**  
**Munemitsu Akasaka**
- 11:15 **Putting a buzzword to work: how data, representation, and stakeholder perspectives influence the interpretation of resilience for coral reef management**  
**Clare Fieseler**
- 11:30 **Dynamics in species associations change surrogate selection for monitoring management**  
**Ayesha Tulloch**
- 11:45 **Land use change and the economic cost of emerging infectious diseases**  
**Carlos Zambrana-Torrel**

## SYMPOSIUM: NEW AVENUES FOR RESOLVING CONSERVATION CONFLICTS

Room: Rondelet  
Monday, 3 August, 10:30-12:00  
ORGANIZER(S) Nils Bunnefeld, University of Stirling

Conflicts between the use and conservation of biodiversity are widely recognized as both damaging to biodiversity and human livelihoods and increasing in scope and scale. Poor management of natural resources often leads to a vicious cycle in which reduced biodiversity and ecosystem services drive loss of







livelihoods and increased poverty, leading to yet further pressure on natural resources. As a result, conflicts emerge between those focused on improving livelihoods and those focused on biodiversity conservation. Both of these goals are crucially important, but in such conflicts, both sides typically seek to achieve their objectives regardless of the cost to the other side. The aim of this symposium is to highlight and develop approaches to an integrated social-ecological framework for decision making in order to inform better conservation and management interventions; to close the science-implementation gap by linking understanding of ecosystem dynamics with stakeholder decision making, and thus address and resolve real world conflict scenarios between biodiversity conservation and human livelihoods; and to explore alternative strategies to conflict management from multiple disciplines, and their effectiveness to draw out lessons for conservation conflicts.

10:30 **Conservation conflicts: Approaches, opportunities and challenges**  
*Steve Redpath*

10:45 **The role of uncertainty and change in conservation conflicts: A game theoretical approach**  
*Nils Bunnefeld*

11:00 **Managing the wildlife tourism commons**  
*David Lusseau*

11:15 **Understanding local stakeholder's preferences for intervention design: The case of conservancies in Kenya's Maasai Mara**  
*Aidan Keane*

11:30 **Visualising and analysing data to save lives: Human and crocodilian**  
*Simon Pooley*

11:45 **Closing discussion**

## BEHAVIORAL ECOLOGY AND CONSERVATION

Room: Sully 1

Monday, 3 August, 10:30-12:00

10:30 **Personality and survival in conservation research - Reintroduction of European mink (*Mustela lutreola*)**

*Marianne Haage, Stockholm University; Maran T., Tallinn Zoological Gardens And The Estonian University Of Life Sciences; Bergvall U.A., Stockholm University; Elmhagen B., Stockholm University; Angerbjörn A., Stockholm University*

10:45 **Investigating the use of conspecific-attraction in the conservation of an endangered amphibian - Manipulating chorus aggregation and landscape distribution**

*Melanie James, University Of Newcastle; Stockwell M.P., University Of Newcastle; Ligia P., University Of Newcastle; Clulow S., University Of Newcastle; Clulow J., University Of Newcastle; Mahony M.J., University Of Newcastle*

11:00 **Listening in and not looking out: Considering the differences in the acoustical ecology of Baleen whales to improve optimal monitoring using passive acoustics**

*Angela Recalde Salas, Curtin University; Salgado Kent C.P., Curtin University; Erbe C., Curtin University; Mccauley R.D., Curtin University; Possingham H.P., The University Of Queensland*

11:15 **Conservation implications of complex social structure in Adriatic bottlenose dolphins Tilen Genov**, Morigenos - Slovenian Marine Mammal Society, Institute For Biodiversity Studies, Science And Research Centre, University Of Primorska, Sea Mammal Research Unit, Scottish Oceans Institute, University Of St Andrews; Centrih T., Morigenos - Slovenian Marine Mammal Society; Kotnjek P., Morigenos - Slovenian Marine Mammal Society; Hace A., Morigenos - Slovenian Marine Mammal Society

11:30 **Population size estimate and vegetation correlates of nest abundance of the Western chimpanzee in Lagoas de Cufada National Park, Guinea-Bissau**

*Joana S. Carvalho, Centre For Environmental And Marine Studies; Meyer C.F., Centre For Ecology, Evolution And Environmental Changes; Vicente L., Centre For Environmental And Marine Studies; Marques T.A., Centre For Research Into Ecological And Environmental Modelling*

11:45 **Conflicting conservations goals: When a threatened species jeopardizes restoration of**





**an endangered plant community**

Marie Sigaud, Université Laval

**12:00 New approaches of conservation planning for migrants**

Takuya Iwamura, Stanford University

**POPULATION DYNAMICS & PVA**

Room: Sully 2

Monday, 3 August, 10:30-12:00

**10:30 Are Australians just observers to shorebird population declines being driven from overseas?***Robert Clemens, University Of Queensland; Skilleter G.A., University Of Queensland; Fuller R.A., University Of Queensland***10:45 Effect of clearcutting operations on the survival rate of a small mammal***Martin A. H. Escobar, Departamento De Ciencias Ambientales Y Recursos Naturales Renovables, Universidad De Chile, Laboratorio De Ecología De Vida Silvestre, Universidad De Chile; Uribe S.V., Laboratorio De Ecología De Vida Silvestre, Universidad De Chile; Romina C., Laboratorio De Ecología De Vida Silvestre, Universidad De Chile; Estades C.F., Laboratorio De Ecología De Vida Silvestre, Universidad De Chile***11:00 The devil is in the detail: Disentangling the mechanisms and drivers of decline of the Alpine ibex population in the Gran Paradiso National Park (Italy)***Achaz von Hardenberg, Alpine Wildlife Research Centre, Gran Paradiso National Park; Mccrea R., National Centre For Statistical Ecology, School Of Mathematics, Actuarial Science And Statistics, University Of Kent; Ranghetti L., Department Of Earth And Environmental Sciences (Dsta), University Of Pavia; Grignolio S., University Of Sassari, Department Of Science For Nature And Environmental Resources; Provenzale A., Istituto Per Le Scienze Dell'Atmosfera E Del Clima Isac-Cnr; Bassano B., Alpine Wildlife Research Centre, Gran Paradiso National Park; Morgan B., National Centre For Statistical Ecology, School Of Mathematics, Actuarial Science And Statistics, University Of Kent***11:15 Contrasting trends in the bird populations of North European peatlands***Sara Fraixedas, University Of Helsinki; Lehikoinen A., University Of Helsinki; Lindén A., Novia University Of Applied Sciences***11:30 Population viability of oscillating populations***Alexander Singer, Helmholtz Centre For Environmental Research - Ufz; Frank K., Helmholtz Centre For Environmental Research - Ufz***11:45 Development and application of a spatial IBM to forecast Greater prairie-chicken population responses to land use in the Flint Hills region of Kansas***Breanna Powers, U.S. Environmental Protection Agency; Schumaker N., U.S. Environmental Protection Agency***11:50 Addressing sources of uncertainty in conservation decision-making under future fire regimes***Natasha Cadenhead, University Of Melbourne; Kearney M., University Of Melbourne; Moore D., Australian Wildlife Conservancy; Wintle B., University Of Melbourne***Conservation Modeling I**

Room: Sully 3

Monday, 3 August, 10:30-12:00

**10:30 Modeling populations versus species under climate change: Implications for conservation decisions***Maria Hällfors, Finnish Museum of Natural History, University of Helsinki; Liao J., Department of Biological Sciences, University of Notre Dame; Dzurisin J., Department of Biological Sciences, University of Notre Dame; Grundel R., U.S. Geological Survey; Hyvärinen M., Finnish Museum of Natural History, University of Helsinki; Towle K., Department of Biological Sciences, University of Notre Dame; Wu G., Energy And Resources Group, University of California, Berkeley; Hellmann J., Department of Biological Sciences, University of Notre Dame*



10:45 **Transferability of predictive models for coral reef fishes**

**Ana Sequeira**, *The University of Western Australia*; Mellin C., *Australian Institute of Marine Science*; Lozano-Montes H., *Csiro Marine and Atmospheric Research*; Vanderklift M.A., *Csiro Marine And Atmospheric Research*; Babcock R.C., *Csiro Marine and Atmospheric Research*; Haywood M., *Csiro, Marine and Atmospheric Research*; Meeuwig J.J., *The University of Western Australia*; Caley M.J., *Australian Institute of Marine Science*

11:00 **Modelling extinction risk of global reptiles**

**Uri Roll**, *University of Oxford*; Meiri S., *Tel-Aviv University*; Chapple D., *Monash University*; Grenyer R., *University of Oxford*

11:15 **Optimal threatened species translocations: How many, how often, and for how long**

**Kate Helmstedt**, *University of California Berkeley*; Possingham H., *University of Queensland*

11:30 **Developing physiology-driven population dynamics models to assess climate change impacts on koalas, evaluate koala conservation actions and prioritize the protection of population refuges**

**Natalie Briscoe**, *University of Melbourne*; Kearney M., *University of Melbourne*; Porter W., *University of Wisconsin*; Wintle B., *University of Melbourne*

11:35 **Assessing causes of the decline of Litoria amphibians in Australia using species distribution models**

**Catharina Gallacher**, *National University of Singapore*; Bickford D., *National University of Singapore*; Chisholm R., *National University of Singapore*

11:40 **Optimizing the trade-off between learning and doing in protecting species' habitats**

**Abbey Camaclang**, *University Of Queensland*; Chadès I., *Csiro Land And Water Flagship*; Martin T., *Csiro Land And Water Flagship*; Possingham H., *University Of Queensland, Imperial College London*

11:45 **Conservation in a complex world: Modelling the boreal forest-caribou complex system, a case for ABM simulation**

**Fabian Cid Yañez**, *UBC*; Parrott L., *UBC*; Raulier F., *Université Laval*; Fortin D., *Université Laval*; Latombe G., *Monash University*

## AFTERNOON SESSIONS

### SYMPOSIUM: NETWORK GOVERNANCE AND LARGE LANDSCAPE CONSERVATION

Room: Antigone 1

Monday, 3 August, 13:30-15:00

ORGANIZER(S): Steven Alexander, *University of Waterloo*; R. Patrick Bixler, *University of Oregon*; Dara M. Wald, *Arizona State University*

Network governance represents a “new path for conservation.” Network governance – as opposed to a more hierarchical mode of governance – reflects the presumed benefits of horizontal and vertical interactions among actors at multiple levels through which conservation decisions are made and actions are taken. These horizontal and vertical interactions occur within and between the state, civil society, and private sector. Working at large scales – with diverse stakeholders, multiple management objectives, and across jurisdictional boundaries – presents significant governance and coordination challenges for the entities involved. Despite the existence of formal and informal models of network governance, a systematic reflection on the implications and challenges of these governance arrangements is needed to achieve the desired conservation outcomes, including – though not limited to – biodiversity protection and reductions in social conflict. Accordingly, the goals of this symposium are to a) explore network governance as a new path for conservation, b) examine the unique challenges and strengths of this governance approach, and c) provide examples of how innovative network approaches are contributing to social capital, ecological resilience, and knowledge innovations.





- 13:30 **Sustaining the useful life of network governance: Life-cycles and developmental challenges in watershed partnerships**  
*Mark Imperial*
- 13:45 **Navigating governance networks for community-based conservation in a multi-level world**  
*Steven Alexander*
- 14:00 **Using social network analysis to unravel complexity in agricultural biodiversity governance**  
*Jennifer Hauck*
- 14:15 **Closing the collaborative gap: Aligning social and ecological connectivity for better management of interconnected wetlands**  
*Arvid Bergsten*
- 14:30 **Achieving social-ecological fit through collaborative governance**  
*Angela Guerrero*

## SYMPOSIUM: NEW PERSPECTIVES ON HUMAN VALUES AND IMPLICATIONS FOR CONSERVATION IN AN ERA OF RAPID ENVIRONMENTAL CHANGE

Room: Antigone 3

Monday, 3 August, 13:30-15:00

ORGANIZER(S): *Michael Manfredo, Colorado State University*

The concept of values is core in the social sciences and in applied environmental or conservation contexts, primarily due to its importance in explaining human behavior. Research suggests values provide a critical mechanism that helps individuals adapt to changing conditions in their environmental surroundings and play a significant role in shaping our response to conservation issues. Although widely used in research, values and related concepts remain loosely defined. This is in part due to the term's common usage (values as part of everyday parlance), but also to the concept's varied treatment across a host of academic disciplines. Moreover, there are contradictory implications drawn from values research. Most notable in the conservation

realm would be the suggestion that values can be changed. If in fact possible, value shift would be the "grand prize" of behavior change strategies because values drive human thought and action across a wide array of issues and contexts. However, recent advances in psychology imply that value shift would be difficult to engineer, and that it may be more productive, rather than trying to change values, to frame persuasive communication appeals in conservation so they are consistent with existing values. While human-engineered value shift may be less tenable, an important question that has been raised is, how might values adapt to sudden social-ecological disturbances anticipated, for example, as a result of climate change? Seeking answers to such questions, which can be facilitated by the social sciences, will be critical to inform new paths for conservation in an era of rapid environmental change. This symposium will seek to clarify definitions of values, detail new frontiers in values research, and summarize the implications of such research for biodiversity conservation.

- 13:30 **Introduction: New directions for conservation psychology**  
*Michael Manfredo*
- 13:45 **The ecological basis of social values**  
*Ayse Uskul*
- 14:00 **A socio-ecological approach to human values**  
*Shigehiro Oishi*
- 14:15 **A Dynamic systems approach to cultural values: implications for human-environment interface**  
*Shinobu Kitayama*
- 14:30 **Closing discussion with Tara Teel, Kent Redford & Jeremy Bruskotter**




**SYMPOSIUM: BIODIVERSITY AND HUMAN DEVELOPMENT - SESSION I**

Room: Barthez

Monday, 3 August, 13:30-15:00

 ORGANIZER(S): *Lisa Biber-Freudenberger, University of Bonn; Jan-Henning Sommer, Center for Development Research (ZEF)*

The use of biodiversity and related ecosystem services has always been an indispensable stimulant of human development. However, the overexploitation of these natural resources is accompanied to an increasing extent - by negative side effects such as species loss, ecosystem degradation and diminishing ecosystem functions and processes. Moreover, the enormous boost of international trade activities has led to a spatial decoupling between intended human development and unintended environmental degradation. Despite the strong interrelationship between biodiversity conservation and human development, they are often treated as completely separate matters at policy level, a practice leading to unnecessarily high opportunity costs. In the past promising concepts and ideas have been developed to facilitate a better alignment of strategies around biodiversity conservation on the one hand and poverty reduction leading to sustainable development on the other. Those inter- and trans-disciplinary strategies have the potential to minimize trade-offs while adequately addressing both, ecological but also economic and socio-cultural conditions. This symposium provides a platform for researchers and practitioners from the field of biodiversity conservation and human development to exchange their experience and to discuss a wide range of related topics.

13:30 **Evidence for the impact of nature conservation on human well-being**  
*Madeleine McKinnon*

13:45 **How economic sectors can contribute to sustainable use and conservation of biodiversity**  
*Mark Van Oorschot*

14:00 **Biodiversity, global change, and sustainable land management: Examples from western and continental Africa**  
*Jan Henning Sommer*

14:15 **Biodiversity conservation as facilitator of development: The Côte d'Ivoire example**  
*Souleymane Konaté*

14:30 **Rewilding Britain: Indicators for ecosystem function could provide effective measures for prioritising sites for wilderness restoration**  
*Peter Hobson*

14:45 **Large biodiversity conservation gains arise by being strategic about broad-scale agricultural development in northern Australia**  
*Alejandra Morán-Ordóñez*

**STUDENT AWARDS I**

Room: Berloiz

Monday, 3 August, 13:30-15:00

13:30 **Ecological and biological characteristics explain the response of species to recent climatic changes**  
*Michela Pacifici, Sapienza Università Di Roma; Visconti P., Microsoft Research Computational Science Laboratory; Watson J., University of Queensland; Rondinini C., Sapienza Università Di Roma*

13:45 **Climate windows: Assessing climate sensitivity using R package climwin**  
*Liam Bailey, Bailey L., Australian National University; Van De Pol M., Australian National University; Mclean N., Australian National University; Rijdsdijk L., Radboud University, Nijmegen*

14:00 **Optimal planning for mitigating the impacts of roads on wildlife: A multiple species approach**  
*Tal Polak, The University of Queensland; Nicolson E., The University of Melbourne; Grilo C., Universidade De Aveiro; Bennett J., The University of Queensland; Possingham H., The University of Queensland*

14:15 **Heterogeneity in consumer preferences for orchids in international trade and the potential for the use of market research methods to study demand for wildlife**  
*Amy Hinsley, University of Kent; Verissimo D., Georgia State University; Roberts D., University of Kent*







14:30 **OPTIMIZING DISTURBANCE MANAGEMENT FOR WILDLIFE PROTECTION**  
**Kiran Dhanjal-Adams**, *Dhanjal-Adams K., University of Queensland, Brisbane, Australia; Mustin K., University of Queensland, Brisbane, Australia; Possingham H., University of Queensland, Brisbane, Australia; Fuller R., University of Queensland, Brisbane, Australia*

14:45 **Derivation of a high resolution land-cover map of the Western Sahara-Sahel transition zone for local biodiversity conservation**  
**João Carlos Campos**, *Inbio-Cibio; Brito J.C., Inbio-Cibio*

#### POPULATION DYNAMICS I

Room: Joffre 5

Monday, 3 August, 13:30-15:00

13:30 **Are white storks addicted to junk food? Consequences of landfill closure for white stork (*Ciconia ciconia*) breeding success and habitat use**  
**Nathalie Gilbert**, *University of East Anglia; Correia R., University of East Anglia; Silva J.P., Centro De Ecologia Aplicada Prof. Baeta Neves; Pacheco C., Centro De Ecologia Aplicada Prof. Baeta Neves; Catry I., Centro De Ecologia Aplicada Prof. Baeta Neves; Atkinson P., British Trust For Ornithology; Gill J.A., University of East Anglia; Franco A.M.A., University of East Anglia*

13:45 **Earlier timing, lower success: Does the spatial scale of climatic conditions matter in a migratory Passerine bird?**  
**Annegret Grimm**, *Helmholtz-Centre For Environmental Research; Weiß B.M., University of Leipzig, Institute Of Biology, Behavioural Ecology Research Group; Kulik L., University of Leipzig, Institute Of Biology, Behavioural Ecology Research Group; Mihoub J-B., Helmholtz-Centre For Environmental Research; Mundry R., Max-Planck-Institute For Evolutionary Anthropology, Department of Primatology; Koeppen U., Beringungszentrale Hiddensee; Brueckmann T., Grüne Liga Kohrener Land; Thomsen R., University of Leipzig, Institute Of Biology, Behavioural Ecology Research Group; Widdig A., University of Leipzig, Institute Of Biology, Behavioural Ecology Research Group*

14:00 **Conservation genetics and population viability of endangered swamp orchid *Phaius australis* in Australia**  
**Laura Simmons**, *University of The Sunshine Coast; Shapcott A., University of The Sunshine Coast; Mathieson M., Queensland Herbarium, Department of Science, Innovation, Information Technology And The Arts*

14:15 **Demography and sociality: Elasticity analysis in a gorilla population affected by an Ebola outbreak**  
**Pascaline Le Gouar**, *University of Rennes; Le Thiec S., University of Rennes; Pierre A., University of Rennes; Genton C., University of Rennes; Pierre J-S., University of Rennes; Schaub M., Swiss Ornithological Institute; Ménard N., CNRS*

14:30 **Estimating population size and trend in the threatened Greater sage-grouse using n-mixture models**  
**Rebecca McCaffery**, *University of Montana; Nowak J., University of Montana; Lukacs P., University of Montana*

14:45 **Structure and dynamics of an unexploited population of the reef manta ray *Manta alfredi***  
**Lydie Couturier**, *School Of Biomedical Sciences, The University of Queensland; Dudgeon C., School Of Veterinary Science, The University of Queensland; Pollock K., Department of Biology, North Carolina State University; Jaine F., Marine Megafauna Foundation; Bennett M., School Of Biomedical Sciences, The University of Queensland; Townsend K., School Of Biological Sciences, The University of Queensland; Weeks S., Biophysical Oceanography Group, School Of Geography, Planning And Environmental Management, The University of Queensland; Richardson A., Csiro Climate Adaptation Flagship, Marine And Atmospheric Research*

14:50 **Long-term demography and recent identification of disease: Useful information for conservation**  
**Erin Muths**, *U.S. Geological Survey; Lambert B., Colorado Natural Heritage Program; Schneider S., Colorado Natural Heritage Program; Schorr R., Colorado Natural Heritage Program*





14:55 **Legal protection drives the recovery of wolf populations in distant regions**

**Sabina Nowak**, Association For Nature 'Wolf'; Myslajek R., University of Warsaw, Faculty Of Biology

**ALIEN AND INVASIVE SPECIES I**

Room: Joffre A/B

Monday, 3 August, 13:30-15:00

13:30 **Invasive ants: Climate change predictions and control prospects**

**Ben Hoffmann**, CSIRO

13:45 **Another Australian despot: The potential for the yellow-throated miner to alter the avifauna across a vast continental area**

**Alexander Kutt**, Royal Botanic Gardens Victoria; Macnally R., Institute For Applied Ecology, The University of Canberra; Thomson J., Institute For Applied Ecology, The University of Canberra; Eyre T., Queensland Herbarium

14:00 **How have invasive mammal eradication projects benefitted native island fauna? A systematic review**

**Holly Jones**, Northern Illinois University; Holmes N., Island Conservation; Kappes P., Oregon State University; Corkery I., University College Cork; Keitt B., Island Conservation; Campbell K., Island Conservation; Tershy B., UC Santa Cruz; Croll D., UC Santa Cruz; Spatz D., UC Santa Cruz; Butchart S., Birdlife International; Armstrong D., Massey University; Seddon P., University of Otago; Kress S., Cornell University; Miskelly C., Te Papa Tongarewa; Burbidge A., Retired; Towns D., Auckland University of Technology; Aguirre A., Conservacion De Islas; Samaniego-Herrera A., University of Auckland; Ebbert S., US Fish And Wildlife Service; Rauzon M., Laney College; Courchamp F., Laboratory Of Ecology Systematics & Evolution Of The University Paris-Sud; Bonnaud E., Laboratory Of Ecology Systematics & Evolution Of The University Paris-Sud; Rocomura G., Island Conservation Society; Poncet S., Fiqq Izz Stanley, South Georgia Surveys; Oppel S., Royal Society For The Protection Of Birds; Cuthbert R., Royal Society for the Protection of Birds

14:15 **Cost and feasibility of a barrier zone to contain the spread of Cane toads in Northwestern Australia**

**Darren Southwell**, University of Melbourne; Tingley R., University of Melbourne; Bode M., University of Queensland; Nicholson E., University of Melbourne; Phillips B., University of Melbourne

14:30 **Non-target mortality of endemic Lesser short-tailed bats from toxic baiting to control exotic mammals in a New Zealand conservation reserve**

**Gillian Dennis**, Massey University; Gartrell B., Massey University; Armstrong D.; O'Donnell C., Department of Conservation; Robertson A., Massey University

14:45 **Born to be wild: How to quantify the impact of an invasive species, *Prosopis juliflora*, in Ethiopian rangelands**

**Astrid Van Teeffelen**, University of Hohenheim; Birhane E., Mekelle University; Eshete A., Forestry Research Institute

14:50 **Optimizing ecological benefits and economic cost of invasive species control: The case of Indo-Pacific lionfish removal on Atlantic reefs**

**Stephanie Green**, Oregon State University; Underwood E., Reef Environmental Education Foundation; Castillo B., University of The Virgin Islands; Kynoch R-M., University of The Virgin Islands; Lundgren I., US National Park Service; Akins L., Reef Environmental Education Foundation

**MARINE CONSERVATION I**

Room: Joffre C/D

Monday, 3 August, 13:30-15:00

13:30 **Conservation of oceanic manta rays: Does the highly migratory paradigm hold up?**

**Joshua Stewart**, UC San Diego; Beale C., Misool Eco Resort Conservation Center; Fernando D., Linneaus University; Aburto-Oropeza O., UC San Diego; Burton R.S., UC San Diego; Semmens B.X., UC San Diego







13:45 **Lessons learned in marine protected area establishment? The case of Koh Rong Archipelago Marine Protected Area, Cambodia**  
*Jesse Hastings, National University of Singapore*

14:00 **Advancing the limits of coral reef sensing in a time of global change: The Catlin Seaview Survey**  
*Benjamin Neal, University of Queensland*

14:15 **Are large MPA's effective for marine megafauna? A case study of *Manta alfredi* (family: Mobulidae) in the Chagos MPA**  
*Daniel Fernando, Linnaeus University; Stewart J., Scripps Institution Of Oceanography, UCSD; Adams K., University of Plymouth; Brierley A., University of St Andrews, Pelagic Ecology Research Group (Perg); Hosegood P., University of Plymouth; Proud R., University of St Andrews, Pelagic Ecology Research Group (Perg); Letessier T., Zoological Society of London*

14:30 **Can you have your fish and eat them too? Effectiveness of periodically harvested closures for achieving multiple objectives**  
*Stacy Jupiter, Wildlife Conservation Society; Goetze J., The Uwa Oceans Institute, The University of Western Australia; Carvalho P., Center For Coastal Marine Sciences, California Polytechnic State University San Luis Obispo; Claudet J., National Center For Scientific Research (Cnrs), Criobe; Hamilton R., The Nature Conservancy; Januchowski-Hartley F., Geography, College Of Life And Environmental Sciences, University of Exeter; Langlois T., The UWA Oceans Institute, The University of Western Australia; Weeks R., Arc Centre Of Excellence For Coral Reef Studies, James Cook University; White C., Biological Sciences Department, California Polytechnic State University San Luis Obispo; Wilson S., Marine Science Program, Department of Parks And Wildlife*

14:45 **Megafauna and Purse Seine fisheries: Interactions and survival of the whale shark, the world's largest fish**  
*Lauriane Escalle, Université De Montpellier Institut De Recherche Pour Le Développement; Capietto A., Université De Montpellier, Institut De Recherche Pour Le Développement; Chavance P., Institut De Recherche Pour Le Développement;*

*Dubroca L., Institut De Recherche Pour Le Développement; Delgado De Molina A., Instituto Español De Oceanografía; Murua H., Azti Tecnalia; Amande J.M., Centre De Recherches Océanologiques; Gaertner D., Institut De Recherche Pour Le Développement; Filmalter J.D., Institut De Recherche Pour Le Développement, South African Institute For Aquatic Biodiversity; Forget F., Institut De Recherche Pour Le Développement, South African Institute For Aquatic Biodiversity; Rowat D., Marine Conservation Society; Dagorn L., Institut De Recherche Pour Le Développement; Merigot B., Université De Montpellier*

15:00 **Marine mammal and seabird foraging around a shelf sea front as revealed through a combination of passive acoustic, shipboard survey and tracking data**  
*Samantha Cox*

#### SYMPOSIUM: HABITAT FRAGMENTATION EFFECTS ON BIODIVERSITY SERVICES REVISITED

Room: Rondelet

Monday, 3 August, 13:30-15:00

ORGANIZER(S): Péter Batáry, Georg-August University; Maria Rosa Rossetti, National University from Cordoba

The number of studies involving habitat fragmentation experienced a strong increase in the last decades as a consequence of continuous deforestation and degradation of natural ecosystems all over the world. The great variety of studies generally shows an impoverishment of biodiversity and associated ecosystem functions, such as pollination, predation and herbivory as a consequence of the habitat fragmentation. However, the evidence available also indicates that the patterns and processes in fragmented landscapes may be very complex depending on several variables such as species identity, habitat type and scale of the study. Meta-analysis is a more and more popular, but still relatively new statistical method in ecology, which allows quantitatively summarizing research findings across studies. Hence meta-analysis is more robust in quantifying evidence than simple narrative reviews. This symposium aims to provide updated information and current knowledge about the fragmentation effects on biodiversity focusing on ecological processes and ecosystems services through meta-analysis.





13:30 **Species interactions show varied responses to the different components of forest fragmentation**

*Ainhoa Magrach*

13:45 **Global patterns of habitat loss and fragmentation for the world's mammals**

*Kevin Crooks*

14:00 **Are species traits useful for predicting primate species responses to habitat loss and fragmentation? A review**

*Xyomara Carretero-Pinzon*

14:15 **The effects of landscape fragmentation on the habitat use of woodlarks *lullula arborea* and their invertebrate prey**

*Laura Bosco*

14:30 **Responses of insect herbivores and herbivory to habitat fragmentation: a meta-analysis**

*Maria Rosa Rossetti*

14:45 **Plant-leafhopper foodwebs in large vs. small habitat fragments and of complex vs. simple landscapes are simplified, but harbor more specialist species**

*Péter Batáry*

## IMPACTS OF HUMANS AND DISEASE

Room: Sully 1

Monday, 3 August, 13:30-15:00

13:30 **Trophic cascades following disease-induced decline of the Tasmanian devil**

**Hamish McCallum**, *University of Melbourne*;  
*Mccallum H., Griffith University; Jones M., University of Tasmania; Mooney N., Environmental Consultant*

13:45 **Tigers of India are at risk of getting diseases from dogs**

**Vratika Chaudhary**, *Clemson University*; *Tonkyn D., Clemson University*

14:00 **Understand the skin to better understand the disease: The role of skin sloughing in the susceptibility of amphibians to a fungal frog-killer**

**Michel E. B. Ohmer**, *The University of Queensland*;  
*Cramp R.L., The University of Queensland; White C.R., The University of Queensland; Franklin C.E., The University of Queensland*

14:15 **African elephant social structure is relatively robust to poaching-induced mortality**

**Shifra Goldenberg**, *Colorado State University*;  
*Douglas-Hamilton I., Save The Elephants; Wittemyer G., Colorado State University*

14:30 **Effects of human activities on carnivore behavior at the individual, population and community level and their implications for conservation**

**Gabriele Cozzi**, *Cozzi G., Zurich University*

14:45 **Infectious agents survey in Pied tamarins subpopulations in Manaus, Amazonas state, Brazil**

**Monica Solorio**, *Department of Preventive Veterinary Medicine And Animal Health, University of São Paulo*; *Gordo M., Federal University of Amazonas; Spironello W.R., National Institute Of Amazonian Research (Inpa); Durigon L.E., Institute Of Biomedical Sciences, University of São Paulo; Campos A., Institute Of Biomedical Sciences, University of São Paulo; Goes L.G., Institute Of Biomedical Sciences, University of São Paulo; Anthony S., The Center For Infection And Immunity, Columbia University, Ecohealth Alliance; Kirchgatter K., Institute Of Tropical Medicine Of São Paulo, University of São Paulo; Guimarães L., Institute Of Tropical Medicine Of São Paulo, University of São Paulo; Brandão P., Department of Preventive Veterinary Medicine And Animal Health, University of São Paulo; Ferreira F., Department of Preventive Veterinary Medicine And Animal Health, University of São Paulo*

14:50 **Behavioral and physiological evaluation of anthropogenic effects on Canids in the Brazilian Cerrado**

**Stacie Castelda**, *George Mason University*; *Lemos F., Universidade Federal De Goiás; Freeman E., George Mason University; Azevedo F., Cerrado Mammals Conservation Program; Songsasen N., Smithsonian Conservation Biology Institute*





## CONSERVATION EDUCATION AND OUTREACH

Room: Sully 2

Monday, 3 August, 13:30-15:00

13:30 **Enhancing mobilization for conservation goals via compelling stories and myth**  
*David Johns, Portland State University*

13:45 **Educational and outreach activities: Their types and effect on biodiversity conservation**  
*Samridhi Shrestha, Arizona State University*

14:00 **Talking to the rest of the world: Lessons from the Fuller Science for Nature Fund on communicating your science to non-scientists**  
*Kate Graves, WWF-US; Abell R., Freshwater Biologist*

14:15 **Inspiring future generations of conservation leaders and stewards in primate range countries**  
*Chia Luen Tan, San Diego Zoo Institute For Conservation Research*

14:30 **Planta! - Building a national movement to save Cuba's amazing plant life**  
*Luis Roberto Gonzalez Torres, Planta! - Plantlife Conservation Society; Palmarola Bejerano A., National Botanic Garden, University of Havana; Barrios Valdes D., National Botanic Garden, University of Havana; Falcon Hidalgo B., National Botanic Garden, University of Havana; Hernandez Rodriguez M., National Botanic Garden, University of Havana, Faculty Of Biology, University of Havana; Cabrera E., University of Las Villas; Diaz Alvarez E., University of Las Villas; Gordillo M., University of Oriente*

14:45 **Campaigning for biodiversity conservation in Bangladesh**  
*Sumaiya Firoze, United States For International Development; Firoze S., United States For International Development; Hasan W., United States For International Development; Holmes C., United States For International Development; Beckman T., United States For International Development*

14:50 **ADVOCATING POLICY AS AN EDUCATIONAL TOOL FOR ENVIRONMENTAL STUDIES STUDENTS**

*Peter Smallwood, University of Richmond; Nash S., University of Richmond*

## INVENTORY AND MONITORING I

Room: Sully 3

Monday, 3 August, 13:30-15:00

13:30 **Indicator selection for biodiversity management: What are we doing wrong?**  
*Payal Bal, University of Queensland; Tulloch A., Australian National University; Rhodes J., University of Queensland*

13:45 **Towards a system of national environmental accounts: Priorities for monitoring**  
*Megan Barnes, Centre For Biodiversity And Conservation Science, The University of Queensland; Tulloch A., Australian National University; Possingham H., Centre For Biodiversity And Conservation Science, The University of Queensland; Mcdonald Madden E., Centre For Biodiversity And Conservation Science, The University of Queensland; Beher J., Centre For Biodiversity And Conservation Science, The University of Queensland; Lyon P., Erin, Department of The Environment*

14:00 **Global data, science, and conservation: Are we talking to each other?**  
*Dmitry Schigel, Global Biodiversity Information Facility; Hirsch T., Global Biodiversity Information Facility; Masinde S., Global Biodiversity Information Facility*

14:15 **Combined use of point counts and automated recorders to monitor avian diversity and phenology along a montane mega-transect**  
*Michael McGrann, William Jessup University; Furnas B., California Department of Fish And Wildlife*

14:30 **Partial identification improves the credibility and transparency of conservation impact**  
*Matthew McConnachie, Centre For Invasion Biology, Stellenbosch University; Romero C.,*





*Department of Biology, University of Florida; Ferraro P., Andrew Young School Of Policy Studies, Georgia State University; Van Wilgen B., Centre For Invasion Biology, Stellenbosch University*

**14:45 Integrating statistical methods, dynamic models and multiple data sources to inform conservation management decisions**  
**Cecilia Pinto**, University of Aberdeen, Marine Scotland Science; **Palmer S.**, University of Aberdeen; **Neat F.**, Marine Scotland Science; **Wright P.**, Marine Scotland Science; **Scott B.E.**, University of Aberdeen; **Travis J.M.J.**, University of Aberdeen

**14:50 A.P.E.S.: Merging local survey efforts and a global perspective on great apes**  
**Louwrens J. du Toit**, Max-Planck Institute For Evolutionary Anthropology; **Sop T.**, Max-Planck Institute For Evolutionary Anthropology; **Vimal R.**, Max-Planck Institute For Evolutionary Anthropology; **Kühl H.S.**, Max-Planck Institute For Evolutionary Anthropology

**14:55 Drosophilid assemblage study as a tool for biodiversity assessment, conservation and sustainable development**  
**Manisha Sarawat**, HNB Garhwal University; **Dewan S.**, HNB Garhwal University; **Fartyal R.S.**, HNB Garhwal University

**SYMPOSIUM: WHEN NUMBERS AREN'T ENOUGH: NEW PATHWAYS TO IMPROVING CONSERVATION PRACTICE THROUGH EVALUATIVE THINKING**

Room: Antigone 1

Monday, 3 August, 15:30-17:00

*ORGANIZER(S): Andrew Knight, Imperial College London; Matt Keene, U.S. Environmental Protection Agency*

*Note: this symposium runs 30-minutes longer than others*

This symposium has a truly global focus, with a European flavor. The goal is to bring together a highly diverse group of stakeholders to develop a deeper understanding of systemic and evaluative thinking for improving the processes and techniques of evaluation for conservation projects and programs. Among other things, the symposium aims to: 1. Promote the development and emergence of a new type of evaluative thinking as an approach for improving learning and implementation processes that increases the effectiveness of conservation

projects and programs; 2. Introduce the conservation sector to world-leading evaluators and system thinkers from other applied disciplines, and to expose these world-leaders to the challenges of biodiversity conservation so as to encourage their future involvement in conservation projects and programs; and 3. Promote the application of evaluative thinking – as a composite of systems thinking and evaluation theory and practice – across the European conservation and environment sectors.

**15:30 Too busy saving the world to be accountable**  
*Kent Redford*

**15:45 The European knowledgebase for biodiversity to assess progress: A perspective from the EU**  
*Frank Wugt Larsen*

**16:00 Historical trends and insights from the field of evaluation**  
*Beverly Parsons*

**16:15 An operational model for implementing evaluative thinking in conservation science and practice**  
*Glenda Eoyang*

**16:30 Systems and design thinking for conservation action and impact**  
*Cameron Norman*

**16:45 From evaluating biodiversity conservation to evaluating biodiversity conservation policy and ecosystem service governance**  
*Eva Primmer*

**17:00 How can evaluative thinking help conservation biology learn to be more effective?**  
*Matt Keene*

**17:15 Issues for impact evaluation design of FSC certification of natural forest management**  
*Claudia Romero*





**SYMPOSIUM: CAN MANAGING ECOSYSTEM SERVICES GIVE A WIN-WIN FOR BIODIVERSITY AND FOOD PRODUCTION?**

Room: Antigone 3

Monday, 3 August, 15:30-17:00

ORGANIZER(S): David Kleijn, Wageningen University/Alterra; Henrik Smith, Lund University

One of the greatest challenges of the 21st century is to produce sufficient food for the growing world population without causing irreparable damage to the environment and biodiversity. The mobilization of ecosystem functions underpinning agricultural production (i.e. regulating ecosystem services) in farming systems has been proposed as a sustainable solution that may combine high agricultural productivity with biodiversity conservation. Pollinators, natural enemies and soil organisms provide key services to agricultural production and have been the topic of both fundamental and applied studies addressing a range of issues such as the relationship between biodiversity and ecosystem service provisioning and the mitigation of effects of climate change. However, we are still lacking a lot of key information that is necessary to more effectively conserve beneficial species in a way that enhances agricultural production with reduced external inputs. How can the totality of these key services to agriculture be managed in synchrony to effectively and efficiently produce food? What are the consequences for farmers and are they willing to adopt these biodiversity-based inputs? What is the role of threatened species? This symposium will bring together an international group of leading scientists that are collaborating intensively within the framework of a high profile pan-European project 'Linking farmland biodiversity to ecosystem services for effective ecological intensification' (LIBERATION; 7 countries; 2013-2017). The symposium will broadly appeal to ecologists interested in the conservation and management of biodiversity, the role of ecosystem services in sustainable agriculture and social, economic and political sciences related to these disciplines. The outcome of this symposium is highly relevant to the development of conservation and food security policies and we will aim to produce practical messages for policymakers and practitioners.

- 15:30 **Production versus environmental impact: Can we have it all on a conventional arable farm?**  
*Rob Field*
- 15:45 **Potential interactions between biodiversity-based ecosystem services supporting major European cropping systems**  
*Lorenzo Marini*
- 16:00 **Managing pollination services for sustainable crop production**  
*Michael Garratt*
- 16:15 **Quantifying the role of biodiversity and ecosystem services in crop production at farm and landscape scales**  
*Henrik G. Smith*
- 16:30 **Quantifying the socio-economic implications of mobilizing ecosystem services in agriculture**  
*Thomas Koellner*
- 16:45 **Biodiversity conservation for ecosystem service delivery or ecosystem services for biodiversity conservation**  
*David Kleijn*

**STUDENT AWARDS II**

Room: Berloiz

Monday, 3 August, 15:30-17:00

- 15:30 **Monitoring wild mammals in county Durham with a citizen science web platform**  
*Pen-Yuan Hsing, Durham University; Bradley S., Durham University; Kent V., Durham Wildlife Trust; Hill R., Durham University; Whittingham M., Newcastle University; Stephens P., Durham University*
- 15:45 **Genomics informing conservation strategies: Which populations should be reconnected in an endangered rodent?**  
*Soraia Barbosa, Cibio-Inbio, Porto University, Cornell University; Paupério J., Cibio-Inbio, Porto University; White T., Cornell University, Lancaster University; Alves P.C., Cibio-Inbio, Porto University,*





*University of Montana; Searle J., Cornell University*

- 16:00 **Global mountain topography and the fate of montane species under climate change**  
*Paul Elsen, Princeton University; Tingley M., University of Connecticut*
- 16:15 **Scaling the divide: Social values and biodiversity conservation in a dynamic world**  
*Alia Dietsch, Ohio State University; Manfredo M., Colorado State University; Teel T., Colorado State University*
- 16:30 **Making space for nature: Balancing food production and biodiversity conservation in Europe**  
*Claire Feniuk, University of Cambridge; Green R., University of Cambridge; Phalan B., University of Cambridge; Donald P., Royal Society For The Protection Of Birds, Sandy; Krogulec J., Polish Society For The Protection Of Birds (Otop); Balmford A., University of Cambridge*
- 16:45 **Can REDD+ deliver biodiversity benefits? Spatial patterns of carbon, biodiversity and REDD+ projects in Indonesia**  
*Josil Philomena Murray, Bangor University; Grenyer R., School Of Geography And The Environment, University of Oxford; Wunder S., Center For International Forestry Research; Raes N., Naturalis Biodiversity Center; Jones J., Bangor University*

#### SYMPOSIUM: BIODIVERSITY AND HUMAN DEVELOPMENT - SESSION II

Room: Barthez

Monday, 3 August, 15:30-17:00

ORGANIZER(S): *Lisa Biber-Freudenberger, University of Bonn; Jan-Henning Sommer, Center for Development Research (ZEF)*

The use of biodiversity and related ecosystem services has always been an indispensable stimulant of human development. However, the overexploitation of these natural resources is accompanied to an increasing extent - by negative side effects such as species loss, ecosystem degradation and diminishing ecosystem functions and processes. Moreover, the enormous boost of international trade activities has led to a spatial

decoupling between intended human development and unintended environmental degradation. Despite the strong interrelationship between biodiversity conservation and human development, they are often treated as completely separate matters at policy level, a practice leading to unnecessarily high opportunity costs. In the past promising concepts and ideas have been developed to facilitate a better alignment of strategies around biodiversity conservation on the one hand and poverty reduction leading to sustainable development on the other. Those inter- and trans-disciplinary strategies have the potential to minimize trade-offs while adequately addressing both, ecological but also economic and socio-cultural conditions. This symposium provides a platform for researchers and practitioners from the field of biodiversity conservation and human development to exchange their experience and to discuss a wide range of related topics.

- 15:30 **A participatory framework to assess multifunctional agriculture: Case study agrobiodiversity in agroforestry systems of Tome Acu in northern Brazil**  
*Daniel Callo-Concha*
- 15:45 **Does sustainability certification of natural resource production and supply chains deliver positive impacts on biodiversity? Applying an ecosystemic approach in the evaluation of certification schemes**  
*Jeanette Blumroeder*
- 16:00 **Critical reflections on the effectiveness of biomass standards to enforce sustainability**  
*Tina Beuchelt*
- 16:15 **Conservation and development in a vuca world: The need for a systemic, risk-robust and ecosystem-based approach**  
*Axel Schick*
- 16:30 **Human population reduction is not a quick fix for environmental problems**  
*Corey Bradshaw*
- 16:45 **Closing Discussion**





**POPULATION DYNAMICS II**

Room: Joffre 5

Monday, 3 August, 15:30-17:00

- 15:30 **Differences in site and life history drive demographic responses to climatic variation in Scandinavian orchids**  
**Matthew Tye**, Uppsala University; Øien D-I., Norwegian University of Science And Technology; Moen A., Norwegian University of Science And Technology; Dahlgren J., University of Southern Denmark; Sletvold N., Uppsala University
- 15:45 **Energetics and the limits of rarity**  
**Philip Andrew Stephens**, Durham University; Vieira M.V., Universidade Federal Do Rio De Janeiro; Carbone C., Institute Of Zoology
- 16:00 **The population trends of European migrant birds: Understanding the drivers on both the breeding and non-breeding grounds**  
**Christine Howard**, Durham University; Stephens P.A., Durham University; Pearce-Higgins J.W., British Trust For Ornithology; Willis S.G., Durham University
- 16:15 **55-year data set implicates disease and a sympatric species in the decline of a threatened frog**  
**Matt West**, University of Melbourne; Gillespie G., Northern Territory Government; Hunter D., Office Of Environment And Heritage; Johnson G., Department of Environment, Land, Water And Planning; Smith S., Department of Environment, Land, Water And Planning; Watts N., Parks Victoria; Mccarthy M., University of Melbourne
- 16:30 **Demographic monitoring to detect climate change impacts on threatened populations**  
**Bruce E Kendall**, University of California, Santa Barbara; Hiroyasu E.H., University of California, Santa Barbara
- 16:45 **Land use, habitat degradation, and Eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*) distribution constriction within the Susquehanna River Drainage**  
**Amber Pitt**, Bloomsburg University; Shinskie J., Bloomsburg University; Hartzell S., Bloomsburg University; Tavano J., Bloomsburg University

- 16:50 **Allometry and the extinction vulnerability of birds and mammals: Why are larger species more vulnerable to extinction?**

**Jelle Hilbers**, Radboud University Nijmegen; Schipper A., Radboud University Nijmegen; Hendriks J., Radboud University Nijmegen; Verones F., Radboud University Nijmegen; Pereira H., German Centre For Integrative Biodiversity Research (Idiv); Huijbregts M., Radboud University Nijmegen

**ALIEN AND INVASIVE SPECIES II**

Room: Joffre A/B

Monday, 3 August, 15:30-17:00

- 15:30 **Investigation into the origin and impacts of the causative agent of white nose disease on bats**  
**Sébastien Puechmaille**, Puechmaille S., Greifswald University; Fritze M., Greifswald University; Leopardi S., Royal Veterinary College; Blake D., Royal Veterinary College; Frick W., University of California; Kilpatrick M., University of California; Rebelo H., University of Porto
- 15:45 **New threat from an old enemy: The role of the feral cat in the current decline of mammals across Northern Australia**  
**Chris Johnson**, University of Tasmania
- 16:00 **Rat eradication and ecosystem recovery in Seychelles**  
**Gerard Rocamora**, University of Seychelles; Labiche A., Island Conservation Society; Henriette E., University of Seychelles; Galman G., Island Conservation Society
- 16:15 **Predicting the potential invasive distribution of raccoon in Iran**  
**Sam Khosravifard**, ITC, Faculty Of Geo-Information Science And Earth Observation Of The University of Twente; Niamir A., Senckenberg Biodiversity And Climate Research Centre
- 16:30 **A global analysis of feral and free-ranging cat diet**  
**Christopher Lepczyk**, Auburn University; House D., University of Hawaii At Manoa; Lindner J., University of Otago; Bonnaud E., Université Paris Sud; Doherty T., Edith Cowan University





16:45 **Thinking about ecologically unbalanced native species - Examples from Brazil**  
**Dalva Maria Silva Matos**, Universidade Federal De São Carlos; Pivello V.R., Universidade De São Paulo; Magela S.T., Universidade Estadual De Maringá; Bottino F., Universidade Federal De São Carlos; Grombone-Guaratini M.T., Instituto De Botânica/ SMA; Vieira M.V., Universidade Federal Do Rio De Janeiro; Bergallo H.G., Universidade Do Estado Do Rio De Janeiro

16:50 **Marsh rabbit mortalities tie pythons to the precipitous decline of mammals in the Everglades**  
**Robert McCleery**, University of Florida; Sovie A., University of Florida; Reed R., U.S. Geological Survey; Hart K., U.S. Geological Survey

## MARINE CONSERVATION II

Room: Joffre C/D

Monday, 3 August, 15:30-17:00

15:30 **The role of egg predation in herring population dynamics in Pacific herring, Puget Sound, USA**  
**Tessa Francis**, University of Washington Tacoma; Shelton A.O., NOAA; Williams G.D., NOAA; Levin P.S., NOAA; Hennessey S., NOAA

15:45 **Assessing benthic responses to fishing disturbance over broad spatial scales that incorporate high environmental variation**  
**Carolyn Lundquist**, NIWA; Hewitt J., NIWA

16:00 **Monitoring and assessing the integrity of a large world heritage marine site using unbaited video**  
**Dominique Pelletier**, French Institute For The Exploitation Of The Sea; Roman W., French Institute For The Exploitation Of The Sea; Powell A., French Institute For The Exploitation Of The Sea; Bockel T., French Institute For The Exploitation Of The Sea; Fiant L., French Institute For The Exploitation Of The Sea; Giraud-Carrier C., French Institute For The Exploitation Of The Sea; Gonson C., French Institute For The Exploitation Of The Sea; Garcia J., French Institute For The Exploitation Of The Sea; Laugier T., French Institute For The Exploitation Of The Sea

16:15 **Impacts of metapopulation dynamics on overfishing risk and vulnerability in multiscale fisheries**  
**Daniel Okamoto**, Simon Fraser University; Anne S., Simon Fraser University; Hessian-Lewis M., Simon Fraser University

16:30 **Plastic in my seafood! Plastic in fish and bivalves sold for human consumption**  
**Chelsea Rochman**, UC Davis; Tahir A., University of Hasanuddin; Baxa D., UC Davis; Lam R., UC Davis; Miller J., UC Davis; Teh F-C., UC Davis; Werorilangi S., University of Hasanuddin; Teh S., UC Davis

16:45 **Seeing the ocean through the eyes of seabirds: A new path for marine conservation?**  
**Amelie Lescroel**, Centre D'Ecologie Fonctionnelle Et Evolutive; Mathevet R., Centre D'Ecologie Fonctionnelle Et Evolutive; Authier M., Observatoire Pelagis (CRMM); Péron C., University of Tasmania-Iimas; Provost P., Réserve Naturelle Nationale Des Sept-Iles; Takahashi A., National Institute Of Polar Research; Grémillet D., Centre D'Ecologie Fonctionnelle Et Evolutive

17:00 **Predictive models of seagrass connectivity to inform conservation planning**  
**Alana Grech**, Macquarie University; Coles R., James Cook University; Rasheed M., James Cook University; Mckenzie L., James Cook University; Wolter J., Université Catholique De Louvain; Hanert E., Université Catholique De Louvain

17:05 **Mismatches between elements of "success" and "failure" of marine protected areas**  
**Sylvaine Giakoumi**, University of Queensland, Hellenic Centre For Marine Research; MCGowan J., University of Queensland; Mills M., University of Queensland; Beger M., University of Queensland; Bustamante R., CSIRO; Charles A., St. Mary'S University; Christie P., University of Washington; Fox M., Conservation International; Garcia Borboroglu P., Global Penguin Society; Gelcich S., Pontificia Universidad Católica De Chile; Guidetti P., Université Nice Sophia Antipolis; Mackelworth P., Blue World Institute Of Marine Research And Conservation; Mbui M., University of Queensland; Mccook L., James Cook University; Micheli F., Stanford University; Morgan L., Marine Conservation





*Institute; Mumby P., University of Queensland; Reyes L.M., National University of Patagonia; White A., The Nature Conservancy; Possingham H., University of Queensland*

## SYMPOSIUM: CONSERVATION 3.0: NEW INNOVATIONS, SOLVERS, AND SOLUTIONS

Room: Rondelet

Monday, 3 August, 15:30-17:00

ORGANIZER(S): *Alex Deghan, Conservation X Labs*

The purpose of the symposium is to introduce conservation scientists to rethink assumptions in how we may address the global challenges of conservation, to be exposed to new models and approaches that harness technological, behavior change, and financial innovation represent the next generation of conservation solutions, and encourage participants in the symposium to create and execute new solutions. Throughout history, some of the most significant achievements in human progress have come from harnessing the power of science, technology, and innovation, and these forces – combined with humanity’s entrepreneurial spirit – have been drivers of global economic prosperity. Moreover, the unprecedented acceleration and democratization of science, technology, and engineering, combined with exponential increase in global connectivity and data, gives us many new powerful tools to address global conservation challenges. This symposium rethinks assumptions around conservation, and seeks to present new approaches to address the Grand Challenges of Conservation.

15:30 **Conservation 3.0: New Innovations, Solvers, and Solutions**

*Alex Deghan*

15:45 **Using open innovation for conservation**

*Paul Bunje*

16:00 **Accelerating the speed, scale & impact of conservation solutions through innovation**

*Brian Sullivan*

16:15 **Domain awareness system approach to protected area management**

*Ted Schmidt*

16:30 **Actively learning about conservation priorities**

*Lucas Joppa*

16:45 **The art of the wild: Thinking about messaging in conservation**

*Asher Jay*

## SYMPOSIUM: THE 100 PRIORITY QUESTIONS FOR BIODIVERSITY CONSERVATION IN MEDITERRANEAN-TYPE REGIONS OF THE WORLD

Room: Sully 1

Monday, 3 August, 15:30-17:00

ORGANIZER(S): *Francisco Moreira, University of Lisbon*

**Note: Talks in this symposium are not in 15-minute increments**

Mediterranean-type ecosystems (MTEs), with their characteristic climate, occur in just five regions of the world: the Mediterranean Basin, the Cape Region of South Africa, Southwestern and South Australia, California, and central Chile. In spite of their small geographic area, they harbor a significant and exclusive proportion of the planet’s biodiversity. Biodiversity values in MTE are threatened by a range of factor including land use changes, overexploitation of natural resources, global climate changes, among others. Researchers have a key role in providing solutions for conserving biodiversity in face of these multiple stressors and socio-economic challenges. Based on similar approaches taken for other parts of the world, a group of researchers from the 5 MTE regions of the world have organized this symposium to identify the 100 priority questions that, if answered, would contribute to preserve biodiversity values in the region. The symposium is a mixture of generic presentations on MTE biodiversity values, conservation threats and existing scientific research, and region-specific assessments of the main issues and questions. Similarities and differences among regions will be highlighted, and symposium participants will be asked to comment and give their opinion on the more relevant questions.

**The ‘100 questions for biodiversity conservation in mediterranean-type regions’ initiative**

*Pedro Beja*

**Patterns and processes of biodiversity defining conservation priorities in mediterranean-type ecosystems of the world**

*Jeffrey Clary*





**Biodiversity conservation threats in mediterranean-type ecosystems of the world**

*Grant Wardell-Johnson*

**Overview of biodiversity conservation research in mediterranean-type ecosystems of the world**

*Karen Esler*

**Priority questions for biodiversity conservation in mediterranean-type regions**

*Francisco Moreira*

**Closing discussion**

**SOCIAL SCIENCE AND CONSERVATION I**

Room: Sully 2

Monday, 3 August, 15:30-17:00

15:30 **The influence of microcredit-funded businesses on human welfare and bushmeat consumption among communities in Serengeti, Tanzania**

*Asanterabi Lowassa, Tawiri; Mvungi A., University of Dar Es Salaam; Naiman L., Frankfurt Zoological Society; Wallace A., Frankfurt Zoological Society; Fischer A., Frankfurt Zoological Society*

15:45 **The contribution of tourists to the resilience of South Africa's national parks**

*Christine Moore, University of Oxford; Cumming G., Percy Fitzpatrick Institute Of African Ornithology, University of Cape Town*

16:00 **Cost-effective conservation of an endangered frog under uncertainty**

*Lucy Rose, University of Melbourne; Heard G., University of Melbourne; Chee Y.E., University of Melbourne; Wintle B., University of Melbourne*

16:15 **Bayesian networks as a tool for reconciling the ecological, social and economic dimensions of conservation: A case study addressing the sustainability of whale-watching**

*Giada Maugeri, Plymouth University, Galway-Mayo Institute Of Technology; Berrow S., Galway-Mayo Institute Of Technology; Fletcher S., Plymouth University; Ingram S.N., Plymouth University*

16:30 **Effects of unpredictability of habitat management to the conservation of early-succession species**

*Henna Fabritius, University of Helsinki; Ovaskainen O., University of Helsinki; Cabeza M., University of Helsinki*

**INVENTORY AND MONITORING II**

Room: Sully 3

Monday, 3 August, 15:30-17:00

15:30 **Dung encounters and photo-captures show similar space-use patterns by mountain ungulates in the Himalaya**

*Tanushree Srivastava, National Centre For Biological Sciences And Centre For Wildlife Studies; Kumar A., National Centre For Biological Sciences And Centre For Wildlife Studies*

15:45 **Wiretapping the wilderness: Using automated acoustic recorders as a collaborative monitoring for assessing the impact of Alberta's oilsands**

*Erin Bayne, Alberta*

16:00 **What lies beneath: Detecting sub-canopy changes in savanna woodlands using a 3D classification method**

*Jolene Fisher, University of The Witwatersrand; Witkowski E., University of The Witwatersrand; Erasmus B., University of The Witwatersrand; Mograbi P., University of The Witwatersrand; Asner G., Carnegie Airborne Observatory, Department of Global Ecology, Stanford University; Van Aardt J., Rochester Institute Of Technology; Wessels K., Council For Scientific And Industrial Research; Mathieu R., Council For Scientific And Industrial Research*

16:15 **Heard but not seen: Exploring acoustic monitoring methods for wild tiger populations**

*Courtney Dunn, Dallas World Aquarium*

16:30 **Leopards in China: Current status and distribution**

*Alice Laguardia, Beijing Forestry University; Zhou Z., Wocheng Institute Of Ecology And The*





*Environment; Kamler J., The University of Oxford; Riordan P., The University of Oxford; Shi K., Beijing Forestry University*

- 16:45 **A methodological comparison for real population size and estimates from a conservation perspective through the use of the Suweon treefrog (*Hyla suweonensis*) as a model species**

*Amaël Borzée, Seoul National University; Waldman B., Seoul National University*

- 16:50 **Developing Bangladesh's first "wall-to-wall" forest cover and forest cover change map**

*Karl Wurster, Bangladesh Forest Department; Hansen M., University of Maryland; Potapov P., University of Maryland; Wurster K., Us Agency For International Development (USAID)*

- 16:55 **Systematic monitoring planning: Optimizing wildlife survey schemes**

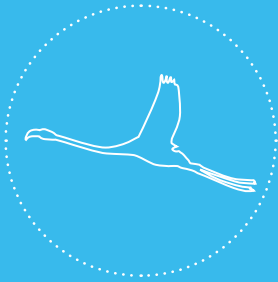
*Jerome Pellet, N+P Wildlife Ecology; Maze G., Universität Zürich; Gonseth Y., Cscf/Karch; Schmidt B., Cscf/Karch*





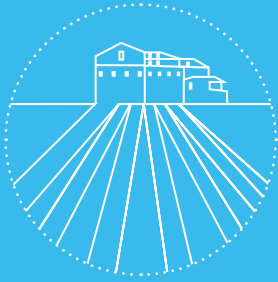


# CONGRESS SCHEDULE



3 AUGUST 2015

MONDAY



4 AUGUST 2015

TUESDAY



5 AUGUST 2015

WEDNESDAY



6 AUGUST 2015

THURSDAY





# TUESDAY, 4 AUGUST 2015

## SCHEDULE AT A GLANCE

ROOM:	ANTIGONE 1	ANTIGONE 3	RONDELET	BARTHEZ	JOFFRE A/B	JOFFRE C/D	JOFFRE 5	SULLY 1	SULLY 2	SULLY 3
7:30	Open for registration									
8:30-10:00	<b>SYMP</b> When conservation goes viral: social science insights for catalyzing conservation	<b>SYMP</b> Conserving small natural features with large ecological roles	<b>SYMP</b> Citizen science in conservation science: the new paths, from data collection to data interpretation	<b>SYMP</b> The role of natural versus novel forest ecosystems in securing the flow of ecosystem services from forest landscapes	Conservation policy	Protected areas and landscape conservation	Conservation modeling I	Adaptive management and monitoring	Disturbance ecology	Conservation biology (assorted session)
10:00 - 10:30	Break									
10:30 - 12:00	<b>SYMP</b> Paths to the future: building conservation leadership capacity	<b>SYMP</b> Marine connectivity studies: a path for biodiversity conservation?	<b>SYMP</b> Complex systems modelling to support biodiversity conservation	<b>SYMP</b> A decade of the open standards for the practice of conservation: the foundation of an applied evidence-based science of conservation	Freshwater conservation	Agriculture and conservation I	Conservation modeling II	Plants conservation genetics	Conservation of forests and forest dependent species I	Urban conservation
12:00-13:30 (Lunchtime meetings)	Walking the talk: why we need to be consistent with our actions to be successful conservationists	Conserve or perish? Developing metrics to quantify conservation impact	Risk & reward: learning from past failures and mistakes to achieve conservation success	Developing a wiki metadatabase for the biodiversity threat mapping community	Social science working group business meeting	European overseas: new frontier for biodiversity research	Addressing conservation biology issues from ethical perspectives—secular and religious	A mediterranean basin scb/iale/ isomed initiative: targeting goals and action plan	Integrating conservation genetics into policy- practical issues, q & a, and consensus building	Paths towards a broader international conservation community
13:30-15:00	<b>SYMP</b> The difference conservation makes: evaluating the impacts of conservation interventions	<b>SYMP</b> Promises and perils of market based conservation: an interdisciplinary conversation	<b>SYMP</b> Biodiversity management and development: challenges, opportunities and new directions	<b>SYMP</b> Bushmeat and human health: implications for conservation policies	<b>SYMP</b> Challenges and implications of species translocations to restore and increase "wildness" in human-dominated landscapes	Agriculture and conservation II	Land use economics and policy	<b>SYMP</b> Exploring outcomes of interacting religions, spiritualities and conservation communities	Conservation genetics I	<b>SYMP</b> Satellite remote sensing for conservation: from successful case studies to global implementation
15:00-15:30	Break									
15:30 - 17:00	<b>SYMP</b> The difference conservation makes: evaluating the impacts of conservation interventions	<b>SYMP</b> Promises and perils of market based conservation: an interdisciplinary conversation	<b>SYMP</b> Biodiversity management and development: challenges, opportunities and new directions	<b>SYMP</b> Genetically modified crops and conservation	<b>SYMP</b> Natura 2000 - the status and fate of EU's network of protected sites	Habitat degradation and fragmentation I	Grasslands and rangelands	<b>SYMP</b> Exploring outcomes of interacting religions, spiritualities and conservation communities	Sustainable agriculture & forestry	Conservation sociology and psychology
17:00-17:15	Break									
17:15-18:30		Symposium 101 - Paper writing session	Poster Session (Exhibit Hall)							
18:30-19:30	No side meeting scheduled	No side meeting scheduled	Rountable risk & reward output discussion	Latin America & Caribbean section business meeting	Future and perspective of the EU nature conservation directives	Oceania section business meeting	Communicating biodiversity conservation to traditional medicine communities	Synergies of faith and conservation: exploring pathways of measurable action	Essential biodiversity variables for conservation needs	No side meeting scheduled
18:30-20:00	Career Fair (exhibit hall)									



## TUESDAY, 4 AUGUST MORNING SESSIONS

### SYMPOSIUM: WHEN CONSERVATION GOES VIRAL: SOCIAL SCIENCE INSIGHTS FOR CATALYZING CONSERVATION

Room: Antigone 1

Tuesday, 4 August, 8:30-10:00

ORGANIZER(S): *Morena Mills, University of Queensland;*  
*Michael Mascia, Conservation International*

This Social Science Working Group-sponsored symposium explores patterns and trends in the establishment of conservation interventions through a social science lens (sociological theories of innovation diffusion), providing novel insights for conservation science and evidence-based policy.

8:30 **When conservation goes viral: The diffusion of innovative biodiversity conservation policies and practices**

*Morena Mills*

8:45 **Going Viral: Insights from the adoption of territorial user rights for fisheries in Chile**

*Stefan Gelcich*

9:00 **When conservation becomes contagious: The expansion and social impacts of community conservation in northern Kenya**

*Louise Glew*

9:15 **Fostering the emergence of conservation in a complex and budget-constrained world**

*Duan Biggs*

9:30 **The futures of privately protected areas**  
*Nigel Dudley*

9:45 **Comparing and contrasting benefits derived from tourism and hunting on communal conservancies in Namibia**

*Robin Naidoo*

### SYMPOSIUM: CONSERVING SMALL NATURAL FEATURES WITH LARGE ECOLOGICAL ROLES

Room: Antigone 3

Tuesday, 4 August, 8:30-10:00

ORGANIZER(S): *Malcolm Hunter, University of Maine;*  
*Rodrigo Medellín, Instituto de Ecología, UNAM;*  
*Aram Calhoun, University of Maine;*  
*David Lindenmayer, Australian National University*

**Note: Talks in this symposium are not in 15-minute increments**

Many places have small natural features that are far more important for maintaining biodiversity or providing ecosystem services than their size would indicate. Consider coral heads in a sea grass dominated bay, groundwater springs in a desert, or the narrow riparian zones that line streams. Even single large, old trees have disproportionate value. The importance of some of these features, most notably riparian zones, has long been recognized. In other cases, our recognition of their role is just emerging: e.g., caves that harbor large bat colonies known to effect widespread control of insect pests.

A diverse set of conservation tools has emerged to conserve these features, but these tools lack strategic coordination and ecological coherence. These landscape elements arguably are too small and scattered to be effectively managed at the usual scale of ecosystem management. Furthermore, the usual tensions between private property rights and public rights to environmental protection are exacerbated in these cases by a spatial mismatch between regional accrual of beneficial services and local costs of protection. Nevertheless, small natural features present novel opportunities because they can usually be protected while allowing traditional activities such as forestry, fishing, and grazing to continue nearby and they are often owned by a single landowner, thus avoiding difficult multi-landowner coordination. This symposium will focus on small-scale conservation that can fit almost anywhere.





**Quantifying the socio-economic implications of mobilizing ecosystem services in agriculture**

*Malcolm Hunter*

**Biodiversity conservation for ecosystem service delivery or ecosystem services for biodiversity conservation**

*Rodrigo Medellín*

**Temporary wetlands: challenges and solutions to conserving a “disappearing” resource**

*Aram Calhoun*

**Springs: conserving perennial water critical in arid landscapes**

*Jenny Davis*

**Riparian zones: Highly dynamic systems that require active conservation**

*Eduardo Gonzalez*

**Temporary streams: Current management challenges and promising solutions**

*Vicenç Acuña*

**Rocky outcrops: A hard road in the conservation of critical habitats**

*James Fitzsimons*

**Large, old trees: Retaining and growing small-scale critical structures**

*David Lindenmayer*

**Using a hybrid regulatory approach to conserve small natural features: A Maine case study**

*Kathleen Bell*

**Managing small natural features: a synthesis of emergent socio-economic issues**

*Dana Bauer*

**Closing discussion**

**SYMPOSIUM: THE ROLE OF NATURAL VERSUS NOVEL FOREST ECOSYSTEMS IN SECURING THE FLOW OF ECOSYSTEM SERVICES FROM FOREST LANDSCAPES**

Room: Barthez

Tuesday, 4 August, 8:30-10:00

ORGANIZER(S): Bengt Gunnar Jonsson, Mid Sweden University

Natural forest ecosystems and their associated biodiversity represent an important baseline for the ability of ecosystems to deliver ecosystem services. However, given ongoing global change, including both climate change and changes in land management, new types of forests are emerging. These will contain elements of natural forests but also represent partly novel ecosystems with some species declining, range expansion of other and introduced exotic tree species. Such forests may, despite potentially being viewed as unnatural, host significant biodiversity values and provide important ecosystem services. The novel ecosystems that are emerging has so far received mainly theoretical focus and science needs to better address both policy related issues as well as applied aspects. This does not only concern regions with a long land use history and limited areas of more natural forests, but to an increasing degree also forests in more remote regions.

**8:30 Forest ecosystem services: From the past into the future**

*Richard Bradshaw*

**8:45 Conservation strategies for forest management in relation to differing ecosystem services shaped by legacies of past land-use**

*Guntis Brumelis*

**9:00 Ecosystem services and benefits from primeval boreal forests**

*Ekaterina Shorohova*

**9:15 Afforested fields as novel ecosystems: Biodiversity at different trophic levels**

*Atte Komonen*

**9:30 Ecosystem services provided by drained peatlands**

*Petri Keto-Tokoi*







- 9:45 **Managing a boreal forest landscape for providing timber, sequestering carbon and sustaining biodiversity**  
*Maria Triviño*

## CONSERVATION MODELING I

Room: Joffre 5

Tuesday, 4 August, 8:30-10:00

- 8:30 **New pathways for conservation planning: Validating the importance of land use in species distribution models**  
*Morgan Gray, UC Berkeley; Merenlender A., UC Berkeley*
- 8:45 **Bridging the gap between small-scale high-resolution and large-scale low-resolution marine studies**  
*Renata Ferrari, The University of Sydney; Figueira W., The University of Sydney; Williams S.B., The University of Sydney; Byrne M., The University of Sydney*
- 9:00 **Ecological network dynamics in a floodplain ecosystem undergoing extreme wet-dry fluctuations**  
*Gilad Bino, University of New South Wales; Wassens S., Charles Sturt University; Spencer J., Office Of Environment And Heritage; Thomas R., Office Of Environment And Heritage; Kingsford R., University of New South Wales*
- 9:15 **How hunting and prey dynamics influence the large carnivore occurrence in the edge of the Western Carpathians?**  
*Miroslav Kutal, Friends Of The Earth Czech Republic; Vana M., Friends Of The Earth Czech Republic; Suchomel J., Mendel University Brno; Lopez J.V.L., Research Unit Of Biodiversity (UO-CSIC-PA), Oviedo University; Chapron G., Grimsö Wildlife Research Station, Department of Ecology, Swedish University of Agricultural Sciences (SLU)*
- 9:20 **Temporal features of tundra ecosystems influencing the density of barren-ground grizzly bears in the Canadian Southern Arctic**  
*Tyler Jessen, University of Calgary; Musiani M., University of Calgary; Diepstraten R., University of Calgary; Mcdermid G., University of Calgary;*

*Galpern P., University of Calgary; Massolo A., University of Calgary; Bath A., Memorial University; Paetkau D., Wildlife Genetics International*

- 9:25 **Clarifying connectivity patterns in the Mediterranean Sea by a multi-disciplinary approach: The role of early life history stages of red mullet (*Mullus barbatus*)**  
*Manuel Muntoni, University of Cagliari; Rocklin D., University of Murcia; Frongia C., University of Cagliari, Cagliari, Italy; Munoz I., University of Murcia, Murcia, Spain; Vergara Chen C., University of Murcia; Garcia J., University of Murcia; Giacalone M., Cnr-Iamc, Castellammare; Renones O., leo; Cuadros Casado A., leo; Raventos N., Barcelona Otolith Reading Services, Ceab-Csic; Beuvier J., Mercator Ocean; Garcia Charton J.A., University of Murcia; D'Anna G., Cnr-Iamc; Murenu M., University of Cagliari*
- 9:30 **The effects of the characteristics of hedgerows on Chiroptera and Orthoptera communities: What is the relevant spatial scale to detect them?**  
*Aurelie Lacoeuilhe, Museum National D'Histoire Naturelle; Machon N., Museum National D'Histoire Naturelle; Julien J-F., Museum National D'Histoire Naturelle; Kerbiriou C., Museum National D'Histoire Naturelle*
- 9:35 **Temporal and spatial population fluctuations of medium sized mammals in a Mediterranean agricultural matrix**  
*Hila Shamoon, Tel Aviv University, Ramat Hanadiv Nature Park, Ramat Gan; Saltz D., Swiss Institute For Dryland Energy And Environmental Research, Blaustein Institutes For Desert Research, Ben Gurion University; Dayan T., Tel Aviv University, Ramat Gan*
- 9:40 **Genetic variation, structure, and gene flow in a sloth bear (*Melursus ursinus*) metapopulation in the Satpura-Maikal landscape of central India**  
*Sandeep Sharma, Smithsonian Conservation Biology Institute; Dutta T., Columbia University; Maldonado J., Smithsonian Conservation Biology Institute; Panwar H.S., Peace Charitable Institute; Seidensticker J., Smithsonian Conservation Biology Institute*





9:45 **The use of habitat association as a proxy for species distribution**  
**Amelia Wenger**, James Cook University; Turner M., The Great Barrier Reef Marine Park Authority; Olds J., Queensland Parks And Wildlife; Craigie I., James Cook University; Hopf J., James Cook University; Pressey B., James Cook University

9:50 **The effect of ambient environmental cues and individual state on resource selection in African elephants**  
**Miriam Tsalyuk**, University of California Berkeley; Getz W., University of California Berkeley

## CONSERVATION POLICY

Room: Joffre A/B

Tuesday, 4 August, 8:30-10:00

8:30 **Solving the mystery of MPA performance: Linking governance to ecological outcomes**  
**David Gill**, National Socio-Environmental Synthesis Center (SESYNC), Annapolis; Fox H., RARE; Mascia M., Conservation International; Ahmadi G., World Wildlife Fund US; Barnes M., University of Queensland; Craigie I., Arc Centre Of Excellence For Coral Reef Studies, James Cook University; Darling E., University of North Carolina, Wildlife Conservation Society; Free C., Rutgers University; Geldmann J., Center For Macroecology, Evolution, And Climate, Natural History Museum Of Denmark, University of Copenhagen; Glew L., World Wildlife Fund US; Holst S., NOAA Coral Reef Conservation Program; Jensen O., Rutgers University; Lester S., University of California; Thomas H., UNEP- World Conservation Monitoring Centre; Whitmee S., CBER - University College London; Woodley S., WCPA-SSC Joint Task Force On Biodiversity And Protected Areas, International Union For The Conservation Of Nature (IUCN)

8:45 **Wildlife and war: Pathways through which armed conflict affects fauna**  
**Kaitlyn Gaynor**, UC Berkeley; Fiorella K., UC Berkeley; Gregory G., McGill University; Kurz D., UC Berkeley; Seto K., UC Berkeley; Withey L., UC Berkeley; Brashares J.S., UC Berkeley

9:00 **The EU habitats directive and the restoration of vanished wildlife populations: The case of large carnivores**  
**Floor Fleurke**, Tilburg University; Trouwborst A., Tilburg University

9:15 **Behavioral crowding: Impact of provision of extrinsic benefits on environmental behavior**  
**Ashwini Chhatre**, Indian School Of Business; Agrawal A., University of Michigan; Gerber E., University of Michigan

9:30 **The impact of bridging the science-policy boundary in assessing risks to ecosystems**  
**Rebecca M. Miller**, International Union For Conservation Of Nature (IUCN); Carré A., Comité Français De L'Uicn; Valderrabano M., Centro De Cooperación Del Mediterráneo Uicn-Med; Ba T., Centre De Suivi Ecologique; Barrow E.G., International Union For Conservation Of Nature; Keith D.A., University of New South Wales; Rodríguez J.P., Instituto Venezolano De Investigaciones Científicas

9:45 **Improving forest conservation outcomes: A case study in Madre de Dios, Peru**  
**Sophia Winkler-Schor**, Scullion J., Mcdaniel College; Vogt K., University of Washington; Winkler-Schor S., University of Washington; Seinkiewicz A., University of Washington; Peña C., Universidad Nacional Amazonica De Madre De Dios; Hajek F., Nature Services Peru

9:50 **The missing middle: Local government, international biodiversity aid, and the politics of property around Benin's W National Park**  
**Daniel Miller**, World Bank, Washington, United States

9:55 **How is biodiversity framed by policy-executors? Insight from regional and local practitioners in Malopolska Region, Poland**  
**Agata Pietrzyk-Kaszynska**, Polish Academy Of Sciences; Grodzinska-Jurczak M., Polish Academy Of Sciences, Institute Of Environmental Sciences, Jagiellonian University







## PROTECTED AREAS AND LANDSCAPE CONSERVATION

Room: Joffre C/D

Tuesday, 4 August, 8:30-10:00

- 8:30 **Providing more protected space for tigers (*Panthera tigris*): A landscape conservation approach in the Western Ghats, Southern India**  
**Sanjay Gubbi**, Nature Conservation Foundation; Mukherjee K., Government Of Karnataka; Swaminath M.H., Indian Forest Service (RETD); Poornesha H.C., Nature Conservation Foundation
- 8:45 **New frameworks for assessing the spatial resilience of protected areas**  
**Graeme Cumming**, James Cook University
- 9:00 **The implications of conservation policies on mammal diversity and movement within a Costa Rican biological corridor**  
**Margot Wood**, Texas A&M University
- 9:15 **Matrix type and protected area conservation: The role of buffer zones in chimpanzee conservation**  
**Beth Kaplin**, Antioch University New England; Martino R., Antioch University New England; Dugger P., Antioch University New England; Kawera S., University of Rwanda; Kubwimana J.P., University of Rwanda; Majyambere M., University of Rwanda
- 9:30 **Assessing the relative importance of local vs. landscape level actions to develop ecological networks**  
**Elisa Fuentes-Montemayor**, University of Stirling; Watts K., Forest Research; Macgregor N., Natural England; Park K., University of Stirling
- 9:45 **The potential of Natura 2000 network has not been fully realized due to lack of international coordination**  
**Aija Kukkala**, University of Helsinki; Arponen A., University of Helsinki; Maiorano L., Sapienza University of Rome; Moilanen A., University of Helsinki; Thuiller W., University Joseph Fourier; Toivonen T., University of Helsinki; Zupan L., University Joseph Fourier; Brotons L., Ctrc Forest Sciences Centre Of Catalonia; Cabeza M., University of Helsinki

- 10:00 **Do terrestrial protected areas mitigate human pressures? A global analysis of local biodiversity within protected areas using the predicts database**  
**Claudia Gray**, University of Sussex; Hill S.L.L., UNEP World Conservation Monitoring Center; Newbold T., Unep World Conservation Monitoring Center; Hudson L.H., Department of Life Sciences, Natural History Museum; Börger L., Swansea University; Purvis A., Department of Life Sciences, Natural History Museum; Scharlemann J.P.W., University of Sussex
- 10:05 **Conservation ecology of butterflies in the Mediterranean island of Cyprus under the Natura 2000 context**  
**Elli Tzirkalli**, University of Ioannina Frederick Research Center, Ioannina, Nicosia; Kati V., University of Patras; Wilson R.J., University of Exeter; Kadis C., Frederick Research Center; Zografou K., University of Ioannina; Halley J.M., University of Ioannina
- 10:10 **Evaluation of participatory management planning processes for Natura 2000 sites in Hungary**  
**Barbara Mihok**, Institute Of Nature Conservation And Landscape Management, Szent István University, Environmental Social Science Research Group (ESSRG); Kiss G., Budapest Business School, College Of Finance And Accountancy; Kelemen E., Institute Of Nature Conservation And Landscape Management, Szent István University, Environmental Social Science Research Group (ESSRG); Fabók V., Institute Of Nature Conservation And Landscape Management, Szent István University, Environmental Social Science Research Group (ESSRG); Kalóczkai Á., Institute Of Nature Conservation And Landscape Management, Szent István University, Environmental Social Science Research Group (ESSRG); Mihók B., Mta Ök Lendület Ecosystem Services Research Group, Centre For Ecological Research, Hungarian Academy Of Sciences; Pataki G., Department of Environmental Economics And Technology, Corvinus University of Budapest, Environmental Social Science Research Group (ESSRG); Balázs B., Institute Of Nature Conservation And Landscape Management, Szent István University, Environmental Social Science Research Group (ESSRG); Bela G., Institute Of Nature





*Conservation And Landscape Management, Szent István University, Environmental Social Science Research Group (ESSRG); Megyesi B., Institute For Sociology, Centre For Social Sciences, Hungarian Academy Of Sciences; Margóczy K., Department of Ecology, University of Szeged; Roboz Á., Department of Environmental Economics And Technology, Corvinus University of Budapest*

**SYMPOSIUM: CITIZEN SCIENCE IN CONSERVATION SCIENCE: THE NEW PATHS, FROM DATA COLLECTION TO DATA INTERPRETATION**

Room: Rondelet

Tuesday, 4 August, 8:30-10:00

ORGANIZER(S): *Karine Prince, Muséum National d'Histoire Naturelle*

Citizen science provides an opportunity to answer conservation-related questions on the broad temporal and spatial scales that are relevant to understanding global biodiversity patterns. However, the data generated by citizen science may contain greater levels of variability (e.g., measurement error) or bias (e.g., spatio-temporal clustering) in comparison to data collected by scientists or instruments. In spite of such weaknesses, many times there are no viable alternative data with which to adequately describe distributions of animals and plants and changes in distribution and abundance. The challenge, therefore, is for conservation scientists to identify methods for improving the quality of insights that can be obtained from citizen science data. New techniques and technologies are being used to collect new forms of data or streamline the process of data collection, and to improve quality control, data management or access to data. Independent of this, advances are also being made in the extraction of knowledge from data through the development of new analytical methods and novel applications of existing methods. This symposium will highlight recent and ongoing developments in the use of citizen science in conservation, covering advances in the processes both of gathering data and of analyzing existing data.

8:30 **Bias, information, signal and noise in citizen science data**  
*Nick Isaac*

8:45 **Conservation management prioritization with citizen science data and species abundance models**

*Alison Johnston*

9:00 **Citizen sciences for monitoring biodiversity in habitat structured spaces**

*Camille Coron*

9:15 **Can opportunistic occurrence records improve the large-scale estimation of abundance trends?**

*Joern Pagel*

9:30 **When do occupancy models produce reliable inferences from opportunistic data?**

*Arco Van Strien*

9:45 **Making sense of citizen science data: A review of methods**

*Olivier Gimenez*

**ADAPTIVE MANAGEMENT AND MONITORING**

Room: Sully 1

Tuesday, 4 August, 8:30-10:00

8:30 **From rhetoric to reality: Integrating impact evaluation in the design, implementation and adaptive management of marine protected areas**

*Gabriella Ahmadi, World Wildlife Fund; Glew L., World Wildlife Fund; Provost M., World Wildlife Fund; Fox H., RARE; Gill D., National Socio-Environmental Synthesis Center; Hiyadat I., Conservation International; Mangubhai S., Wildlife Conservation Society; Purwanto, The Nature Conservancy*

8:45 **Performance of wildlife conservation approaches in northern Tanzania**

*Christian Kiffner, The School For Field Studies*

9:00 **Setting conservation management thresholds using a novel participatory modelling approach**

*Prue Addison, University of Melbourne; De Bie K., University of Melbourne; Rumpff L., University of Melbourne*





9:15 **Using the policy sciences analytical framework in the assessment, implementation and monitoring of adaptive ecosystem-based approaches to resource management**

**John Coon**, University of New Hampshire, University of New Hampshire; Becker M.L., University of New Hampshire, University of New Hampshire; Lee T., University of New Hampshire

9:30 **Integrating ecosystem thresholds into adaptive management of marine resources**

**Kendra Karr**, Environmental Defense Fund; Fujita R., Environmental Defense Fund

9:45 **Innovative monitoring methods in the context of adaptive management of hunting in the Amazon, Colombia**

**François Sandrin**, CIFOR; Sandrin F., Fundacion Si; Cruz D., Fundacion Si; Quiceno Mesa M.P., Fundacion Si; Lebel S., Cirad; Diaz A., Instituto Alexander Von Humboldt; Vanegas L., Fundacion Si; Andrade G., Instituto Alexander Von Humboldt; Baptiste B., Instituto Alexander Von Humboldt; Trujillo F., Fundación Omacha; Garcia C., Cirad; Nasi R., CIFOR

9:50 **Overcoming the challenges to conservation monitoring: Integrating data from in SITU reporting and global datasets to measure impact and performance**

**PJ Stephenson**, WWF International; Burgess N., Unep-Wcmc; Jungmann L., WWF Market Transformation Initiative; Loh J., Zoological Society of London; O'Connor S., WWF International; Oldfield T., Traffic International; Reidhead W., WWF International; Shapiro A., WWF-Germany Remote Sensing Centre

9:55 **An adaptive assessment and management toolkit for data-limited fisheries with a case study from Karimunjawa National Park, Indonesia**

**Gavin McDonald**, Sustainable Fisheries Group, UCSB; Campbell S., Wildlife Conservation Society; Fox H., RARE; Jakub R., RARE; Karr K., Environmental Defense Fund; Kartawijaya T., Wildlife Conservation Society; Mueller J., RARE; Siegel K., Sustainable Fisheries Group, UCSB; Thomas L., Sustainable Fisheries Group, UCSB

## DISTURBANCE ECOLOGY

Room: Sully 2

Tuesday, 4 August, 8:30-10:00

8:30 **Bird functional diversity decreases with time since disturbance: Does patchy planned fire enhance ecosystem function?**

**Holly Sitters**, University of Melbourne; Di Stefano J., University of Melbourne; Christie F., University of Melbourne; Swan M., University of Melbourne; York A., University of Melbourne

8:45 **Fire management for conservation in a mega-diverse and highly flammable world heritage area: A collaborative partnership between scientists and land managers in the Blue Mountains, Australia**

**Elizabeth Tasker**, Office Of Environment & Heritage NSW; Hammill K., Office Of Environment & Heritage NSW

9:00 **Effects of recreation on animals revealed as widespread through a global systematic review**

**Courtney Larson**, Colorado State University; Reed S., Wildlife Conservation Society; Merenlender A., University of California - Berkeley; Crooks K., Colorado State University

9:15 **Resistance of coastal marsh ecosystems to large-scale perturbations: Regional effects of Hurricane Sandy on saltmarsh vegetation and bird populations in the Northeastern USA**

**Chris Elphick**, University of Connecticut; Field C.R., University of Connecticut; Wiest W.A., University of Delaware; Correll M.D., University of Maine; Shriver W.G., University of Delaware; Hodgman T.P., Maine Department of Inland Fisheries And Wildlife; Olsen B.J., University of Maine

9:30 **The landscape of anthropogenic mortality risk for lions: Determinants, use, and consequences for lions, particularly for young individuals**

**Marion Valeix**, CNRS; Elliot N., University of Oxford; Macdonald D., University of Oxford; Loveridge A., University of Oxford





9:45 **Impacts on forest-bird diversity down to single individual's through recreational activities - An experiment**  
**Yves Bötsch**, Swiss Ornithological Institute;  
*Tablado Z.*, Swiss Ornithological Institute; *Jenni-Eiermann S.*, Swiss Ornithological Institute; *Almasi B.*, Swiss Ornithological Institute; *Jenni L.*, Swiss Ornithological Institute

9:50 **The role of fire disturbances on the distribution of structural resources for the Eastern bristlebird**  
**Zoe Stone**, The University of Queensland; *Maron M.*, The University of Queensland; *Tasker E.*, Office Of Environment And Heritage, NSW Government

9:55 **Predicting growth trajectories with functional traits for multiple plant species in fire-prone communities**  
**Freya Thomas**, The University of Melbourne;  
*Vesk P.*, The University of Melbourne

## CONSERVATION BIOLOGY (ASSORTED SESSION)

Room: Sully 3

Tuesday, 4 August, 8:30-10:00

8:30 **Bioremediation of petroleum hydrocarbons from diesel contaminated soil with the earthworm - *Eudrilus eugeniae***  
**Abraham Ekperusi**, University of Benin;  
*Aigbodion F.*, University of Benin

8:45 **Integrative approach to assess genotoxic risks and ecological risks of river contamination for wild fish populations**  
**Raphael Santos**, Université De Lyon, Umr Lehna, Institut National De L Environnement Industriel Et Des Risques (INERIS); *Besnard A.*, Centre D'Ecologie Fonctionnelle Et Evolutive - Umr; *Joyeux A.*, Institut National De L Environnement Industriel Et Des Risques (INERIS); *Bony S.*, Université De Lyon, Umr; *Devaux A.*, Université De Lyon, Umr; *Sanchez W.*, Institut National De L Environnement Industriel Et Des Risques (INERIS)

9:00 **Plastic in my seafood!: plastic in fish and bivalves sold for human consumption**  
**Chelsea Rochman**, UC Davis; *Tahir A.*, University of Hasanuddin; *Baxa D.*, UC Davis; *Lam R.*, UC Davis;

*Miller J.*, UC Davis; *Teh F-C.*, UC Davis; *Werorilangi S.*, University of Hasanuddin; *Teh S.*, UC Davis

9:15 **Key role for nuclear energy in global biodiversity conservation**  
**Barry Brook**, University of Tasmania; *Bradshaw C.*, The University of Adelaide

9:30 **The effect of fish dispersal capacity on yields for territorial use rights in fisheries: Case studies of Chile, Mexico and Japan**  
**Erendira Aceves-Bueno**, UCSB; *Cornejo-Donoso J.*, UCSB; *Gaines S.*, UCSB

9:45 **In pursuit of the common understanding of forest grazing: The changing views of Hungarian foresters and conservationists**  
**Zsófia Benedek**, Varga A., Centre For Ecological Research, Hungarian Academy Of Sciences, Vácrátót, Hungary; *Benedek Z.*, Centre For Economic And Regional Studies, Hungarian Academy Of Sciences; *Babai D.*, Centre For Ecological Research, Hungarian Academy Of Sciences; *Demeter L.*, Centre For Ecological Research, Hungarian Academy Of Sciences; *Pataki G.*, Environmental Social Science Research Group (ESSRG)

9:50 **The efficacy of the one plan approach to African penguin conservation**  
**Grainne McCabe**, Bristol Zoological Society; *Roestorf M.*, Southern African Foundation For The Conservation Of Coastal Birds; *Sherley R.*, Environment And Sustainability Institute, University of Exeter, Bristol Zoological Society; *Schwitzer C.*, Bristol Zoological Society

## SYMPOSIUM: PATHS TO THE FUTURE: BUILDING CONSERVATION LEADERSHIP CAPACITY

Room: Antigone 1

Tuesday, 4 August, 10:30-12:00

ORGANIZER(S): *Chris Sandbrook*, United Nations Environment Programme World Conservation Monitoring Centre

This symposium shares knowledge about the relationship between leadership and effectiveness in conservation, and best practice for building conservation leadership capacity. It is widely agreed that good leadership is







essential for achieving the ambitious objectives of the conservation movement. Emerging conservation leadership programmes are geared towards providing the next generation of conservation practitioners with practical and adaptable skill sets to carve out new paths in the profession. Transcending traditional disciplinary roles by working with diverse stakeholders, communicating across borders and institutional boundaries, future conservation leaders will need to manage complex challenges in a changing world. To support the development of conservation leadership, a variety of capacity development programmes have taken form, ranging from experiential learning to short courses and full professional masters degrees. However, the research literature on conservation leadership remains limited, with unanswered questions about what characteristics and skills are needed to be an effective conservation leader, and how best to develop conservation leadership capacity. These challenges are exacerbated by a lack of coordination and sharing of experience between those who are seeking to conduct research and capacity development for conservation leadership.

- 10:30 **Understanding the impact of conservation leadership capacity development: The case of the Cambridge Masters in Conservation Leadership**  
*Nigel Leader-Williams*
- 10:45 **Training conservation leaders: How will we know if we've done it?**  
*Janet Silbernagel*
- 11:00 **Citizen scientists as agents for conservation**  
*Krithi Karanth*
- 11:15 **Learning by doing: Lessons learnt through building conservation leadership via project grants and awards, internships and mentor support**  
*Marianne Carter*
- 11:30 **Lessons learned in the first five years: Conservation leadership through learning**  
*Brett Bruyere*
- 11:45 **Closing discussion**

## SYMPOSIUM: MARINE CONNECTIVITY STUDIES: A PATH FOR BIODIVERSITY CONSERVATION?

Room: Antigone 3

Tuesday, 4 August, 10:30-12:00

ORGANIZER(S): *Christophe Lett, Institut de Recherche pour le Developement*

Marine protected areas (MPAs) have become an important tool for biodiversity conservation. For an effective design of MPA networks, connectivity, the extent of connection among MPAs, is a crucial consideration. This connection occurs primarily through the dispersal of larvae. Larval connectivity studies have flourished in the last 10 years, benefiting from complementary approaches in population genetics, geochemical analysis of calcified structures, and biophysical modelling. These studies have undoubtedly challenged our view of marine populations as being "open", well-connected, systems. However, whether these studies have also contributed to improve significantly key biodiversity conservation strategies is still debatable. Recently, it has even been suggested that marine connectivity studies often do not provide accurate proxies to assess population persistence, a key element for conservation. Our symposium will address this question and investigate whether marine connectivity studies follow the right path for contributing to biodiversity conservation, and if not, explore paths to this aim.

- 10:30 **Link between self-recruitment, local retention and persistence in marine metapopulations**  
*Christophe Lett*
- 10:45 **Do theoretical and empirical estimates of connectivity match? A case study in the south-west lagoon of New Caledonia**  
*Marion Cuif*
- 11:00 **Multi-disciplinary approaches to the study of marine connectivity: Recent experiences in the Western Mediterranean Basin**  
*Delphine Rocklin*
- 11:15 **Large scale connectivity: Advancing our knowledge in the Mediterranean Sea**  
*Alicia Dalongeville*
- 11:30 **Seascape genetics for the design of a marine reserve network for a long-duration pelagic larva**  
*Amanda Xuereb*





- 11:45 **Connectivity measurement as a useful tool for the spatial management of marine resources: The case of the great scallop *pecten maximus* in the English Channel**  
*Eric Thiebaut*

**SYMPOSIUM: A DECADE OF THE OPEN STANDARDS FOR THE PRACTICE OF CONSERVATION: THE FOUNDATION OF AN APPLIED EVIDENCE-BASED SCIENCE OF CONSERVATION**

Room: Barthez

Tuesday, 4 August, 10:30-12:00

ORGANIZER(S): *Nick Salafsky, Foundations of Success; Amielle Dewan, IFAW; Sheila O'Connor, WWF International*

Ten years ago, representatives of many of the world's leading conservation organizations launched the *Open Standards for the Practice of Conservation*, a framework for designing, managing, monitoring and learning from conservation projects and programs. This framework and its associated tools provide a platform for systematically describing and tracking the effectiveness of conservation actions - or in other words, the foundation of a true evidence-based science of conservation. It also provides a set of tools for organizations and agencies to show performance and meet reporting requirements for policies such as the Natura 2000 standards in Europe or government performance requirements in the United States. In this symposium we will share our experiences over the past decade and invite participants to join this path going forward.

- 10:30 **An overview of the open standards for the practice of conservation**  
*Amielle Dewan*
- 10:45 **Using evidence based science to assess WWF's global conservation programme with reference to the value of the open standards in conservation projects**  
*PJ Stephenson*
- 11:00 **Use of the open standards to develop a network of marine protected areas off the west-coast of Sweden that meets European Natura 2000 obligations**  
*Jen Odinga*

- 11:15 **The open standards for the practice of conservation as a transformative tool in managing the business of conservation**  
*Annette Stewart*

- 11:30 **Taking the open standards to scale: Our path for the coming decade**  
*Nick Salafsky*

- 11:45 **Closing discussion**

**CONSERVATION MODELING II**

Room: Joffre 5

Tuesday, 4 August, 10:30-12:00

- 10:30 **Modeling the recolonization of a large carnivore using opportunistic data**  
*Julie Louvrier, CEFE, CNRS Umr; Duchamp C., Office National De La Chasse Et De La Faune Sauvage; Marboutin E., Office National De La Chasse Et De La Faune Sauvage; Gimenez O., CEFE, CNRS Umr*
- 10:45 **Where to go next? Predicting habitat suitability of an expanding mesocarnivore - The Golden jackal (*Canis aureus*) in Europe**  
*Nathan Ranc, Harvard University; Cagnacci F., Fondazione Edmund Mach; Banea O., Crispus Ngo; Berce T., Slovenia Forest Service; Cirovic D., University of Belgrade; Csanyi S., Szent István University; Giannatos G., University of Athens; Heltai M., Szent István University; Lanszki J., University of Kaposvar; Lapini L., Friulian Natural History Museum; Maiorano L., La Sapienza University of Rome; Malesevic D., University of Banja Luka, Banja Luka; Migli D., Aristotle University of Thessaloniki; Mladenovic J., University of Ljubljana; Penezic A., University of Belgrade; Salek M., Academy Of Sciences Of The Czech Republic; Selanec I., Association Biom; Stoyanov S., University of Forestry; Szabo L., Szent István University; Trbojevic I., University of Banja Luka, Banja Luka; Krofel M., University of Ljubljana*
- 11:00 **Modeling spread rate in terrestrial mammals and the ability to track a shifting climate: A trait space approach**  
*Luca Santini, Sapienza Università Di Roma;*







Cornulier T., University of Aberdeen; Bullock J., Centre For Ecology And Hydrology; Palmer S., University of Aberdeen; White S., Centre For Ecology And Hydrology; Bocedi G., University of Aberdeen; Hodgson J., University of Liverpool; Rondinini C., Sapienza Università Di Roma; Travis J., University of Aberdeen

11:15 **Searching for hotspots within a hotspot: Stacked species distribution models provide new opportunities to map species richness in New Caledonia**

**Robin Pouteau**, Institut Agronomique Néo-Calédonien (IAC); Bayle E., Institut De Recherche Pour Le Développement (IRD); Blanchard E., Institut Agronomique Néo-Calédonien (IAC); Birnbaum P., Institut Agronomique Néo-Calédonien (IAC); Cassan J.-J., Province Nord; Hequet V., Institut De Recherche Pour Le Développement (IRD); Ibanez T., Institut Agronomique Néo-Calédonien (IAC); Vandrot H., Institut Agronomique Néo-Calédonien (IAC)

11:30 **Range shift of European butterfly: Increasing colonization-extinction ratio at the margin**

**Reto Schmucki**, Museum National D'Histoire Naturelle & Cesab; Pe'Er G., Helmholtz Centre For Environmental Research; Brereton T., Butterfly Conservation; Carnicer J., Creaf Global Ecology Unit; Harpke A., Helmholtz Centre For Environmental Research; Heliölä J., Finnish Environment Institute; Kühn E., Helmholtz Centre For Environmental Research; Musche M., Helmholtz Centre For Environmental Research; Oliver T., Nerc Centre For Ecology Hydrology; Roy D., Nerc Centre For Ecology Hydrology; Ries L., University of Maryland; Stefanescu C., Museu De Granollers De Ciències Naturals; Settele J., Helmholtz Centre For Environmental Research; Schweiger O., Helmholtz Centre For Environmental Research; Van Strien A., Statistics Netherlands, The Hague; Van Swaay C., De Vlinderstichting; Julliard R., Museum National D'Histoire Naturelle

11:45 **Despotic animals and ideal distribution models**

**Nicholas Pilfold**, University of Alberta; Derocher A., University of Alberta; Auger-Méthé M., Dalhousie University; Richardson E., Environment Canada

## FRESHWATER CONSERVATION

Room: Joffre A/B

Tuesday, 4 August, 10:30-12:00

10:30 **Disentangling the multiple effects of land use on fish assemblages in Amazon streams**

**Rafael Pereira Leitao**, Instituto Nacional De Pesquisas Da Amazonia, Université De Montpellier, Manaus; Leal C.G., Universidade Federal De Lavras, Lancaster University; Zuanon J., Instituto Nacional De Pesquisas Da Amazonia; Pompeu P.S., Universidade Federal De Lavras; Mouillot D., Université De Montpellier, James Cook University; Barlow J., Lancaster University, Museu Paraense Emílio Goeldi; Hughes R.M., Oregon State University; Kaufmann P.R., Us Environmental Protection Agency; Villéger S., Université De Montpellier; Kasper D., Instituto Nacional De Pesquisas Da Amazonia; Ferreira J., Embrapa Amazônia Oriental; Rossetti F., Universidade De São Paulo; Ferraz S., Universidade De São Paulo; Thomson J., University of Canberra; Mac Nally R., University of Canberra; Gardner T., Stockholm Environment Institute

10:45 **Europe's freshwater biodiversity: Priorities, patterns and gaps in current conservation**

**Marton Szabolcs**, Hungarian Academy Of Sciences, Centre For Ecological Research; Kapusi F., University of Debrecen, Department of Ecology; Carrizo S., International Union For The Conservation Of Nature, Freshwater Biodiversity Unit; Markovic D., Leibniz-Institute Of Freshwater Ecology And Inland Fisheries; Freyhof J., German Center For Integrative Biodiversity Research; Cid N., European Commission, Institute For Environment And Sustainability; Cardoso A-C., European Commission, Institute For Environment And Sustainability; Scholz M., Helmholtz Centre For Environmental Research, Department of Conservation Biology; Kasperidus H.D., Helmholtz Centre For Environmental Research, Department of Conservation Biology; Darwall W.R.T., International Union For The Conservation Of Nature, Freshwater Biodiversity Unit; Lengyel S., Hungarian Academy Of Sciences, Centre For Ecological Research





11:00 **Enhanced coastal fisheries in Bangladesh (ecofish): Biodiversity conservation and improved livelihoods in the Padma-Meghna River Estuary**  
*Nathan Sage, Wahab M.A., Worldfish Bangladesh; Sage N., USAID/Bangladesh; Park S., Worldfish*

11:15 **Mapping freshwater services for assessing conservation metrics in Cambodia under conditions of sparse data**  
*Leonardo Saenz, Conservation International; Acero N., Conservation International*

11:30 **Application of process based models for mapping fresh water services in Cambodia**  
*Natalia Acero Martinez, Conservation International; Sáenz L., Conservation International*

11:45 **Species patterns in small freshwater bodies guides towards focal species approach in aquatic habitat restoration**  
*Elin Soomets, University of Tartu; Rannap R., University of Tartu*

11:50 **Mapping a sustainable future for Gabon's freshwater resources**  
*Steven Schill, The Nature Conservancy*

11:55 **Engaging diverse partners: The multi-party conservation agreement and strategy as an effective framework for arid-land aquatic species conservation at a landscape scale**  
*Jon Sjoberg, Nevada Department of Wildlife; Krueger J., US Fish And Wildlife Service; Miskow E., Nevada Natural Heritage Program; Mellison C., US Fish And Wildlife Service; Burroughs M., US Fish And Wildlife Service; Jaeger J., University of Nevada Las Vegas; Haley R., National Park Service*

## AGRICULTURE AND CONSERVATION I

Room: Joffre C/D

Tuesday, 4 August, 10:30-12:00

10:30 **Links between on farm habitat, bird diversity, pest control and crop damage in California's Central Valley**  
*Sara Kross, University of California, Davis; Kelsey R., The Nature Conservancy; Soykan C., National Audubon Society; Heath S., University of California, Davis; Velas K., Audubon California*

10:45 **Can increasing crop heterogeneity improve synergies between ecosystem services and biodiversity conservation in European and North-American farmlands?**  
*Clélia Sirami, Representing The Farmland Consortium, INRA*

11:00 **Using countryside species-area relationship to quantify the impacts of land use on biodiversity**  
*Inês Martins, German Centre For Integrative Biodiversity Research (IDIV) Halle-Jena-Leipzig; Marques A., German Centre For Integrative Biodiversity Research (IDIV) Halle-Jena-Leipzig; Pereira H., German Centre For Integrative Biodiversity Research (IDIV) Halle-Jena-Leipzig*

11:15 **Dynamic approaches to conservation: Delivering cost-effective habitat for migratory birds in agricultural landscapes**  
*T. Rodd Kelsey, The Nature Conservancy; Reynolds M.R., The Nature Conservancy; Hallstein E., The Nature Conservancy; Hickey C., Point Blue Conservation Science; Hertel M., Audubon California; Matsumoto S., The Nature Conservancy; Reiter M.E., Point Blue Conservation Science; Kelling S., Cornell Lab of Ornithology; Sullivan B., Cornell Lab of Ornithology*

11:30 **Economic valuation of rice crop damage by Red-billed quelea and other granivorous birds on a rural irrigation scheme in western Kenya**  
*Nickson Otieno, National Museums Of Kenya; Mutati A., National Museums Of Kenya; Akoth C., National Museums Of Kenya; Ogwang D., Ahero Rice Research Station; Alaro P., Ahero Rice Research Station*

11:45 **Ecogeomorphological assessment of agricultural abandonment in semiarid Mediterranean areas: A basis for natural reconstruction**  
*Francisco Robledano, University of Murcia; Romero-Díaz A., University of Murcia; Belmonte-Serrato F., University of Murcia; Zapata V.M., University of Murcia; Martínez-Hernández C., University of Murcia; Martínez-López V., University of Murcia*





11:50 **Managing agricultural landscapes for conservation: What do mental models of farmers and scientists teach us?**

*Carole Vuillot, CNRS; Mathevet R., CNRS*

11:55 **How can agri-environment schemes complement semi-natural habitat in protected areas?**

*Jamie Alison, University of Liverpool; Duffield S., Natural England; Morecroft M., Natural England; Marrs R., University of Liverpool; Saccheri I., University of Liverpool; Hodgson J., University of Liverpool*

12:00 **Agri-environment schemes in agricultural landscapes: The importance of area, quality and connectivity for bird and butterfly biodiversity**

*Silvia Zingg, Ritschard E., University of Bern; Zingg S., University of Bern; Arlettaz R., University of Bern; Humbert J-Y., University of Bern*

**SYMPOSIUM: COMPLEX SYSTEMS MODELLING TO SUPPORT BIODIVERSITY CONSERVATION**

Room: Rondelet

Tuesday, 4 August, 10:30-12:00

*ORGANIZER(S): Eve Mcdonald-Madden, University of Queensland; Michael Bode, University of Melbourne; Laura Dee, University of California*

**Note: Talks in this symposium are not in 15-minute increments**

Most conservation management and policy problems are confounded by complexity. Ecosystems are variable, complex networks of interacting species. The management (or not) of one species can therefore have cascading, system-wide implications. Moreover, ecological management is a socio-ecological process, and interactions between the institutions and individuals involved in management determine the ecosystem dynamics. Considering such large and highly connected socio-ecological systems amplifies our uncertainty about system dynamics, ultimately creating challenges for the management of complex systems. In response to this uncertainty, there is a tendency to reduce system complexity by ignoring the linkages between system components and to make decisions based only on single species and/or simple social-ecological systems. However, ignoring the complexity of species interactions

and how a society interacts with biodiversity can have a significant impact on conservation outcomes. Methods that can incorporate uncertainty and embrace complexity are essential for accurate prediction, clear understanding, and effective management. The aim of this symposium is to highlight novel cutting-edge approaches for dealing with the complexity and uncertainty facing real conservation challenges.

**Using food web theory to conserve ecosystems**

*Eve Mcdonald-Madden*

**Managing interacting species within food webs through time**

*William Probert*

**Biodiversity and ecosystem services: How does better information affect management decisions and value?**

*Laura Dee*

**Adaptive strategies for managing a metapopulation of cryptic sumatran tigers with declining connectivity**

*Ladine Chades*

**Discussion**

**Optimal multispecies eradication schedules for a common invaded island ecosystem motif**

*Michael Bode*

**Conservation decision-making on Christmas Island: Managing ecosystems using limited information**

*Yi Han*

**Avoiding perverse outcomes from species introductions: Ecosystem-wide modelling at Booderee National Park**

*Christopher Baker*

**Discussion**





## PLANTS CONSERVATION GENETICS

Room: Sully 1

Tuesday, 4 August, 10:30-12:00

- 10:30 **Admixture in reinforced plant populations**  
**Nathalie Machon**, Sorbonne Universités, MNHN, UPMC, CNRS; *Zavadna M.*, Sorbonne Universités, MNHN, UPMC, CNRS; *Pellissier V.*, Sorbonne Universités, MNHN, UPMC, CNRS; *Abdelkrim J.*, Sorbonne Universités, MNHN, UPMC, CNRS
- 10:45 **Investigating the floral preferences of pollinating insects using pollen DNA metabarcoding**  
**Natasha de Vere**, National Botanic Garden Of Wales; *Lucas A.*, Swansea University; *Hawkins J.*, Cardiff University; *Forman D.*, Swansea University; *Ford C.*, National Botanic Garden Of Wales; *Hegarty M.*, Aberystwyth University; *Gilmore T.*, National Botanic Garden Of Wales; *Lowe A.*, National Botanic Garden Of Wales; *Moscrop J.*, National Botanic Garden Of Wales
- 11:00 **The genetic diversity and spatial genetic structure of the *Ferula communis* complex (Apiaceae) in the Tyrrhenian area**  
**Caterina Angela Dettori**, Centro Conservazione Biodiversità - Università Degli Studi Di Cagliari; *Loi M.C.*, Centro Conservazione Biodiversità - Università Degli Studi Di Cagliari; *Bacchetta G.*, Centro Conservazione Biodiversità - Università Degli Studi Di Cagliari
- 11:15 **How to conserve taxonomic complexity: Genetic and ecological interactions in *Sorbus***  
**Tracey Hamston**, University of Exeter & Whitley Wildlife Conservation Trust; *De Vere N.*, National Botanic Garden Of Wales & Ibers, Aberystwyth University; *Stevens J.*, University of Exeter; *Cresswell J.*, University of Exeter
- 11:30 **Saving seeds: How to improve the effectiveness of sampling protocols for ex situ conservation seed collections**  
**Sean Hoban**, University of Tennessee; *Strand A.*, College Of Charleston; *Schlarbaum S.*, University of Tennessee
- 11:35 **Investigating a dinosaur: Conservation genetics and demographic analysis of the**

**endangered Cycad species *Cycas Megacarpa* and implications for a proposed translocation**  
**Heather James**, University of The Sunshine Coast; *Lamont R.*, University of The Sunshine Coast; *Forster P.*, Queensland Herbarium; *Shapcott A.*, University of The Sunshine Coast

- 11:40 **The conservation value of peripherally isolated populations of Mediterranean endemic plants: A comparative analysis of ecological niche variation and originality**  
**Guillaume Papuga**, University of Sassari & CEFE CNRS; *Gauthier P.*, CEFE CNRS; *Pons V.*, CEFE CNRS; *Farris E.*, University of Sassari; *Thompson J.D.*, CEFE CNRS

## CONSERVATION OF FORESTS AND FOREST-DEPENDENT SPECIES I

Room: Sully 2

Tuesday, 4 August, 10:30-12:00

- 10:30 **Relative contributions of set-asides and tree retention to the long-term availability of key forest biodiversity structures at the landscape scale**  
**Jean-Michel Roberge**, Swedish University of Agricultural Sciences (SLU); *Lämås T.*, Swedish University of Agricultural Sciences (SLU); *Lundmark T.*, Swedish University of Agricultural Sciences (SLU); *Ranius T.*, Swedish University of Agricultural Sciences (SLU); *Felton A.*, Swedish University of Agricultural Sciences (SLU); *Nordin A.*, Swedish University of Agricultural Sciences (SLU)
- 10:45 **Dead wood creation to compensate for habitat loss from intensive forestry**  
**Thomas Ranius**, Rudolphi J., Swedish University of Agricultural Sciences; *Ranius T.*, Swedish University of Agricultural Sciences; *Caruso A.*, Swedish University of Agricultural Sciences; *Jonsell M.*, Swedish University of Agricultural Sciences; *Juutinen A.*, University of Oulu
- 11:00 **Conservation of African rain forests: A rapid assessment of threat using a meta-dataset of plant occurrences records**  
**Gilles Dauby**, Institut De Recherche Pour Le Développement; *Blach-Overgaard A.*, Aarhus University; *Deblauwe V.*, Institut De Recherche







*Pour Le Développement; Droissart V., Institut De Recherche Pour Le Développement; Hardy O.J., Université Libre De Bruxelles; Harris D., Royal Botanic Garden Edinburgh; Ley A., University Halle-Wittenberg; Mackinder B., Royal Botanic Garden Edinburgh; Sosef M., Botanic Garden Meise; Stévert T., Missouri Botanical Garden; Sonké B., Université De Yaoundé 1; Svenning J-C., Aarhus University; Sepulchre P., CNRS; Wieringa J., Naturalis Biodiversity Center; Zaiss R., Institut De Recherche Pour Le Développement; Couvreur T.L., Institut De Recherche Pour Le Développement*

11:15 **Threatened species conservation: Challenges and opportunities for flagship trees**

**Victoria Price**, Fauna & Flora International/Global Trees Campaign; Gill D., Fauna & Flora International/Global Trees Campaign; Magin G., Fauna & Flora International/Global Trees Campaign

11:30 **Mountain forest biodiversity under climate change: Compensating negative effects by increasing structural richness**

**Veronika Braunisch**, Institute Of Ecology And Evolution, University of Bern; Coppes J., Forest Research Institute Of Baden-Württemberg; Suchant R., Forest Research Institute Of Baden-Württemberg; Zellweger F., Swiss Federal Institute For Forest, Snow And Landscape Research WSL; Arlettaz R., Institute Of Ecology And Evolution, University of Bern; Bollmann K., Swiss Federal Institute For Forest, Snow And Landscape Research WSL

11:35 **A closer look at Brazil's forest code: Assessing the new law impacts**

**Thaís Nícia Azevedo**, Earthwatch Institute; Giorgi A.P., Earthwatch Institute; Costa K., USP; Mills M., University of Queensland

11:40 **Do limits to the global oil supply increase the rate of deforestation and biodiversity loss?**

**Rowan Eisner**, University of Queensland; Seabrook L., University of Queensland; Mcalpine C., University of Queensland

11:45 **Will forest conservation areas safeguard important functional diversity over time?**

**Mari Jönsson**, Swedish University of Agricultural Sciences; Ruete A., Swedish University of

*Agricultural Sciences; Snäll T., Swedish University of Agricultural Sciences*

## URBAN CONSERVATION

Room: Sully 3

Tuesday, 4 August, 10:30-12:00

10:30 **Effect of habitat and resource availability on avian nest survival in yards and adjacent forest parks**

**Jennifer Malpass**, The Ohio State University; Rodewald A., Cornell University

10:45 **Using social values for green open space to enhance urban conservation outcomes**

**Chris Ives**, Rmit University; Oke C., Rmit University; Gordon A., Rmit University; Bekessy S., Rmit University

11:00 **Linking theory and practice: How can edge effects research inform conservation strategies in landscapes under urban development?**

**Nelida Villasenor**, The Australian National University; Driscoll D., The Australian National University; Gibbons P., The Australian National University; Lindenmayer D., The Australian National University

11:15 **A collaborative science platform for seamless land use and land cover data to inform conservation: The global land use emergent (glue) project**

**David Theobald**, Conservation Science Partners; Harrison-Atlas D., Graduate Degree Program In Ecology, Colorado State University; Shaw N., Conservation Science Partners; Zachmann L., Conservation Science Partners; Dickson B., Conservation Science Partners

11:30 **Conservation development: A win-win for developers, homeowners and biodiversity?**

**Liba Pejchar**, Colorado State University; Reed S., Wildlife Conservation Society; Farr C., Colorado State University; Laposa S., Alvarez And Marsal; Hannum C., Istanbul Technical University

11:45 **Urban mires remain hotspots of epigeic arthropod diversity despite the detrimental**



**effects of urbanization**

**Norbertas Noreika**, *University of Helsinki; Pajunen T., Finnish Museum Of Natural History; Kotze D.J., University of Helsinki*

**Urbanization causes relatively high local biodiversity but large scale biotic homogenization**

**Eva Knop**, *University of Bern; Turrini T., University of Bern*

by different interventions (from policy to species-specific approaches), and teasing out the key determinants of conservation success. We aim to demonstrate that, 1) without conservation action, the 2020 target would be even less likely to be achieved than current mid-term evaluations, and 2) the importance of evaluating the effectiveness of ongoing conservation interventions.

13:30 **What does it take to save species: A case study from Mauritius**  
*Carl Jones*

13:45 **The return of large carnivores to Europe**  
*Luigi Boitani*

14:00 **Quantifying success for bird conservation**  
*Ian Burfield*

14:15 **Using the IUCN Red List index to evaluate the impact of a conservation organization**  
*Richard Young*

14:30 **Evaluating the impact of species-based intervention: The contribution of reintroductions to species recovery**  
*Natasha Lloyd*

14:45 **Does the European Union birds directive continue to benefit birds in a new, larger eu? Testing the effectiveness of an international policy intervention**  
*Fiona Sanderson*

**SYMPOSIUM: PROMISES AND PERILS OF MARKET BASED CONSERVATION: AN INTERDISCIPLINARY CONVERSATION - SESSION I**

Room: Antigone 3

Tuesday, 4 August, 13:30-15:00

*ORGANIZER(S): George Holmes, University of Leeds; Robin Roth, York University*

As conservation practice in novel human-dominated ecosystems grows in urgency and importance, proposals for a new path in which market mechanisms such as payments for ecosystem services, ecotourism, and biodiversity offsetting have emerged as key tools for conservation. Such proposals have generated a good deal of both enthusiasm and criticism from across and within the social sciences, biological sciences

## AFTERNOON SESSIONS

**SYMPOSIUM: THE DIFFERENCE CONSERVATION MAKES: EVALUATING THE IMPACTS OF CONSERVATION INTERVENTIONS - SESSION I**

Room: Antigone 1

Tuesday, 4 August, 13:30-15:00

*ORGANIZER(S): Michael Hoffman, IUCN Species Survival Commission; Richard Young, Durrell Wildlife Conservation Trust*

Current evidence indicates a growing mismatch between increasing pressures to biodiversity and conservation responses. Success, however, is not uncommon in the field of biodiversity conservation. Extinctions of some species have been prevented, population trajectories have improved and the risk of extinction of wild species has decreased. There have been increased calls for evidence-based conservation to enhance funding by actively demonstrating this effectiveness to funders and policy formers. However, while other policy fields of global importance undertake extensive evaluations of success, evaluations of the effectiveness of conservation actions have been relatively rare. Consequently, opportunities to demonstrate the efficacy of conservation action, and to encourage future funding and ultimately benefit biodiversity may be missed. Unfortunately, understanding what difference conservation makes is difficult, because it is inherently difficult to know what would have happened without intervention. Nonetheless, several studies have attempted to quantify the impact of specific interventions on biodiversity (such as protected areas). This symposium will draw together experts in a range of disciplines to review the contribution that conservation makes to global biodiversity both through meta-analyses and specific case studies, highlighting the roles played







and practitioner communities. In particular, such approaches purport to provide win-win solutions that benefit biodiversity as well as human populations, yet critics argue that important decisions about trade-offs remain; many feel that market based mechanisms simply encourage and entrench human use of fragile ecosystems while others feel they replicate the displacement inherent in 'older' forms of 'fortress' conservation. And while a variety of academic disciplines have analyzed the promise and perils of such moves, particularly their impacts on both biodiversity and local communities, there remain two important absences. First, cross-disciplinary conversations that attempt to bridge understanding between social sciences, biological sciences and practitioner communities are relatively rare. Second, many of the discussions are abstract and rooted in theoretical differences rather than explicitly grounded in empirical studies.

**13:30 Impacts, opportunities and challenges of using market based mechanisms for securing conservation outcomes: When, where and why do they work, fail or land somewhere in between?**

*Jane Carter Ingram*

**13:45 Investigating market enthusiasm amongst conservation professionals**

*Chris Sandbrook*

**14:00 Engagements between conservation NGOs and corporations: lessons from the front lines**

*John Robinson*

**14:15 Private protected areas and markets in conservation in southern Chile**

*George Holmes*

**14:30 Nature, capital, and social justice: debating the role of economics in conservation**

*Robert Fletcher*

**14:45 Land sharing not sparing in the "green economy": The role of livelihood bricolage in conservation and development**

*Wolfram Dressler*

**SYMPOSIUM: BUSH MEAT AND HUMAN HEALTH: IMPLICATIONS FOR CONSERVATIONS POLICIES**

Room: Barthez

Tuesday, 4 August, 13:30-15:00

ORGANIZER(S): *Nathalie Van Vliet, CIFOR; Jori Ferran, CIRAD*

Conservation policies regarding the use of wildlife have often focused on the ecological risks of bush meat for consumption and trade, undermining often the interconnections with the land and human health. Indeed, it is now known that the bush meat trade can become a highly lucrative business (worth tens of millions of dollars) which is widespread in tropical areas worldwide. However, research to date has largely concentrated on aspects of sustainability and ecological impacts on the forest ecosystem rather than on potential links between wildlife and human health. There are several ways in which bush meat utilization and consumption can have an impact on human health. This symposium will provide some food for thought for discussing different ways in which human health can be affected by wildlife exploitation and consumption, possible impacts of those links from the nutritional, social, epidemiological and ecological perspectives; and possible holistic aspects that should be considered when defining integrated conservation policies to manage wildlife use for human consumption.

**13:30 Craving for meat: Psychocultural disorders induced by a depletion of bushmeat in the diets of Congo basin forest dwellers**

*Edmond Dounias*

**13:45 Wildlife's importance to health and livelihoods in Madagascar**

*Christopher Golden*

**14:00 Influence of beliefs and taboos on hunting and wildmeat handling practices in an indigenous reserve from Amazonas, Colombia: Implications on human health and conservation**

*Nathalie Van Vliet*

**14:15 Zoonotic origin of human retroviruses and impact of retroviruses on survival of non-human primates**

*Martine Peeters*





14:30 **Can zoonotic disease risk help curb the wildlife trade in China?**

*Fabian Daszak*

14:45 **Wild great apes as sources and sentinels for emerging infectious diseases**

*Peter Leendertz*

## LAND USE ECONOMICS AND POLICY

Room: Joffre 5

Tuesday, 4 August, 13:30-15:00

13:30 **Using community-based microfinance for conservation: Lessons from case studies in rural Zambia and Tanzania**

*Victoria Lang, Imperial College; Wallace A.P.C., Frankfurt Zoological Society; Wallace G.E., Frankfurt Zoological Society; Milner-Gulland E.J., Imperial College*

13:45 **Meeting global conservation targets: Create new protected areas or manage existing ones?**

*Vanessa M. Adams, University of Queensland; Possingham H.P., University of Queensland*

14:00 **Biodiversity in input-output analysis: The indirect drivers of biodiversity loss**

*Alexandra Marques, Idiv; Martins I., Idiv; Pereira H.M., Idiv*

14:15 **Time discounting in biodiversity offsets and ecological equivalency analysis-aping economics, or economizing biodiversity loss?**

*Michael Curran, Eth Zürich*

14:30 **International policy and pressure around climate-smart agriculture**

*Marit Wilkerson, AAAS S&T Policy Fellowship, United States Agency For International Development (USAID)*

14:45 **Surveys make me feel good: A multi-national evaluation of social desirability bias when valuing environmental public goods**

*Martin Dallimer, University of Leeds; Brehdahl Jacobsen J., University of Copenhagen; Hedemark Lundhede T., University of Copenhagen; Jellesmark Thorsen B., University of Copenhagen*

14:50 **How biodiversity indicators shape the biodiversity/food production relationship**

*Camille Dross, INRA, Agroparistech; Jiguet F., MNHN; Tichit M., INRA, Agroparistech*

## CHALLENGES AND IMPLICATIONS OF SPECIES TRANSLOCATIONS TO RESTORE AND INCREASE "WILDNESS" IN HUMAN-DOMINATED LANDSCAPES

Room: Joffre A/B

Tuesday, 4 August, 13:30-15:00

ORGANIZER(S): *Francois Sarrazin, UPMC*

Restoring wildness processes in human-dominated landscapes, and particularly in Europe, faces a number of critical challenges, including which species are appropriate or acceptable, how to assess the success of translocations that seek to restore ecological functions, and what is the long term evolutionary potential of such restored population, species and communities in face of global changes. This symposium will address these questions and consider what will a rewilded Europe look like, provide an overview of current and future translocation projects, and bring together different perspectives to provide an interdisciplinary perspective on the future trajectories of a rewilded Europe.

13:30 **The new nature in Europe: What is it?**

*Mark Stanley Price*

13:45 **Stochastic dominance to make decisions about translocations with risky outcomes**

*Stefano Canessa*

14:00 **Making the right choices in rewilding human-dominated landscapes**

*John Ewen*

14:15 **Translocations in Europe, what kind of wildness do we restore?**

*Charles Thévenin*

14:30 **An analysis of plant conservation translocations in Europe**

*Bruno Colas*

14:45 **Closing discussion**



**AGRICULTURE AND CONSERVATION II**

Room: Joffre C/D

Tuesday, 4 August, 13:30-15:00

- 13:30 **Does agricultural land-use intensity drive the loss of rare bee species in central Europe?**  
**Johan Ekroos**, Lund University; Blüthgen N., Technische Universität Darmstadt; Kleijn D., Alterra; Knop E., University of Bern; Kühnel S., Technische Universität Darmstadt; Smith H.G., Lund University
- 13:45 **Hedgerows increase native crop pollinator occurrence but do not increase functional redundancy or response diversity of these communities**  
**Emily Kearney**, University of California, Berkeley; Lu A., University of California, Berkeley; Ponisio L., University of California, Berkeley; M'Gonigle L., University of California, Berkeley; Kremen C., University of California, Berkeley
- 14:00 **How farmers influence biodiversity on their farms**  
**Simon Birrer**, Swiss Ornithological Institute; Zellweger-Fischer J., Swiss Ornithological Institute; Pfiffner L., Research Institute Of Organic Agriculture; Jenny M., Swiss Ornithological Institute; Stöckli S., Research Institute Of Organic Agriculture
- 14:15 **Dually improving biodiversity and pollination services for enhanced cotton yields and sustainability**  
**Sarah Cusser**, University of Texas, Austin; Jha S., University of Texas, Austin
- 14:30 **Managing coffee agroforests for ecosystem multifunctionality: Role of farm management and landscape context**  
**Aaron Iverson**, University of Michigan; Gonthier D., University of California-Berkeley; Ennis K., University of California-Santa Cruz; Pak D., University of Michigan; Burnham R., University of Michigan; Vandermeer J., University of Michigan
- 14:45 **Pollinator-friendly practices to enhance sustainability and crop production in apples and pears**  
**Benoît Geslin**, Sede Andina, Universidad Nacional De Río Negro (UNRN) And Consejo Nacional De Investigaciones Científicas Y Técnicas (CONICET);

Aizen M.A., Laboratorio Ecotono, Inibioma, Universidad Nacional Del Comahue And Consejo Nacional De Investigaciones Científicas Y Técnicas (CONICET); Garcia N., Centro Pyme, Agencia De Desarrollo Económico Del Neuquén; Pereira A-J., Instituto Nacional De Tecnología Agropecuaria (INTA); Vaissière B.E., Institut National De La Recherche Agronomique (INRA); Garibaldi L.A., Sede Andina, Universidad Nacional De Río Negro (UNRN) And Consejo Nacional De Investigaciones Científicas Y Técnicas (CONICET)

- 14:50 **Importance of ethiopian shade coffee farms for forest bird conservation**  
**Cagan H Sekercioglu**, Buechley E., University of Utah; Sekercioglu C.H., University of Utah; Atickem A.M., Oslo University; Gebremichael G., Jimma University; Ndung'u J.K., Front Trail Safaris; Mahamued B.A., Manchester Metropolitan University; Beyene T., Arba Minch Crocodile Farm; Mekonnen T., Jimma University; Lens L., Ghent University
- 14:55 **Habitat heterogeneity and species richness under three contrasting agri-environment schemes**  
**Chloe Hardman**, University of Reading; Potts S.G., University of Reading; Norris K., Institute Of Zoology, Zoological Society of London
- Biodiversity under the light of agricultural land abandonment - interactions, implications and the need to preserve rural mosaics**  
**Sylvia Zakkak**, University of Patras; Kati V., University of Patras

**SYMPOSIUM: BIODIVERSITY MANAGEMENT AND DEVELOPMENT: CHALLENGES, OPPORTUNITIES AND NEW DIRECTIONS - SESSION I**

Room: Rondelet

Tuesday, 4 August, 13:30-15:00

ORGANIZER(S): Fabien Quétier, BIOTOPE; Martine Maron, University of Queensland; Astrid van Teeffelen, VU University Amsterdam; Leon Bennun, The Biodiversity Consultancy

With biodiversity in continued global decline, there is increasing concern that its loss should not be accelerated by the impacts of development projects. Goals of 'no net loss' or 'net gains' of biodiversity are being set by





corporations, banks and governments, including the European Union through its No Net Loss initiative (expected in 2015). Interpreting and tracking these goals, and implementing actions to achieve them, pose challenges that have technical, socio-economic and political dimensions. Through contributions from key experts in the field, this symposium aims to illustrate the concepts underlying no net loss/net gain approaches (including biodiversity offsets) and the latest developments from science, policy and practice. Discussion will focus on the need and opportunity for conservation biologists to engage, so as to shape the debate and contribute to emerging best practice.

- 13:30 The mitigation hierarchy, no net loss and biodiversity offsets: Where have we reached?**  
*Kerry Ten Kate*
- 13:45 Value versus fact: The role of science in implementing the mitigation hierarchy and achieving 'no net loss' of biodiversity**  
*Joseph Bull*
- 14:00 Money talks: The drivers of corporate biodiversity commitments**  
*Steven Dickinson*
- 14:15 Biodiversity offsets by regulation: Can we define the elements of good policy?**  
*Leon Bennun*
- 14:30 Averted loss offsetting: Counterfactuals and what they mean for NNL goals**  
*Martine Maron*
- 14:45 Measurement of biodiversity, offset ratios and risks in the application of market-based instruments for conservation**  
*Jussi Laitila*

## SYMPOSIUM: EXPLORING OUTCOMES OF INTERACTING RELIGIONS, SPIRITUALITIES AND CONSERVATION COMMUNITIES - SESSION I

Room: Sully 1

Tuesday, 4 August, 13:30-15:00

*ORGANIZER(S): Stephen Awoyemi, Nigerian Conservation Foundation*

Synergies between conservationists and the world's faiths have been growing considerably over recent years. In particular, it has been highlighted that the spiritualities of Indigenous People as well as mainstream religions often carry a message of caring for Earth, and can be powerful vehicles of conservation. Similar partnerships are also fully coherent with a consolidating paradigm of community-based resource management, where conservation of biodiversity is expected to be grounded in local values and understandings. Despite increasing enthusiasm, however, the actual potential of faith-based conservation remains a disputed issue. NGOs, practitioners, and a growing strand of scientific literature present some cases of positive outcomes, but there still is little systematic evaluation.

This symposium aims to bridge that gap on the grounds of the empirical evidence available. It will bring together some of the world's leading scholars and practitioners who work at the interface of faith and conservation, and address such questions as: in what contexts do spiritual beliefs help to promote conservation? When do they not? Are environmental awareness and involvement actually rising within faith groups worldwide? What can be done to strengthen cooperation across faiths, and between faiths and conservationists, for the sake of protecting life on earth?

- 13:30 Faith, forests, and food: Towards a conceptual framework for faith-based forest conservation in African agricultural landscapes**  
*Shonil Bhagwat*
- 13:45 The experience of ethiopian orthodox church in conserving forest and other bio resources**  
*Alemayehu Wassie Eshete*
- 14:00 Production versus environmental impact: Can we have it all on a conventional arable farm?**  
*Allen Ottaro*





- 14:15 **Potential interactions between biodiversity-based ecosystem services supporting major European cropping systems**  
*Dekila Chungyalpa*
- 14:30 **Managing pollination services for sustainable crop production**  
*Fachruddin Mangunjaya*
- 14:45 **Quantifying the role of biodiversity and ecosystem services in crop production at farm and landscape scales**  
*Li-yi Cheng*

## CONSERVATION GENETICS I

Room: Sully 2

Tuesday, 4 August, 13:30-15:00

- 13:30 **From behavioral patterns to population genetics: The reintroduced Asiatic wild ass in the Negev Desert**  
*Shirli Bar-David*, Renan S., Ben-Gurion University of The Negev; Greenbaum G., Ben-Gurion University of The Negev; Ziv A., Ben-Gurion University of The Negev; Shahar N., Ben-Gurion University of The Negev; Templeton A.R., Washington University; Bouskila A., Ben-Gurion University of The Negev; Bar-David S., Ben-Gurion University of The Negev
- 13:45 **Inbreeding depression in translocated populations of a recovering Ratite: The Little spotted kiwi (*Apteryx owenii*)**  
*Helen Ruth Taylor*, Allan Wilson Centre, University of Otago; Nelson N.J., Allan Wilson Centre, Victoria University of Wellington; Robertson H.A., Department of Conservation; Allendorf F.W., University of Montana; Ramstad K.M., Allan Wilson Centre, Victoria University of Wellington
- 14:00 **How can genetics guide translocations - lessons learned from endangered bird species**  
*Gernot Segelbacher*, University Freiburg
- 14:15 **Genetic restoration for the recovery of the Iberian lynx (*Lynx pardinus*) population in Doñana, SW Spain**  
*José A. Godoy*, López G., Agencia De Medio Ambiente Y Agua De Andalucía; Soriano L., Estación Biológica De Doñana, CSIC; Ruiz G., Agencia De

*Medio Ambiente Y Agua De Andalucía; Marmesat E., Estación Biológica De Doñana, CSIC; Lucena M., Estación Biológica De Doñana, CSIC; Simón M.A., Consejería De Medio Ambiente De La Junta De Andalucía; Godoy J.A., Estación Biológica De Doñana, CSIC*

- 14:30 **Ecological and genetic traits of threatened caribou: Conservation planning from the individual to the metapopulation**  
*Marco Musiani*, University of Calgary; Gubili C., University of Calgary; Weckworth B., University of Calgary; Hebblewhite M., University of Montana; Mariani S., University of Salford
- 14:45 **Whole genome sequencing of California condors is now utilized for guiding genetic management**  
*Cynthia Steiner*, Ryder O., San Diego Zoo Institute For Conservation Research; Miller W., Pennsylvania State University; Ralls K., Smithsonian Institution National Zoological Park; Ballou J., Smithsonian Institution National Zoological Park; Steiner C., San Diego Zoo Institute For Conservation Research; Mitelberg A., San Diego Zoo Institute For Conservation Research; Romanov M., University of Kent; Chemnick L., San Diego Zoo Institute For Conservation Research; Mace M., San Diego Zoo Global; Schuster S., Pennsylvania State University
- 15:00 **Unexpected consequences of population management: Strong genetic impact of historic reinforcements on a population of the endangered Spur-thighed tortoises**  
*Eva Graciá Martínez*, Miguel Hernández University; Rodríguez-Caro R.C., Miguel Hernández University; Botella F., Miguel Hernández University; Fritz U., Museum Of Zoology, Senckenberg Dresden; Andreu A.C., Equipo De Seguimiento De Procesos Naturales - Estación Biológica De Doñana (CSIC); Giménez A., Miguel Hernández University







**SYMPOSIUM: SATELLITE REMOTE SENSING FOR CONSERVATION: FROM SUCCESSFUL CASE STUDIES TO GLOBAL IMPLEMENTATION**

Room: Sully 3

Tuesday, 4 August, 13:30-15:00

*ORGANIZER(S): Nathalie Pettorelli, Institute of Zoology (ZSL), Zoological Society of London; Martin Wegmann, University of Wuerzburg*

The usefulness of satellite remote sensing to inform conservation has been highlighted by many, with multiple scientific reviews discussing over the past decades the potential for such technology to revolutionize environmental management. Yet there is still doubt emanating from practitioners and policy makers as to how such tools can effectively support actions on the ground. This symposium aims to address such doubts, demonstrating how satellite remote sensing represents a realistic, robust opportunity to address current conservation challenges. To do so, it will bring together a range of terrestrial and marine examples to illustrate how Earth Observations have the required credentials to support the implementation of national and international environmental policy agendas. This symposium matches the theme of ICCB-ECCB and will generate discussions that will help choose new paths for conservation.

**13:30 Satellite remote sensing and environmental policy**

*Nathalie Pettorelli*

**13:45 Using earth observations to manage protected ecosystems**

*Nestor Fernández*

**14:00 Remote sensing to assess carbon stocks: Revealing the value of urban areas**

*Zoe Davies*

**14:15 Satellite remote sensing, frontal zones and the identification of priority conservation areas in the oceans**

*Kylie Scales*

**14:30 Remotely-sensed essential biodiversity variables**

*Andrew Skidmore*

**14:45 Towards sustained, long-term and global observations of land cover change for biodiversity conservation**

*Brian O'Connor*

**SYMPOSIUM: THE DIFFERENCE CONSERVATION MAKES: EVALUATING THE IMPACTS OF CONSERVATION INTERVENTIONS - SESSION II**

Room: Antigone 1

Tuesday, 4 August, 15:30-17:00

*ORGANIZER(S): Michael Hoffman, IUCN Species Survival Commission; Richard Young, Durrell Wildlife Conservation Trust*

Current evidence indicates a growing mismatch between increasing pressures to biodiversity and conservation responses. Success, however, is not uncommon in the field of biodiversity conservation. Extinctions of some species have been prevented, population trajectories have improved and the risk of extinction of wild species has decreased. There have been increased calls for evidence-based conservation to enhance funding by actively demonstrating this effectiveness to funders and policy formers. However, while other policy fields of global importance undertake extensive evaluations of success, evaluations of the effectiveness of conservation actions have been relatively rare. Consequently, opportunities to demonstrate the efficacy of conservation action, and to encourage future funding and ultimately benefit biodiversity may be missed. Unfortunately, understanding what difference conservation makes is difficult, because it is inherently difficult to know what would have happened without intervention. Nonetheless, several studies have attempted to quantify the impact of specific interventions on biodiversity (such as protected areas). This symposium will draw together experts in a range of disciplines to review the contribution that conservation makes to global biodiversity both through meta-analyses and specific case studies, highlighting the roles played by different interventions (from policy to species-specific approaches), and teasing out the key determinants of conservation success. We aim to demonstrate that, 1) without conservation action, the 2020 target would be even less likely to be achieved than current mid-term evaluations, and 2) the importance of evaluating the effectiveness of ongoing conservation interventions.





15:30 **Can payments for environmental services conserve habitats and alleviate poverty at the same time? A case study from northern Cambodia**

*Tom Clements*

15:45 **Evaluating the biodiversity impacts of community conservation programmes in Madagascar**

*Herizo Andrianandrasana*

16:00 **Quick and dirty evaluation of social impacts in low-capacity, data-poor situations**

*E. J. Milner-Gulland*

16:15 **Evaluating impacts of conservation initiatives on deforestation and forest degradation in the Peruvian Amazon and factors influencing their success**

*Judith Schleicher*

16:30 **A multi-species comparative approach to assessing drivers of success in mammalian conservation recovery programmes**

*Sam Turvey*

16:45 **The difference conservation makes**

*Michael Hoffmann*

**SYMPOSIUM: PROMISES AND PERILS OF MARKET BASED CONSERVATION: AN INTERDISCIPLINARY CONVERSATION - SESSION II**

Room: Antigone 3

Tuesday, 4 August, 15:30-17:00

*ORGANIZER(S): George Holmes, University of Leeds; Robin Roth, York University*

As conservation practice in novel human-dominated ecosystems grows in urgency and importance, proposals for a new path in which market mechanisms such as payments for ecosystem services, ecotourism, and biodiversity offsetting have emerged as key tools for conservation. Such proposals have generated a good deal of both enthusiasm and criticism from across and within the social sciences, biological sciences and practitioner communities. In particular, such approaches purport to provide win-win solutions that benefit biodiversity as well as human populations, yet critics argue that important decisions about trade-

offs remain; many feel that market based mechanisms simply encourage and entrench human use of fragile ecosystems while others feel they replicate the displacement inherent in 'older' forms of 'fortress' conservation. And while a variety of academic disciplines have analysed the promise and perils of such moves, particularly their impacts on both biodiversity and local communities, there remain two important absences. First, cross-disciplinary conversations that attempt to bridge understanding between social sciences, biological sciences and practitioner communities are relatively rare. Second, many of the discussions are abstract and rooted in theoretical differences rather than explicitly grounded in empirical studies.

15:30 **Novel ecosystem theory: Is it useful for the market-oriented management of landscapes for biodiversity and people (video presentation)**

*Jennifer Finn*

15:45 **Aboriginal engagements with market-based conservation**

*Robin Roth*

16:00 **Discussion and Q&A with Mike Mascia**

*Mike Mascia*

16:15 **Discussion and Q&A with Paul Jepson**

*Paul Jepson*

16:30 **Closing discussion**

**SYMPOSIUM: GENETICALLY MODIFIED CROPS AND CONSERVATION**

Room: Barthez

Tuesday, 4 August, 15:30-17:00

*ORGANIZER(S): Gabor L. Lovei, University Aarhus, Denmark*

*Note: this symposium runs 30-minutes longer than others*

Genetically manipulated (GM) crops have been cultivated in various parts of the world, including some that are in the forefront of conservation biology (North America), among the fastest developing regions with biodiversity hotspots (China), and important repositories of global biodiversity (South America). Recently, the alarm has been raised by conservation biologists, that the monarch butterfly (*Danaus plexippus*), the iconic species for conservation biology in North America, has suffered





substantial declines, due to the widespread use of herbicide-resistant GM crops. Thus it is timely to survey the relationship of GM crops and conservation, especially that some early arguments in favor of GM crops has been that it can help biodiversity conservation.

15:30 **Resource shrinkage and extinction debt: Some theoretical considerations**

*John Maxwell Halley*

15:45 **Movement and egg laying in monarch butterflies: What happens when the matrix is cleaned up?**

*Myron Zalucki*

16:00 **Herbicide tolerant crops implicated in declining monarch butterfly population**

*Carl Stenoien*

16:15 **Exposure analysis of diurnal *Lepidoptera* to maize pollen in protected areas**

*Salvatore Arpaia*

16:30 **Can the growing of transgenic maize threaten protected *Lepidoptera* in Europe?**

*Gabor L. Lövei*

16:45 **Indirect effects of mosquito control on the non-target fauna in the Camargue**

*Brigitte Poulin*

17:00 **Sicily as theoretical model to study the potential impact of genetically modified plants in a hotspots of biodiversity**

*Barbara Manachini*

### GRASSLANDS AND RANGELANDS

Room: Joffre 5

Tuesday, 4 August, 15:30-16:50

15:30 **Nitrogen addition impacts plant biodiversity in mountain grasslands, but magnitude of effects depends on climatic context: A systematic review**

*Jean-Yves Humbert, University of Bern; Dwyer J., The University of Queensland; Andrey A., University of Bern; Arlettaz R., University of Bern*

15:45 **Challenges of multiple species management: Effects of cattle grazing and resting rangeland on songbird abundance and vegetation structure in a mixed-grass prairie in southwestern Saskatchewan**

*Samantha Fischer, University of Manitoba; Koper N., University of Manitoba*

16:00 **Managing a keystone rodent and domestic cattle to restore semi-arid grasslands in Mexico**

*Eduardo Ponce Guevara, Universidad Nacional Autónoma De México; Davidson A., Institute For Wildlife Studies; Sierra Corona R., Universidad Nacional Autónoma De México; Ceballos G., Universidad Nacional Autónoma De México*

16:05 **Novel pressures and the population dynamics of a pivotal grass species in the Mediterranean ecosystem of southern Australia**

*Katherine Giljohann, The University of Melbourne; Mccarthy M., The University of Melbourne; Kelly L., The University of Melbourne; Regan T., The University of Melbourne*

16:10 **Climate-smart grasslands management: Adapting to climate variability, reducing vulnerability of producers, and conserving biodiversity in Uruguay**

*A. Alberto Yanosky, Guyra Paraguay; Kray H., World Bank*

16:15 **Effects of unpredictability of habitat management to the conservation of early-succession species**

*Henna Fabritius, University of Helsinki; Ovaskainen O., University of Helsinki; Cabeza M., University of Helsinki*

16:20 **Born to be wild: How to quantify the impact of an invasive species, *Prosopis juliflora*, in Ethiopian rangelands**

*Anna Treydte, University of Hohenheim; Birhane E., Mekelle University; Eshete A., Forestry Research Institute*





## SYMPOSIUM: NATURA 2000 - THE STATUS AND FATE OF EU'S NETWORK OF PROTECTED SITES

Room: Joffre A/B

Tuesday, 4 August, 15:30-17:00

ORGANIZER(S): *Martin Dieterich, University of Hohenheim*

The Natura 2000 symposium organized by the Policy Committee of SCB-Europe Section, will provide a general overview on key issues relating to the implementation of EU nature conservation policies. The symposium strives at integrating presentations and debate. It will critically scrutinize Natura 2000, suggested caveats and means of improvement, ideally demonstrating advantages or disadvantages of different approaches to implement the EU conservation directives – from the scale of single sites to the scale of the EU.

15:30 **The EU Conservation Directives - Refit and a perspective from the EU Commission**

*Stefano Leiner*

15:45 **State of the EU Conservation Directives, successes and failures: A perspective from Europe's environmental NGOs**

*Friedrich Wulf*

16:00 **NATURA 2000 In Germany**

*Frank Klingenstein*

16:15 **Towards a multi-perspective approach in nature policy**

*Henk Van Zeijts*

16:30 **EU Conservation directives: A science perspective**

*Martin Dieterich*

16:45 **Closing discussion**

## HABITAT DEGRADATION AND FRAGMENTATION I

Room: Joffre C/D

Tuesday, 4 August, 15:30-17:00

15:30 **Jaguar and associated biodiversity conservation across increasing oil-palm landscapes in Colombia**

*Valeria Boron, University of Kent; Payan E., Panthera; Tzanopoulos J., University of Kent*

15:45 **How pervasive is biotic homogenization in human-modified tropical forests?**

*Ricardo Solar, Universidade Federal De Vicosa; Barlow J., Lancaster University; Ferreira J., Embrapa Amazonia Oriental; Berenguer E., Lancaster University; Lees A., Museu Paraense Emílio Goeldi; Louzada J., Universidade Federal De Lavras; Maues M., Embrapa Amazonia Oriental; Moura N., Museu Paraense Emílio Goeldi; Oliveira V., Universidade Federal De Lavras; Chaul J., Universidade Federal De Vicosa; Ribas C., Universidade Federal De Lavras; Schoederer J.H., Universidade Federal De Vicosa; Mac Nally R., Institute For Applied Ecology, University of Canberra; Thomson J.R., Institute For Applied Ecology, University of Canberra; Vieira I.C.G., Museu Paraense Emílio Goeldi; Gardner T., Stockholm Environment Institute*

16:00 **Do primary forest parks in central Africa protect rainforest bird communities better than unprotected secondary forests? An exploration, education and ecology project from the Equatorial Guinea bird initiative.**

*Luke Powell, Smithsonian Migratory Bird Center; Wolfe J., US Forest Service, Redwood Sciences Lab; Cooper J., University of Kansas*

16:15 **Quantity or quality, local or landscape scale - What determines multi-taxon species richness in dry grassland fragments?**

*Klaus Peter Zulka, University of Vienna; Abensperg-Traun M., University of Vienna; Milasowszky N., University of Vienna*

16:30 **Finding middle ground: Frogs, pines and sustainable forestry in Chile**

*Virginia Moreno-Puig, Massey University; Brunton D.H., Massey University*

16:35 **Both current and historical landscape configuration affect plants and butterflies in fragmented farmlands**

*Regina Lindborg, Stockholm University; Bommarco R., Swedish University of Agricultural Sciences; Öckinger E., Swedish University of Agricultural Sciences; Marini L., Swedish University of Agricultural Sciences*







- 16:40 **Spatio-temporal dynamics of the impacts of forest fragmentation on neotropical bat assemblages**  
**Ricardo Rocha**, Centre For Ecology, Evolution And Environmental Changes, University of Lisbon, Biological Dynamics Of Forest Fragments Project, National Institute For Amazonian Research And Smithsonian Tropical Research Institute, Metapopulation Research Centre, Faculty Of Biosciences, University of Helsinki; Sampaio E., Institute Of Experimental Ecology, University of Ulm; Lopez-Baucells A., Centre For Ecology, Evolution And Environmental Changes, University of Lisbon, Biological Dynamics Of Forest Fragments Project, National Institute For Amazonian Research And Smithsonian Tropical Research Institute, Museu De Ciències Naturals De Granollers; Farneda F., Centre For Ecology, Evolution And Environmental Changes, University of Lisbon, Biological Dynamics Of Forest Fragments Project, National Institute For Amazonian Research And Smithsonian Tropical Research Institute; Bobrowiec P., Biological Dynamics Of Forest Fragments Project, National Institute For Amazonian Research And Smithsonian Tropical Research Institute; Cabeza M., Metapopulation Research Centre, Faculty Of Biosciences, University of Helsinki; Palmeirim J., Centre For Ecology, Evolution And Environmental Changes, University of Lisbon; Meyer C., Centre For Ecology, Evolution And Environmental Changes, University of Lisbon, Biological Dynamics Of Forest Fragments Project, National Institute For Amazonian Research And Smithsonian Tropical Research Institute
- 16:45 **A systematic review and meta-analysis of habitat fragmentation literature: What, where and how do we study habitat fragmentation?**  
**Dini Fardila**, The University of Melbourne; Mccarthy M., The University of Melbourne; Kelly L., The University of Melbourne; Moore J., Monash University
- 16:50 **Secondary habitats: A valuable opportunity for the conservation of vertebrates in the Central Mexican Plateau**  
**Mónica E. Riojas-López**

**SYMPOSIUM: BIODIVERSITY MANAGEMENT AND DEVELOPMENT: CHALLENGES, OPPORTUNITIES AND NEW DIRECTIONS - SESSION II**

Room: Rondelet

Tuesday, 4 August, 15:30-17:00

ORGANIZER(S): Fabien Quétier, BIOTOPE; Martine Maron, University of Queensland; Astrid van Teeffelen, VU University Amsterdam; Leon Bennun, The Biodiversity Consultancy

With biodiversity in continued global decline, there is increasing concern that its loss should not be accelerated by the impacts of development projects. Goals of 'no net loss' or 'net gains' of biodiversity are being set by corporations, banks and governments, including the European Union through its No Net Loss initiative (expected in 2015). Interpreting and tracking these goals, and implementing actions to achieve them, pose challenges that have technical, socio-economic and political dimensions. Through contributions from key experts in the field, this symposium aims to illustrate the concepts underlying no net loss/net gain approaches (including biodiversity offsets) and the latest developments from science, policy and practice. Discussion will focus on the need and opportunity for conservation biologists to engage, so as to shape the debate and contribute to emerging best practice.

- 15:30 **The use of model-based approaches for evaluating the effectiveness of no net loss policies**  
*Ascelin Gordon*
- 15:45 **German impact mitigation regulation: An example towards no net loss of biodiversity?**  
*Marianne Darbi*
- 16:00 **Filling the gap in mitigation policy implementation for coastal and marine development projects**  
*Celine Jacob*
- 16:15 **The challenge of achieving no net loss in the forests of central Africa**  
*Fabien Quétier*







16:30 **Can we achieve the “no net loss” of biodiversity through mitigation bank system? Empirical evidences from the french experimentation**

*Coralie Calvet*

16:45 **The next generation of mitigation: Landscape planning improves outcomes for people and nature**

*Joseph Kiesecker*

## SYMPOSIUM: EXPLORING OUTCOMES OF INTERACTING RELIGIONS, SPIRITUALITIES AND CONSERVATION COMMUNITIES - SESSION II

Room: Sully 1

Tuesday, 4 August, 15:30-17:00

ORGANIZER(S): *Stephen Awoyemi, Nigerian Conservation Foundation*

Synergies between conservationists and the world's faiths have been growing considerably over recent years. In particular, it has been highlighted that the spiritualities of Indigenous People as well as mainstream religions often carry a message of caring for Earth, and can be powerful vehicles of conservation. Similar partnerships are also fully coherent with a consolidating paradigm of community-based resource management, where conservation of biodiversity is expected to be grounded in local values and understandings. Despite increasing enthusiasm, however, the actual potential of faith-based conservation remains a disputed issue. NGOs, practitioners, and a growing strand of scientific literature present some cases of positive outcomes, but there still is little systematic evaluation.

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15:30 **Session I recap and discussion**

15:45 **Whose faith, whose biodiversity? Multiscale issues in the contribution of faith to biocultural conservation: Central Italy as a case study**

*Fabrizio Frascaroli*

16:00 **Finding common ground for the protection, conservation and revitalisation of indigenous sacred natural sites**

*Bas Verschuuren*

16:15 **Sacramental motivation for restoring and conserving prairies, woodlands, and lakes in midwestern USA**

*Jame Schaefer*

16:30 **Closing discussion**

## SUSTAINABLE AGRICULTURE & FORESTRY

Room: Sully 2

Tuesday, 4 August, 15:30-17:00

15:30 **Do REDD+ social safeguards reach the ‘right’ people?**

*Julia Jones, Bangor University; Poudyal M., Bangor University; Ramamonjisoa B., University of Antananarivo; Mandimbiniaina R., University of Antananarivo; Rasoamanana A., University of Antananarivo; Hockley N., Bangor University; Gibbons J., Bangor University; Rakotonarivo S., Bangor University*

15:45 **Solving conflicts among conservation, economic and social objectives in boreal production forest landscapes**

*Mikko Mönkkönen, University of Jyväskylä; Le Tortorec E., University of Jyväskylä; Mazziotta A., University of Jyväskylä; Miettinen K., University of Jyväskylä; Podkopaev D., University of Jyväskylä; Pohjanmies T., University of Jyväskylä; Trivino M., University of Jyväskylä*

16:00 **Can frogs thrive in oil palm? A study of the effects of habitat management on frog diversity**

*David Kurz, University of Cambridge; Turner E., University of Cambridge; Konopik O., University of Würzburg; Barkley H., Woods Hole Oceanographic Institution; Aryawan A., Smart Research Institute;*





*Ps S., Smart Research Institute; Caliman J-P., Smart Research Institute; Netral A., Smart Research Institute; Cranston J., University of Cambridge; Zu Ermgassen S., University of Cambridge; Corlet C., University of Cambridge; Foster W., University of Cambridge*

**16:15 A credit point system for assessing and enhancing biodiversity at the farm scale - and beyond**

*Judith Zellweger-Fischer, Swiss Ornithological Institute; Birrer S., Swiss Ornithological Institute; Stoeckli S., Research Institute Of Organic Agriculture Fibl; Pfiffner L., Research Institute Of Organic Agriculture Fibl*

**16:30 An assessment of targeting in a compensation scheme for hilsa (*Tenualosa ilisha*) conservation in Bangladesh**

*Annabelle Bladon, Imperial College London; Mohammed E.Y., International Institution For Environment And Development; Milner-Gulland E.J., Imperial College London*

**16:35 Harvest of pine trees at varying retention levels: Economic return and effects on amount and diversity of dead wood**

*Francesca Santaniello, Slu/Skogforsk; Djupström L., Skogforsk; Ranius T., Slu; Rudolphi J., Slu; Widenfalk O., Greensway; Weslien J-O., Skogforsk*

**16:40 Should we be worrying about ecological traps? The case of forest birds in shade coffee**

*Lina Maria Sanchez Clavijo, University of Central Florida*

## CONSERVATION SOCIOLOGY AND PSYCHOLOGY

Room: Sully 3

Tuesday, 4 August, 15:30-17:00

**15:30 Measuring and mapping the digital saliency of biodiversity**

*Ricardo Correia, Universidade Federal De Alagoas, University of Oxford; Long P., University of Oxford; Malhado A., Universidade Federal De Alagoas; Ladle R., Universidade Federal De Alagoas, University of Oxford; Jepson P., University of Oxford*

**15:45 Gamers like it green: Virtual biophilia-like experience in the world of warcraft**

*Minh-Xuan Truong, French National Museum Of Natural History; Prevot A.C., French National Museum Of Natural History; Clayton S., College Of Wooster*

**16:00 Changing Oceans - Changing fish consumption: a psychological approach towards sustainable fish consumption as a way of combatting overfishing**

*Isabel Richter, NTNU; Kloeckner C., NTNU; Mehmetoglu M., NTNU*

**16:15 Conservation psychology in action: Fostering and evaluating durable motivation in capacity building programs**

*Kayla Cranston, Antioch University New England*

**16:30 Social dimensions of conservation: An organisational perspective**

*Sarah Thomas, Zoological Society of London*

**16:35 Strengthening capacity through a regional learning network: A coral triangle case study**

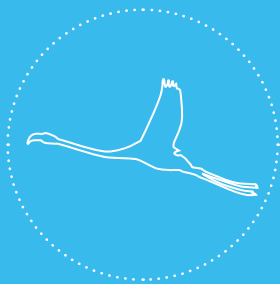
*Diana Pietri, University of Washington; Stevenson T., University of Washington; Christie P., University of Washington*

**16:40 The role of zoos in attitudes towards biodiversity and the reintroduction of native wild carnivores to the UK: Results from a pilot study**

*Adriana Consorte-McCrea, Canterbury Christ Church University; Fernandez A., Canterbury Christ Church University; Bainbridge A., Canterbury Christ Church University; Nigbur D., Canterbury Christ Church University*



# CONGRESS SCHEDULE



3 AUGUST 2015

MONDAY



4 AUGUST 2015

TUESDAY



5 AUGUST 2015

WEDNESDAY



6 AUGUST 2015

THURSDAY





# WEDNESDAY, 5 AUGUST 2015

# SCHEDULE AT A GLANCE

ROOM:	ANTIGONE 1	ANTIGONE 3	RONDELET	BARTHEZ 1	BARTHEZ 2	JOFFRE A/B	JOFFRE C/D	JOFFRE 5	SULLY 1	SULLY 2	SULLY 3
8:00	Open for registration										
8:30-10:00	SYMP Preserving wilderness in the anthropocene	SYMP New frontiers in conservation criminology	SYMP Conservation marketing: a new path to understanding and influencing human behaviour	SYMP Equity and justice as goals for conservation: analytical tools and their application	Miscellaneous topics II	SYMP Advances on human pressure quantification and biodiversity monitoring under global change	Habitat degradation and fragmentation II	Human-wildlife conflict I	Conservation planning I	Citizen science / public participation in science I	Ecosystems and ecosystem services conservation I
10:00 - 10:30	Break										
10:30 - 12:00	SYMP Can we save it all? Confronting conservation priorities in a changing climate	SYMP Invertebrates in sustainable forest management: from research to implementation in practice	SYMP Conservation marketing: a new path to understanding and influencing human behaviour	SYMP Synergies and trade-offs between equity, poverty, and well-being in conservation	Miscellaneous topics III	SYMP Sustainability in agricultural landscapes: linking biodiversity to agricultural practices and policy	Conservation genetics II	Human-wildlife conflict II	Conservation planning II	Citizen science / public participation in science II	Ecosystems and ecosystem services conservation II
12:00-13:30 (Lunchtime meetings)	Editor's forum on publication of conservation science: questions & answers	Africa section business meeting	Conservation marketing working group members meeting	No side meeting scheduled	No side meeting scheduled	"Population matters" asks for input about human population from conservation biologists	Economic ecology, or ecological economics?-alternatives to monetary valuation of biodiversity for decision-making	Interdisciplinary field courses: challenges & opportunities for training in conservation science	The role of citizen sciences and collaborative research in conserving bio cultural diversity	SCB works through local chapters: boots-on-the-ground conservation research, policy, and education	Boundary organisations to connect conservation science, policy and practice
13:30-15:00	SYMP From abandoned to wild landscapes: practices, consequences and perceptions of rewilding in europe	SYMP Marxan at 15 years old: the past, present, and future of a conservation planning tool	SYMP Power to the people? Valuing and integrating local perspectives in conservation	SYMP Recent trend in agent-based models applied to biodiversity conservation: from simulating population dynamics and human-environment interactions to enhancing social learning	SYMP Moving forward strategic planning at scale: lessons from europe, australia and the united states	SYMP Ecosystem-based adaptation: from conceptual basis to implementation at global scale	Connectivity conservation	Conservation policy and ethics I	SYMP Challenges and opportunities for forest conservation in human-modified amazonian landscapes	Role of evolution and context in conservation	Getting scientific evidence used in practice: progress, barriers and solutions
15:00-15:30	Break										
15:30 - 17:00	SYMP Creating natural connections in unnatural habitats through citizen science	SYMP Conservation trade-offs in a resource-limited world	SYMP Human behavior and nature conservation	SYMP Recent trend in agent-based models applied to biodiversity conservation: from simulating population dynamics and human-environment interactions to enhancing social learning	SYMP Green infrastructure, connectivity, and the agricultural landscape	SYMP Ecosystem-based adaptation: from conceptual basis to implementation at global scale	Building communities and capacity for conservation	Conservation of forests and forest dependent species II	Protected area management	Infrastructures and conservation I	Getting scientific evidence used in practice: progress, barriers and solutions
17:00-17:15	Break										
17:15-18:30	Poster Session (Exhibit Hall)										
18:30-19:30	Europe section social & business meeting	Developing a pan-african curriculum for master's program in conservation biology	No side meeting scheduled	Strengthening local chapters through global connections	Green infrastructure, connectivity, and the agricultural landscape	No side meeting scheduled	Ecological economics and sustainability science working group business meeting	"modeling and scenarios of biodiversity" with frb program	Montpellier assets in agroecology and agrobiodiversity research	Conservation poetry slam	Tools, approaches and pathways to reframing conservation for future change



## WEDNESDAY, 5 AUGUST MORNING SESSIONS

### SYMPOSIUM: **PRESERVING WILDERNESS IN THE ANTHROPOCENE**

Room: Antigone 1

Wednesday, 5 August, 08:30-10:00

ORGANIZER(S): *Vincent Devictor, University of Montpellier; François Sarrazin, University Pierre & Marie Curie; Virginie Maris, Centre d'Ecologie Fonctionnelle et Evolutive*

Conservation is searching new pathways. But motives and goals for these pathways are highly controversial and have yet to be discussed. A strong shift seems to emerge between so-called "New conservation movements" pleading for more anthropocentric objectives i.e. conserving nature for people and more radical and traditional approaches of nature protection, i.e. conserving nature for itself. This symposia is dedicated to highlight emerging ethical and practical justifications on this debate and identify the possibility of a third pathway, i.e. conserving nature and people. Even before the grand narrative of Anthropocene, the idea of wilderness had been attacked as being a new-world fantasy much more than an ecological reality. Having said that, should we, and can we, still make sense of wilderness preservation? If most habitats are human-influenced, does wilderness still worth attention, or simply be considered as an ideal or as a regulatory norm? Should the mere concept of wilderness be abandoned? Should it be redefined e.g. through wildness? Can emerging care for wilderness be embedded into evolutionary perspectives for both humans and non-humans? What does conserving nature and people means in term of evolutionary transition? In this symposium we want to question the

possibility and relevance of wilderness preservation in the Anthropocene through the articulation of ethical, ecological and evolutionary perspectives.

8:30 **Conservation for people and nature**  
*Georgina Mace*

8:45 **Conservation for people and nature, a major evolutionary transition?**  
*François Sarrazin*

9:00 **Where are we? 15 years of bad and good news in conservation science**  
*Vincent Devictor*

9:15 **A wildlife comeback in Europe?**  
*Laurent Godet*

9:30 **Nature and wilderness in the Anthropocene**  
*Virginie Maris*

9:45 **Closing discussion**

### SYMPOSIUM: **NEW FRONTIERS IN CONSERVATION CRIMINOLOGY**

Room: Antigone 3

Wednesday, 5 August, 08:30-10:00

ORGANIZER(S): *E.J. Milner-Gulland, Department of Life Sciences, Imperial College London; Meredith Gore, Michigan State University*

Illegal wildlife use is both a cause and consequence of declining natural resources, and is currently high on the international political agenda. Methods for addressing illegal behavior from the fields of criminology and political ecology have the potential to transform how conservationists and practitioners approach the issue.

8:30 **Understanding the complex relationship between poverty and wildlife crime**  
*Dilys Roe*

8:45 **Applying situational crime prevention techniques to global conservation crimes**  
*Jessica Kahler*

9:00 **Using behavioural economics to elucidate responses in conservation interventions**  
*Henry Travers*







9:15 **Changing the incentives for bushmeat hunting in northeastern Madagascar**

*Danamona Andrianarimanana*

9:30 **Would you poach? Assessing potential outcomes from management strategies**

*Ana Nuno*

9:45 **Closing discussion**

## SYMPOSIUM: EQUITY AND JUSTICE AS GOALS FOR CONSERVATION: ANALYTICAL TOOLS AND THEIR APPLICATION

Room: Barthez 1

Wednesday, 5 August, 08:30-10:00

ORGANIZER(S): *Neil Dawson, University of East Anglia*

This symposium draws on insights from the 'Ecosystem Services for Poverty Alleviation' program, seeks to explore the different concepts and approaches to studying equity and social justice in relation to environmental conservation. The session brings together scholars whose work explores questions of justice in ecosystem management, but who adopt different approaches and apply them at varying scales, from international policy analysis to empirical village level studies. In doing so these studies bring forward the perspectives of a variety of actors, from local indigenous populations to practitioners and policy makers.

8:30 **Justices and injustices of carbon forestry: Insights from villagers' reactions to two projects in Uganda**

*Janet Fisher*

8:45 **Evaluating the impacts of conservation on human well-being: A case study on the northern Tanzania rangelands**

*Emily Woodhouse*

9:00 **Towards justice as recognition: Assessing the politics of representation in conservation governance**

*Kimberly Marion Suiseeya*

9:15 **Ubuntu and the balancing of diverse environmental ethics and values to achieve environmental justice in the Maasai Mara, Kenya**

*Francisca Pretorius*

9:30 **Biocultural rights of indigenous peoples and local communities: When rights embrace responsibilities**

*Giulia Sajevo*

9:45 **Closing discussion**

## MISCELLANEOUS

Room: Barthez 2

Wednesday, 5 August, 8:30-10:00

8:30 **Assessing the spatial extent of wolf-dog hybridization in real-time and at a population level using non-invasive DNA sampling**

*Carolina Pacheco*

8:45 **Genetic censusing suggests an unexpectedly large population of chimpanzees (*Pan Troglodytes schweinfurthii*) in a forest fragment corridor of western Uganda**

*Maureen McCarthy*

9:00 **Conservation and management of California's Chinook salmon: Using genomics to define populations and identify individuals**

*Mariah Meek*

9:15 **Genetic diversity in ringed seals (*Pusa hispida*) from the Baltic Sea and the adjacent lakes**

*Bethany Cole*

9:30 **Trait-dependent responses of butterflies to the connectivity of semi-natural elements in agricultural landscapes**

*Anne Villemey*

9:45 **Landscape heterogeneity is crucial for specialist interior species in ecological networks**

*James Stephen Pryke*

## HUMAN-WILDLIFE CONFLICT I

Room: Joffre 5

Wednesday, 5 August, 8:30-10:00





8:30 **Taking an integrated approach to minimizing human-wildlife conflict using a rapid assessment tool that identifies critical gaps in interventions**

**Nilanga Jayasinghe**, Brooks A., WWF - Tigers Alive Initiative; Jayasinghe N., WWF

8:45 **A socio-ecological exploration of human-wildlife conflict in the context of oil palm plantation development in Cameroon**  
**Cynthia Malone**, Columbia University

9:00 **Human-wildlife coexistence in Qomolangma (Mt. Everest) Nature Reserve: Conflict and recommendations**

**Pengju Chen**, Everest Snow Leopard Conservation Center, Beijing Forestry University, Shigatse; Gao Y., Everest Snow Leopard Conservation Center, Yale School Of Forestry & Environmental Studies

9:15 **A framework for measuring conflict in conservation**

**Karen Mustin**, Universidade Federal Do Amapá; Mills M., University of Queensland; Michalski F., Universidade Federal Do Amapá; Young J., Nerc Centre For Ecology And Hydrology; Redpath S.M., University of Aberdeen

9:30 **Looking for (the origin of) HEC in the Okavango Delta**

**Rocio Pozo**, University of Oxford, Ecoexist Project, Botswana; Songhurst A., Ecoexist Project, Botswana, University of Oxford; Mcculloch G., Ecoexist Project, Botswana, University of Oxford; Stronza A., Ecoexist Project, Botswana, Texas A&M University, Applied Biodiversity Sciences

9:45 **Living with predators: Anthropological approaches to Iberian lynx reintroduction**

**Margarida Lopes Fernandes**, CRIA-FCSH; Espirito Santo C., CRIA-FCSH; Frazão-Moreira A., CRIA-FCSH

9:50 **Assessing the relative importance of landscape and husbandry factors in determining large carnivore depredation risk in Tanzania's Ruaha landscape**

**Leandro Abade**, Wildcru - Univ. Oxford; Macdonald D., Wildcru - Univ. Oxford; Dickman A., Wildcru - Univ. Oxford

9:55 **Large-scale factors associated with brown bear damages in Europe**

**Carlos Bautista Leon**, Institute Of Nature Conservation; Selva N., Institute Of Nature Conservation; Fernandez N., Estación Biológica De Doñana-CSIC; Revilla E., Estación Biológica De Doñana-CSIC; Scharf A.K., Max Planck Institute For Ornithology; Karamanlidis A.A., Arcturos - Civil Society For The Study And Protection And Management Of Wildlife And The Natural Environment; Rigg R., Slovak Wildlife Society; Jerina K., Biotechnical Faculty, University of Ljubljana; Huber D., Department of Biology, Faculty Of Science, University of Zagreb; Palazón S., Departament Of Animal Biology (Vertebrates), University of Barcelona; Seijas J.M., Servicio Territorial De Medio Ambiente De León; Ciucci P., Dipartimento Di Biologia E Biotecnologie, Università Di Roma, La Sapienza; Groff C., 12Forest And Wildlife Service, Provincia Autonoma Di Trento; Dutsov A., Balkani Wildlife Society; Kont R., Estonian Environmental Information Center Department of Game Monitoring; Adamec M., State Nature Conservancy Of The Slovak Republic; Shkvryia M., I.I. Schmalhausen Institute Of Zoology Of National Academy Of Sciences Of Ukraine; Naves J., Estación Biológica De Doñana-CSIC

**SYMPOSIUM: ADVANCES ON HUMAN PRESSURE QUANTIFICATION AND BIODIVERSITY MONITORING UNDER GLOBAL CHANGE**

Room: Joffre A/B

Wednesday, 5 August, 08:30-10:00

**ORGANIZER(S):** Moreno Di Marco and Carlo Rondinini, Department of Biology and Biotechnologies, Sapienza University of Rome

"Choosing new paths for conservation", with an aim to make these new paths more and more efficient, relies on a constant update and upgrade of the conservation toolkit. Recent advances in data acquisition (e.g. through satellite imagery) and data processing (e.g. with the use of mechanistic approaches or machine learning techniques) open up new possibilities for quantifying human pressures on biodiversity and for monitoring biodiversity response to these impacts.





In this symposium, we introduce recent advances in methodologies and tools for monitoring human pressure on biodiversity, and present the consequent quantification of human impact on global biodiversity decline.

- 8:30 **Quantifying threats to global biodiversity through extinction risk assessment**  
*Thomas Brooks*
- 8:45 **Historical drivers of extinction risk: Using past evidence to direct future monitoring**  
*Moreno Di Marco*
- 9:00 **Developing improved footprint analyses to assess the distant drivers of biodiversity loss**  
*Martin Persson*
- 9:15 **Incorporating the effects of multiple future threats on declining mammals to identify spatial priorities for private land conservation incentives**  
*Cristina Romero*
- 9:30 **Quantifying the global impact of deforestation on terrestrial vertebrates**  
*Lukasz Tracewski*
- 9:45 **Challenges for combining indicators, models and scenarios of human pressure and biodiversity response into a coherent story**  
*Carlo Rondinini*

## HABITAT DEGRADATION AND FRAGMENTATION II

Room: Joffre C/D

Wednesday, 5 August, 8:30-10:00

- 8:30 **Habitat loss from hydraulic fracturing lowers avian nest survival in a western North American landscape**  
*Matthew Hethcoat, University of Wyoming; Chalfoun A., University of Wyoming*
- 8:45 **Single-species management has long-term consequences for non-target wildlife**  
*Travis Gallo, Colorado State University; Stinson L., Colorado State University; Pejchar L., Colorado State University*

- 9:00 **A global meta-analysis of proximate causes and underlying drivers of tropical deforestation**  
*Stephanie Pau, Florida State University*
- 9:15 **Availability of prey and natural habitats are related with temporal dynamics in range and habitat suitability for Asiatic cheetah in Iran**  
*Leili Khalatbari, Yusefi G.H., CIBIO - Centro De Investigação Em Biodiversidade E Recursos Genéticos Universidade Do Porto, Mohitban Society; Martínez-Freiría F., CIBIO - Centro De Investigação Em Biodiversidade E Recursos Genéticos Universidade Do Porto; Jowkar H., Conservation Of Asiatic Cheetah Project; Carlos Brito J., CIBIO - Centro De Investigação Em Biodiversidade E Recursos Genéticos Universidade Do Porto*
- 9:30 **Are we underestimating biodiversity loss using space-for-time approaches?**  
*Julio Louzada, França F., Federal University of Lavras, Lancaster Environment Centre; Barlow J., Lancaster Environment Centre, Museu Paraense Emilio Goeldi; Korasaki V., Universidade Estadual De Minas Gerais; Silveira J., Federal University of Lavras; Griffiths H., Lancaster Environment Centre, Federal University of Lavras; Louzada J., Federal University of Lavras, Lancaster Environment Centre*
- 9:45 **The influence of fire on avian diversity and community composition in South African savanna**  
*Teegan Docherty, University of Durham; Stephens P., University of Durham; Willis S., University of Durham*
- 9:50 **The semi-aquatic antelope Kafue Lechwe shows a remarkable, but effective, food adaptation upon changed flooding conditions and shrub encroachment**  
*Wilma Blaser, Eth Zurich; Shanungu G., Zambia Wildlife Authority; Edwards P., Eth Zurich; Olde Venterink H., Vrije Universiteit Brussel*
- 9:55 **People or the plow? Understanding range collapse in large African carnivores**  
*Andrew Jacobson, Zoological Society of London; Durant S., Zoological Society of London*





## SYMPOSIUM: CONSERVATION MARKETING: A NEW PATH TO UNDERSTANDING AND INFLUENCING HUMAN BEHAVIOUR - SESSION I

Room: Rondelet

Wednesday, 5 August, 8:30-10:00

ORGANIZER(S): *Diogo Veríssimo, RARE / Georgia State University*

Human behaviour is the driver behind all major threats to biodiversity and the environment. Yet, influencing human behaviour remains a major challenge for conservation professionals. This goal has parallels in the private sector, where companies work to influence the behaviour of a target audience, or promote the adoption of a product or service. Inspired by the increasing adoption of marketing principles in the fields of health and social work, conservation professionals have recently started to adopt marketing techniques pioneered in the commercial world to help achieve their conservation goals, including changing behaviour and fund raising. However, many are still uneasy about relying on these 'dark arts' of marketing that are also be used to market 'bad' products such as cigarettes and alcohol. Moreover, some may feel that the conservation ethic is powerful enough without relying on glossy brochures or celebrity-endorsements. The current extinction crisis suggests otherwise.

In this symposium we will bring together conservation academics and practitioners together with marketing professionals from the commercial sector to present and discuss the application of marketing in supporting conservation projects and programs. We will explore the advantages and obstacles associated with conservation marketing, and discuss how the limitations can be overcome. Our goal is to reframe what marketing means in the context of conservation, away from the 'dark arts' perception and towards its adoption as a new path to more effective public engagement for the delivery of conservation goals.

8:30 **How effective are conservation interventions at achieving behaviour change?**

*Diogo Veríssimo*

8:45 **The power of behaviour change: How to apply social marketing principles to conservation issues**

*Christiane Lellig*

9:00 **Conservation marketing: How to promote your research or cause more effectively (video presentation)**

*Kathleen Pilfold*

9:15 **Does pride work? An applied model for inspiring behavior change for conservation**

*Monica Pearce*

9:30 **The effectiveness of celebrities in conservation marketing**

*Elizabeth Duthie*

9:45 **Closing discussion**

## CONSERVATION PLANNING I

Room: Sully 1

Wednesday, 5 August, 8:30-10:00

8:30 **Conserving nature's stage: Abiotic surrogates efficiently prioritize sites for species representation**

*Paul Beier, Northern Arizona University; Albuquerque F., Northern Arizona University*

8:45 **Reconciling biodiversity conservation and renewable and unconventional energy development**

*Viorel Dan Popescu, Simon Fraser University; Munshaw R., Simon Fraser University; Montesino-Pouzols F., University of Helsinki; Palen W., Simon Fraser University; Gibeau P., Simon Fraser University; Dubman E., Simon Fraser University; Horne M., Pembina Institute; Moilanen A., University of Helsinki*

9:00 **Towards a more strategic approach to offsetting biodiversity losses: The role of spatial prioritization concepts and tools**

*Heini Kujala, The University of Melbourne; Whitehead A.L., The University of Melbourne; Wintle B.A., The University of Melbourne*

9:15 **A new IUCN standard for the identification of key biodiversity areas**

*Annabelle Cuttelod, Cambridge, United Kingdom; Langhammer P., Terraconsilium; Lincoln F., Birdlife International*







9:30 **Strategic prioritization of islands for invasive mammal eradications to protect globally threatened vertebrates**

**Erin McCreless**, University of California Santa Cruz; **Croll D.**, University of California Santa Cruz; **Tershy B.**, University of California Santa Cruz; **Spatz D.**, University of California Santa Cruz; **Holmes N.**, Island Conservation; **Butchart S.**, Birdlife International; **Wilcox C.**, CSIRO Marine And Atmospheric Science

9:45 **How much should we compromise on setting targets of conservation prioritization problems?**

**Andrea Kaim**, Universität Leipzig

10:00 **Operationalizing adequacy in marine protected area network design**

**Rebecca Weeks**, Arc Centre Of Excellence For Coral Reef Studies; **Green A.**, The Nature Conservancy; **Joseph E.**, Conservation Society of Pohnpei; **Rhodes K.**, University of Hawaii; **Terk E.**, The Nature Conservancy Micronesia; **Vandewal J.**, James Cook University

10:05 **Is climate-smart conservation planning feasible in Europe? Spatial relations of Natura 2000 sites, soil carbon, and land values**

**Kerstin Jantke**, Universität Hamburg; **Trapp N.**, Universität Hamburg; **Müller J.**, Universität Hamburg

10:10 **Spatial and temporal dynamics of the conservation estate**

**Nyeema Harris**, Luc Hoffmann Institute; **Macsharry B.**, Unep World Conservation Monitoring Centre; **Lewis E.**, UNEP World Conservation Monitoring Centre; **Kingston N.**, UNEP World Conservation Monitoring Centre; **Tewksbury J.**, Luc Hoffmann Institute; **Joppa L.**, Microsoft Research

## CITIZEN SCIENCE /PUBLIC PARTICIPATION IN SCIENCE I

Room: Sully 2

Wednesday, 5 August, 8:30-10:25

8:30 **Citizen science online: Producing high-quality data from camera trap images**

**Alexandra Swanson**, University of Oxford; **Kosmala M.**, University of Harvard

8:45 **Corporate citizen science; A novel tool for tackling environmental sustainability?**

**Jenny Cousins**, Earthwatch Institute

9:00 **Local people count: Using citizen scientists to monitor fruit bat populations**

**Tammy Mildenstein**, Cornell College; **Mills L.S.**, North Carolina State University; **Patterson D.**, University of Montana, Missoula

9:15 **What motivates citizens to take part in the management of an invasive non-native species? the case of tree mallow control on the islands of the Firth of Forth, Scotland**

**Marie Pagès**, University of Aberdeen; **Fischer A.**, The James Hutton Institute; **Van Der Wal R.**, University of Aberdeen; **Lambin X.**, University of Aberdeen

9:20 **Understanding the motivations and satisfactions of volunteers to improve the effectiveness of citizen science programs**

**Dale Wright**, Birdlife South Africa; **Underhill L.**, University of Cape Town; **Keene M.**, US Environmental Protection Agency; **Knight A.**, Imperial College London

9:25 **Citizen science in rural Africa: The conservation and monitoring of a threatened carnivore by Maasai hunters**

**Stephanie Dolrenry**, Lion Guardians; **Edwards C.T.**, National Institute Of Water And Atmospheric Research; **Hazzah L.**, Lion Guardians; **Frank L.**, Living With Lions, University of California-Berkeley

9:30 **Nature in your backyard - Citizen science in gardens**

**Silvia Winter**, University of Natural Resources And Life Sciences Vienna; **Kelemen-Finan J.**, Technical Office Julia Kelemen-Finan; **Plenk K.**, University of Natural Resources And Life Sciences Vienna; **Pachinger B.**, University of Natural Resources And Life Sciences Vienna

## ECOSYSTEMS AND ECOSYSTEM SERVICES CONSERVATION I

Room: Sully 3

Wednesday, 5 August, 8:30-10:00







- 8:30 **Biodiversity influences on mangrove forest multifunctionality and ecosystem services provision**  
**Clare Duncan**, Institute Of Zoology (ZSL) & University College London; Primavera J., Zoological Society of London & Seafdec Aquaculture Department (Iloilo, Philippines); Thompson J., University College London; Koldewey H., Zoological Society of London; Pettorelli N., Institute Of Zoology
- 8:45 **Estimating the supply of ecosystem services in boreal forests**  
**Eric le Tortorec**, University of Jyväskylä; Mazziotta A., University of Jyväskylä; Pohjanmies T., University of Jyväskylä; Triviño De La Cal M., University of Jyväskylä; Mönkkönen M., University of Jyväskylä
- 9:00 **Fish carbon: Valuation of marine vertebrate carbon services as a means to prioritise marine biodiversity conservation**  
**Angela Martin**, Lutz S., Grid-Arendal; Martin A., Blue Climate Solutions
- 9:15 **Demand-side approach to delivering the benefits from ecosystem services**  
**Caroline Howe**, UCL; Mace G., UCL
- 9:30 **Niche development for certification of forest ecosystem services - Are we there yet?**  
**Sini Savilaakso**, Center For International Forestry Research; Guariguata M.R., Center For International Forestry Research
- 9:45 **Vital signs: Sustaining ecosystem services in the context of agricultural intensification and climate change**  
**Sandy Andelman**, Conservation International
- 10:00 **Increasing habitat isolation changes the composition of a Saproxyllic beetle community and negatively impacts dead wood decomposition**  
**Laia Mestre**, Swedish University of Agricultural Sciences (SLU); Jansson N., Linköping University; Ranius T., Swedish University of Agricultural Sciences (SLU)

- 10:05 **Oyster aquaculture and the environment: Is it a win-win?**  
**Ashley Smyth**, Virginia Institute Of Marine Science; Piehler M., Unc Institute Of Marine Science; Grabowski J., Northeastern University; Anderson I., Virginia Institute Of Marine Science

## SYMPOSIUM: CAN WE SAVE IT ALL? CONFRONTING CONSERVATION PRIORITIES IN A CHANGING CLIMATE

Room: Antigone 1

Wednesday, 5 August, 10:30-12:00

ORGANIZER(S): Morgan Tingley, University of Connecticut; Emily Darling, Wildlife Conservation Society

While conservation biologists have excelled at documenting how species are responding to global climate change, we have failed to agree upon the proper response to this change. The creation of protected areas remains one of the most useful tools for enacting conservation on the ground or in the sea, yet there remains considerable disagreement about where, what, and how many. There is also a great deal of risk and uncertainty with how protected areas can tackle climate change, a threat they were never intended to defend against. Remarkably, even fundamental questions such as, "do we protect the most at risk, or the least at risk?" remain unresolved. Given the pace of global climate change, conservation biologists must force themselves to confront the topics of prioritization, vulnerability assessments, and triage, to start implementing a set of consensus tools, methods, and principles through conservation and management partnerships. This symposium was developed with the ICCB-ECCB's theme closely in mind: "Choosing new paths for conservation". If our mission is to conserve biodiversity (something we can largely agree on), then what path do we choose? Is there more than one path? Our symposium speaks directly to the use of a portfolio approach to identify the role of multiple, complementary conservation actions to achieve biodiversity conservation in a changing climate.

- 10:30 **Risk, resilience, and prioritization: The evolving role of climate change in conservation**  
**Morgan Tingley**





10:45 **Mapping vulnerability and conservation adaptation strategies under climate change across global terrestrial ecosystems**

*James Watson*

11:00 **Identifying biocultural indicators that integrate local and global conservation outcomes**

*Eleanor Sterling*

11:15 **Balance and trade-offs in climate-oriented conservation planning in the EU**

*Mar Cabeza*

11:30 **Assessing species vulnerability to climate change in an uncertain world**

*Richard Pearson*

11:45 **Data-driven portfolios of climate adaptation strategies for Indo-Pacific coral reefs**

*Emily Darling*

## SYMPOSIUM: INVERTEBRATES IN SUSTAINABLE FOREST MANAGEMENT: FROM RESEARCH TO IMPLEMENTATION IN PRACTICE

Room: Antigone 3

Wednesday, 5 August, 10:30-12:00

ORGANIZER(S): *Anne Oxbrough, Edge Hill University; Matti Koivula, University of Eastern Finland*

The goal of sustainable forest management (SFM) is the maintenance of biodiversity in balance with economic and social pressures. Invertebrates are key to sustaining forest ecosystem health, however their needs are typically overlooked in SFM, due to the difficulty in collecting, identifying and elucidating impacts. Instead, SFM policy typically takes either an indicator approach (using structural or condition criteria) or a surrogacy approach (using more readily sampled taxa e.g. plants or birds). This symposium seeks to determine whether current policy and management techniques based on these approaches suitably support invertebrate biodiversity in forested ecosystems. It brings together researchers, practitioners and policy makers in this field and will examine how traditional management and policy as well as recent changes to these, can incorporate the needs of invertebrates.

10:30 **Managing invertebrate diversity in contrasting forest environments: Lessons from natural forests in Canada and Irish plantations**

*Anne Oxbrough*

10:45 **Retention forestry, prescribed burning and Saproxyllic beetles in early forest successions**

*Osmo Heikkala*

11:00 **Effects of monocultures and mixtures on arthropod communities**

*Nadia Barsoum*

11:15 **Supporting biodiversity in landscapes of managed forests: Invertebrates as research and application challenges**

*Matti Koivula*

11:30 **Response of forest biodiversity to partial retention harvest in a boreal mixedwood forest: How to manage it?**

*John Spence*

11:45 **Supporting biodiversity in landscapes of managed forests: Invertebrates as research and application challenges**

*Matti Koivula*

## SYMPOSIUM: SYNERGIES AND TRADE-OFFS BETWEEN EQUITY, POVERTY, AND WELL-BEING IN CONSERVATION

Room: Room: Barthez 1

Wednesday, 5 August, 10:30-12:00

ORGANIZER(S): *Phil Franks, International Institute for Environment and Development*

Integrated conservation and development projects (ICDPs) began in the 80's with a narrow focus on providing alternatives to income and resources obtained from a protected area (PA), and then in many cases evolved into a broader effort that combined interventions to decouple livelihoods from PA resources, interventions to enhance the contribution of PAs to livelihoods, and, in some cases, interventions to promote stronger community participation in PA governance. With both the narrower and broader strategies, there was very often an underlying assumption that threats to conservation were essentially driven by poverty, and thus





the “D” in ICDP was framed in terms of poverty reduction/alleviation.

Over the last ten to fifteen years we have seen the rise of the concepts of social equity and justice in conservation. With the growing concern over inequality in society at large, equity is now becoming more prominent not only in conservation discourse, but also as a central feature of discourse on green economy and sustainable development.

This interdisciplinary symposium will explore understandings of three concepts—equity, poverty and well-being—and their inter-relationship in the context of conservation, drawing on expertise from the development sector and payments for ecosystem services (including REDD+) as well biodiversity conservation.

10:30 **Research to action: Establishing who is poaching and why to improve conservation interventions at Bwindi National Park, Uganda**  
*Becky Wright*

10:45 **Poverty, wellbeing and equitable conservation: Empirical insights from Rwanda and Laos**  
*Neil Dawson*

11:00 **The equity landscape**  
*Mariel Harrison*

11:15 **Integrated conservation and development projects, poverty and equity**  
*Phil Franks*

11:30 **A conceptual framework for understanding the inter-relationship of equity, poverty and well-being**  
*Constance McDermott*

11:45 **Closing discussion**

## MISCELLANEOUS

Room: Barthez 2

Wednesday, 5 August, 10:30-12:00

10:30 **Diagnosing large-scale marine protected areas: A comparative analysis of the social,**

**ecological and institutional drivers of successful conservation**

*Tammy Davies*

10:45 **Sea sharing or sparing: Should we focus on more habitat protection or no-take marine areas?**  
*Jennifer McGowan*

11:00 **Short-term response of wildlife to clear-cutting of pine plantations in central Chile**  
*Cristian Estades*

11:15 **Potential biodiversity impacts of forest biofuel harvest: Lichen assemblages on stumps and slash of Scots pine**  
*Aino Hämäläinen*

11:30 **The biodiversity and development research agenda of the United States agency for international development**  
*Andres Gomez*

11:45 **Who has control? Assessing the significance of self-determination in conservation**  
*Danielle Holstein*

## HUMAN-WILDLIFE CONFLICT II

Room: Joffre 5

Wednesday, 5 August, 10:30-12:00

10:30 **How green are large scale wind farm development projects? A win-win spatial planning allowing green investments and conserving Cinereous vultures (*Aegypius monachus*)**  
*Dimitris Vasilakis*, University of Patras, Department of Environmental And Natural Resources Management; Hellenic Republic, Decentralized Administration Of Macedonia-Thrace, Forestry Service Of Soufli; Whitfield P., Natural Research Ltd; Schindler S., University of Vienna, Department of Conservation Biology, Vegetation & Landscape Ecology; Poirazidis K., Technological Education Institute Of Ionian Islands, Department of Ecology And Environment; Kati V., University of Patras, Department of Environmental And Natural Resources Management





10:45 **Using universal human needs to understand the costs of living with damage causing mammalian wildlife**

**Ruth Kansky**, University of Stellenbosch; **Kidd M.**, University of Stellenbosch; **Knight A.**, Imperial College London, Silwood Park Campus

11:00 **Exploring multidisciplinary possibilities in understanding human-wildlife conflict along a forest-agriculture fringe in the western ghats hotspot in southern India**

**Meera Anna Oommen**, University of Technology Sydney; **Goodall H.**, University of Technology Sydney; **Gladstone W.**, University of Technology Sydney

11:15 **Tolerating tigers: Understanding human behaviour towards tigers and other wildlife in sumatra**

**Freya St John**, Dice, University of Kent; **Mckay J.**, Fauna & Flora International; **Linkie M.**, Fauna & Flora International; **Kartika E.**, Fauna & Flora International; **Agustin I.**, Fauna & Flora International; **Millyanawati B.**, Fauna & Flora International; **Anggriawan Y.**, Fauna & Flora International; **Struebig M.**, Dice, University of Kent

11:30 **Research can inform management practices to deter crop raiding by mountain gorillas**

**Nicole Seiler**, Max Planck Institute For Evolutionary Anthropology; **Robbins M.M.**, Max Planck Institute For Evolutionary Anthropology

11:45 **A range-wide analysis of human-jaguar conflict**

**Alexandra Zimmermann**, Chester Zoo

**SYMPOSIUM: SUSTAINABILITY IN AGRICULTURAL LANDSCAPES: LINKING BIODIVERSITY TO AGRICULTURAL PRACTICES AND POLICY**

Room: Joffre A/B

Wednesday, 5 August, 10:30-12:00

**ORGANIZER(S):** **Rodd Kelsey**, The Nature Conservancy of California; **Sara Cross**, **David H. Smith** Postdoctoral Research Fellow

Agricultural expansion and intensification has a long history of driving biodiversity loss, but, paradoxically, there is increasing evidence demonstrating that human

populations rely on the ecosystem services provided by biodiversity, such as on-farm pollination and pest-control services, as well as landscape-scale effects like improved water and air quality. An increasing number of agricultural sustainability schemes are being designed to increase the diversity of cultivated landscapes and enhance ecosystem service benefits. These are being implemented through governments (e.g. The EU's Common Agriculture Policy), industry (e.g. Sustainable Winegrowing NZ), corporations (e.g. Walmart's Sustainability Index), and consumer-driven action (e.g. Bird-friendly coffee). They offer promising potential to reverse the negative impacts of farming intensification to biodiversity. However, what is the evidence for the ability of these prescribed or other practices and programs to preserve biodiversity and deliver ecosystem services? And, how is this evidence being used to inform sustainability schemes? This symposium will provide an overview of current sustainability practices in global farming, examine the science available to assess and design agricultural sustainability schemes for biodiversity, present current science in ecosystem services evaluations, and discuss policy recommendations for improving biodiversity in agricultural regions.

10:30 **Land-use intensification and agricultural yield - who needs biodiversity?**

**Jason M. Tylianakis**

10:45 **Integrating biodiversity in agriculture**

**Teja Tschardt**

11:00 **Research-led evolution of UK agri-environment schemes to address farmland bird declines**

**David Buckingham**

11:15 **Do native plant hedgerows in conventional farming systems help to conserve pollinators and pollination services?**

**Lauren Ponisio**

11:30 **When integration fails: Wishes versus reality in the EU agricultural policy and biodiversity**

**Trees Robijns**

11:45 **Trophic and diversity cascades for resilience and policy reform in agroecosystems**

**Deborah Letourneau**







## CONSERVATION GENETICS II

Room: Joffre C/D

Wednesday, 5 August, 10:30-12:00

- 10:30 **The importance of addressing allelic richness in conservation: The case of founder events and the 'one migrant per generation' rule**  
**Gili Greenbaum**, Ben-Gurion University; Templeton A., Washington University; Zarmi Y., Ben-Gurion University; Bar-David S., Ben-Gurion University
- 10:45 **From genetics to conservation in Latin America and the Caribbean: Are we really achieving conservation goals?**  
**Juan Pablo Torres-Florez**, Universidade Federal De Sao Carlos; Galetti Jr. P., Universidade Federal De Sao Carlos; Johnson W., Smithsonian Conservation Biology Institute; Nery M., Universidade Estadual De Campinas
- 11:00 **The use of microsatellite, major histocompatibility complex, and toll-like receptor markers to examine bottleneck effects in three diverse New Zealand species**  
**Gabrielle Knafler**, University of Otago; Grueber C., University of Sydney, NSW; Robertson B., University of Otago; Jamieson I., University of Otago
- 11:15 **Application of a threshold to determine Bontebok purity: Detrimental or beneficial?**  
**Anri Van Wyk**, National Zoological Gardens Of South Africa; Dalton D., National Zoological Gardens Of South Africa; Kotze A., National Zoological Gardens Of South Africa; Grobler P., Genetics Department, University of Free State; Janse Van Vuuren B., Centre For Invasion Biology, Department of Zoology, University of Johannesburg; Birss C., Capenature; Roelofse M., National Zoological Gardens Of South Africa; Russo I-R., Cardiff School Of Bioscience, Cardiff University; Bruford M., Cardiff School Of Bioscience, Cardiff University; Hoban S., National Institute For Mathematical And Biological Synthesis, University of Tennessee
- 11:30 **Habitat fragmentation as surrogate of population connectivity: results from an isolation by distance model coupled with oceanographic and genetic data**  
**Simon Van Wynsberge**, University of French

Polynesia (UPF) And Institut De Recherche Pour Le Développement (IRD); Andrefouet S., Institut De Recherche Pour Le Développement (IRD); Gaertner-Mazouni N., Université De La Polynésie Française (UPF); Fauvelot C., Institut De Recherche Pour Le Développement (IRD); Tiavouane J., Institut De Recherche Pour Le Développement (IRD); Grulois D., Institut De Recherche Pour Le Développement (IRD); Pinsky M., Institute Of Marine And Coastal Sciences

## SYMPOSIUM: CONSERVATION MARKETING: A NEW PATH TO UNDERSTANDING AND INFLUENCING HUMAN BEHAVIOUR - SESSION II

Room: Rondelet

Wednesday, 5 August, 10:30-12:00

ORGANIZER(S): Diogo Veríssimo, Rare / Georgia State University

Human behaviour is the driver behind all major threats to biodiversity and the environment. Yet, influencing human behaviour remains a major challenge for conservation professionals. This goal has parallels in the private sector, where companies work to influence the behaviour of a target audience, or promote the adoption of a product or service. Inspired by the increasing adoption of marketing principles in the fields of health and social work, conservation professionals have recently started to adopt marketing techniques pioneered in the commercial world to help achieve their conservation goals, including changing behaviour and fund raising. However, many are still uneasy about relying on these 'dark arts' of marketing that are also be used to market 'bad' products such as cigarettes and alcohol. Moreover, some may feel that the conservation ethic is powerful enough without relying on glossy brochures or celebrity-endorsements. The current extinction crisis suggests otherwise.

In this symposium we will bring together conservation academics and practitioners together with marketing professionals from the commercial sector to present and discuss the application of marketing in supporting conservation projects and programs. We will explore the advantages and obstacles associated with conservation marketing, and discuss how the limitations can be overcome. Our goal is to reframe what marketing means in the context of conservation, away from the 'dark arts' perception and towards its adoption as a new path to more effective public engagement for the delivery of conservation goals.







- 10:30 **How not to get ahead in advertising: What many conservation NGOs are doing wrong**  
*Edward Christien Michael Parsons*
- 10:45 **Audience-led engagement: How understanding public perceptions of nature can deliver more effective conservation marketing**  
*Rebecca Jefferson*
- 11:00 **Species, spaces and science: Broadening the flagship concept in conservation marketing**  
*Robert Smith*
- 11:15 **Marketing MPAs: Lessons from the land?**  
*Emma Mckinley*
- 11:30 **Reducing demand for wildlife products: A framework from social marketing theory**  
*Leo Douglas*
- 11:45 **Closing discussion**

## CONSERVATION PLANNING II

Room: Sully 1

Wednesday, 5 August, 10:30-12:00

- 10:30 **Are protected area networks representing biodiversity and ecosystem services? Case studies from Cambodia and Madagascar**  
*Rachel Neugarten, Conservation International; Turner W.R., Conservation International*
- 10:45 **Securing migratory birds in protected areas**  
*Claire Runge, University of Queensland; Watson J., University of Queensland; Butchart S., Birdlife International; Hanson J., University of Queensland; Possingham H., University of Queensland; Fuller R., University of Queensland*
- 11:00 **Evolution of systematic conservation planning (SCP) work in Turkey - Advances, adaptations and possible contributions**  
*Özge BALKIZ, Zeydanli U., Nature Conservation Centre; Turak A.S., Nature Conservation Centre; Ambarli D., Nature Conservation Centre; Balkiz O., Nature Conservation Centre; Ozut D., Nature Conservation Centre; Bilgin C.C., Metu*

- 11:15 **Employing rank aggregation of local expert knowledge for conservation planning of the critically endangered Saola**  
*Nicholas Wilkinson, Wilkinson N., University of Cambridge; Leader-Williams N., University of Cambridge; Luong Van D., Hue University of Sciences*
- 11:30 **A new open-source software tool for more effective conservation planning**  
*Jana Brotankova, James Cook University; Pressey B., James Cook University; Wenger A., James Cook University; Craige I., James Cook University*
- 11:45 **Improving complementarity within a portfolio of conservation fences**  
*Jeremy Ringma, The University of Queensland; Brendan W., The University of Melbourne; Fuller R., The University of Queensland; Fisher D., The University of Queensland; Bode M., The University of Melbourne, The University of Melbourne*
- 12:00 **Accounting for marine ecosystem services and benefits to people to improve conservation planning: It's not just about fishing**  
*Melanie Hamel, James Cook University; Pressey R.L., James Cook University; Andréfouët S., Institut De Recherche Pour Le Developpement; Evans L.S., University of Exeter; Hicks C., James Cook University*

## CITIZEN SCIENCE /PUBLIC PARTICIPATION IN SCIENCE II

Room: Sully 2

Wednesday, 5 August, 10:30-12:00

- 10:30 **Promotion of biodiversity in agricultural landscape via umbrella bird species, agri-envi scheme and citizen science project: Lessons from central European country**  
*Vojtěch Kubelka, Kubelka V., Department of Ecology, Faculty Of Science, Charles University, Prague, Czech Republic; Zamecnik V., Czech Society For Ornithology, Prague, Czech Republic; Salek M., Department of Ecology, Faculty Of Environmental Sciences, Czech University of Life Sciences, Prague, Czech Republic*





10:45 **Predicting impacts of forest management and climate change on dead-wood dependent fungi distributions using citizen science data and a range of modeling approaches**

**Louise Mair**, Swedish University of Agricultural Sciences; **Harrison P.**, Swedish University of Agricultural Sciences; **Jönsson M.**, Swedish University of Agricultural Sciences; **Nordén J.**, University of Oslo; **Siitonen J.**, The Finnish Forest Research Institute; **Snäll T.**, Swedish University of Agricultural Sciences

11:00 **Can citizen science yield conservation outcomes? A framework describing pathways to conservation**

**Tina Phillips**, Cornell Lab Of Ornithology; **Ballard H.**, University of California, Davis

11:15 **Influence of vineyard expansion on California's woodland bird communities**

**Andrés Muñoz Saez**, Merenlender A., University of California, Berkeley; **Drill S.**, University of California

11:20 **Online conservation - Updated spatial information on threatened plant species in Israel**

**Ofer Steinitz**, Vine G., Israel Nature And Parks Authority; **Lebel M.**, Israel Nature And Parks Authority; **Walczak M.**, Israel Nature And Parks Authority; **Oron U.**, Israel Nature And Parks Authority; **David O.**, Israel Nature And Parks Authority; **Steinitz O.**, Israel Nature And Parks Authority

11:25 **Citizen science projects in environmental NGOs - Bridging the gap between scientific standards and civil engagement**

**Eick von Ruschkowski**, Naturschutzbund Deutschland (Nabu - Nature And Biodiversity Conversation Union); **Lachmann L.**, Naturschutzbund Deutschland (Nabu - Nature And Biodiversity Conversation Union)

## ECOSYSTEMS AND ECOSYSTEM SERVICES CONSERVATION II

Room: Sully 3

Wednesday, 5 August, 10:30-12:00

10:30 **Ecosystem service supply in Europe: Where are we now and what should we expect from the future?**

**Maud Mouchet**, Muséum National D'Histoire Naturelle; **Lasseur R.**, Umr; **Lavorel S.**, Umr

10:45 **Elasticity in ecosystem services: Analysing variable relationships between ecosystems and human wellbeing**

**Fraser Januchowski-Hartley**, Daw T., Stockholm Resilience Centre; **Bandeira S.**, Universidade Eduardo Mondlane; **Chaigneau T.**, University of Exeter; **Cheung W.**, University of British Columbia; **Crona B.**, Stockholm Resilience Centre; **Januchowski-Hartley F.**, University of Exeter; **Hicks C.**, Stanford University, James Cook University; **Mcclanahan T.**, Coral Reef Conservation Project, Wildlife Conservation Society; **Muthiga N.**, Coral Reef Conservation Project, Wildlife Conservation Society; **Omukoto J.**, Kenya Marine And Fisheries Research Institute; **Perry C.**, University of Exeter; **Rosendo S.**, University of East Anglia; **Sandbrook C.**, United Nations Environment Programme World Conservation Monitoring Centre; **Schulte-Herbrüggen B.**, Stockholm Resilience Centre; **Thyresson M.**, Stockholm Resilience Centre; **Brown K.**, University of Exeter

11:00 **Developing ecosystem viability analysis to inform the IUCN Red List of ecosystems**

**Lucie Bland**, The University of Melbourne; **Nicholson E.**, Deakin University; **Regan T.**, Arthur Rylah Institute; **Keith D.**, The University of New South Wales; **Murray N.**, The University of New South Wales; **Rodríguez J.P.**, IVIC

11:15 **Diversity-stability relationships: From theory to natural communities**

**Théophile Olivier**, National Museum Of Natural History; **Fontaine B.**, National Museum Of Natural History; **Elias M.**, National Museum Of Natural History; **Fontaine C.**, National Museum Of Natural History





- 11:30 **The Red List of ecosystem in Brazil -subnational pilot experiences towards a broad implementation strategy**  
**Tina Oliveira-Miranda**, Moraes M.A., UICN/IUCN - Brasil, Brasilia, Brazil; Marques C.D., UICN/IUCN - Brasil, Brasilia, Brazil; Merico L.F., UICN/IUCN - Brasil, Brasilia, Brazil; Oliveira-Miranda M.A., Provita; Rodriguez J., Provita, IVIC
- 11:45 **Effects of landscape complexity on multi-taxon indicator bundles for ecosystem services**  
 Klaus Birkhofer, Lund University; Smith H.G., Lund University
- 11:50 **Bundling and stacking in bio-sequestration schemes: Opportunities and risks**  
**Nooshin Torabi**, Rmit University; Bekessy S., Rmit University
- 11:55 **Causes and consequences of avian scavenger declines**  
**Evan Buechley**, University of Utah; Sekercioglu C., University of Utah

## AFTERNOON SESSIONS

### SYMPOSIUM: FROM ABANDONED TO WILD LANDSCAPES: PRACTICES, CONSEQUENCES AND PERCEPTIONS OF REWILDING IN EUROPE

Room: Antigone 1

Wednesday, 5 August, 13:30-15:00

ORGANIZER(S): Laetitia Navarro, German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig; Vania Proença, IST/UL

Following the spread and development of agriculture, the European landscapes underwent large transitions. By the beginning of the Iron Age (3000 BP), 40% of the European land could have been cleared for extensive agriculture and pastures. However, for the past decades, previously managed land has been progressively alleviated of human pressures, particularly traditional agriculture in mountains and remote areas. Rewilding can be defined as the restoration of natural dynamics and self-sustaining ecosystem processes while reducing human intervention to a minimum. Though gaining interest in the scientific literature and for land managers, research is still needed

to fill a data void in order to propose clear management options on the ground, and to facilitate its inclusion in European conservation policies. Rewilding can be beneficial for biodiversity, ecosystem services, and lead to new rural economies based on wild values. However its adoption by the public and the various stakeholder groups can be tempered by an increasing risk of conflicts with wildlife, and a lack of proper information and education on this issue.

This symposium is organized around three topics: 1.) How can rewilding be put in practice on the ground? 2.) What are the observed consequences of rewilding for biodiversity and ecosystem services?; and 3.) What is the public perception of rewilding and how can the conflicts between humans and wildlife be prevented and/or mitigated or even turned into opportunities for wildlife based economies?

- 13:30 **Mapping opportunities and challenges to European rewilding**  
 Silvia Ceausu
- 13:45 **Rewilding as a land-use option for biodiversity conservation in a context of land abandonment and fire disturbances: Winners and losers**  
 Adrián Regos
- 14:00 **Rewilding in practice**  
 Wouter Helmer
- 14:15 **Rewilding large carnivores: New wilderness or wild novel ecosystem?**  
 John Linnell
- 14:30 **Top scavengers in a wilder and more unpredictable Europe**  
 Ainara Cortés Avizanda
- 14:45 **Closing discussion**





## **SYMPOSIUM: MARXAN AT 15 YEARS OLD: THE PAST, PRESENT, AND FUTURE OF A CONSERVATION PLANNING TOOL**

Room: Antigone 3

Wednesday, 5 August, 13:30-15:00

*ORGANIZER(S): Patrick Huber, University of California, Davis; Hugh Possingham, University of Queensland*

**Note: Talks in this symposium are 8-minutes long**

Marxan is a conservation planning tool that was developed in 2000. The subsequent 15 years have seen the reserve selection software used globally in a wide variety of planning contexts, leading to well more than 100 peer-reviewed publications as well as numerous reports and other outputs from conservation planning processes. Several new versions of the tool have been developed, and it continues to be a relevant and important addition to the global conservation toolbox. This symposium takes stock of the current state of the tool, specifically by looking at past successes, present uses, and future possibilities. We will look at the development of the tool, some ways that it is being used to address important conservation themes (e.g. climate change, landscape connectivity, and invasive species), new ways of using the tool, and future potential developments and uses.

### **Exploring trade-offs among spatial planning scenarios: a multivariate approach**

*Linda Harris*

### **Using marxan and cluz to guide negotiations with conservation stakeholders**

*Rachel Sykes*

### **Strategic conservation planning for the polar regions**

*Falk Huettmann*

### **Marxan's role in participatory planning processes**

*Heather Coleman*

### **The use of Marxan to address invasive species in conservation management**

*Stephanie Januchowski-Hartley*

### **Using Marxan to incorporate climate change in conservation planning**

*Silvia Carvalho*

### **Using Marxan to aid in mitigation planning**

*Kei Sochi*

### **Non-spatial uses of marxan as a conservation planning tool**

*Patrick Huber*

### **Discussion: The future of Marxan**

### **Closing discussion**

## **SYMPOSIUM: RECENT TREND IN AGENT-BASED MODELS APPLIED TO BIODIVERSITY CONSERVATION: FROM SIMULATING POPULATION DYNAMICS AND HUMAN-ENVIRONMENT INTERACTIONS TO ENHANCING SOCIAL LEARNING - SESSION I**

Room: Room: Barthez 1

Wednesday, 5 August, 13:30-15:00

*ORGANIZER(S): Christophe Le Page, CIRAD; Raphaël Mathevet, CNRS*

Ecological models are increasingly used to improve understanding of ecosystems and the dynamics of species that are threatened or exploited by humans. Modelling proves to be very useful for observing complex systems, both in revealing their attributes and in exposing the gaps in knowledge, as well as in helping to define areas of research or to design actions for conservation purposes. In this symposium, we will show that agent-based models (ABM) allow researchers to dig deep into a social-ecological system's complexity, taking into account factors such as spatial effects, changes in scale and individual behaviour. Several examples will illustrate how ABMs contribute to biodiversity conservation either by modelling population dynamics in a heterogeneous and dynamic environment, or by modelling human-environment interactions. With computer simulations and/or role-playing games, ABMs can support participatory modelling approaches in which stakeholders involved in biodiversity management projects collectively construct and reflect together on land use and land planning scenarios. Lastly this symposium will discuss how participatory modelling and role-playing game experiments can give rise to social learning and social change that any integrated conservation project may need.







- 13:30 **Introduction**
- 13:45 **Paws: Randomized patrols for wildlife security**  
*Milind Tambe*
- 14:00 **Participatory agent-based simulation to foster dialogue and build trust between local communities and researchers: A case study on bushmeat hunting in the periphery of Korup National Park (south-west Cameroon)**  
*Christophe Le Page*
- 14:15 **Wetland social-ecological dynamics, biodiversity conservation and dialogue process: Lessons-learned from the butorstar computer-based role-playing game**  
*Raphaël Mathevet*
- 14:30 **Teaching biodiversity conservation through companion modelling: An original way to tackle social and ecological dynamics**  
*Michel Etienne*

**SYMPOSIUM: MOVING FORWARD STRATEGIC PLANNING AT SCALE: LESSONS FROM EUROPE, AUSTRALIA AND THE UNITED STATES**

Room: Room: Barthez 2

Wednesday, 5 August, 13:30-15:00

ORGANIZER(S): *David Theobald, Conservation Science Partners; Jodi Hilty, Wildlife Conservation Society; Elaine Leslie, National Park Service*

We are losing our world's natural heritage—the species richness, role and function, and the beauty a biodiverse landscape provides to us daily in our natural environment. This can lead to destabilization of ecological processes and a reduction in critical ecosystem services. Efforts are moving in Europe, Australia and the United States to move beyond management of isolated protected areas toward planning for extensively connected ecosystems across broad spaces and that we ensure the restoration of those ecosystems and their keystone species. The purpose of this symposium is to compare three efforts across the globe and assess the progress made to large landscape conservation planning and implementation in Europe, Australia and in the United States. This symposium will seek to share successes and lessons learned across land, freshwater, and seascapes. By taking a look across three advanced

examples, we hope to create expand a network of practice and to learn from one another's efforts and ultimately to offer lessons and approaches that can be utilized in other parts of the world.

- 13:30 **Marine and terrestrial protected area system design in Australia: Successes and failures**  
*Hugh Possingham*
- 13:45 **Life in European rivers: Legislative framework and freshwater biodiversity**  
*Leopold Füreder*
- 14:00 **Perspectives on Natura 2000: From design to conservation**  
*Vassiliki Kati*
- 14:15 **Moving toward a national strategy in the United States**  
*Jodi Hilty*
- 14:30 **A bold strategy for biodiversity conservation**  
*Ray Sauvajot*
- 14:45 **Closing discussion**

**CONSERVATION POLICY AND ETHICS I**

Room: Joffre 5

Wednesday, 5 August, 13:30-15:00

- 13:30 **Rhinos are not vicunas: The commercial use delusion**  
*Cristian Bonacic, Bonacic C., Fauna Australis, Uc, Santiago, Chile*
- 13:45 **Rob Peter to Rob Paul - triage or the limits of conservation approaches that ignore strategy**  
*Aleksandar Rankovic, Iddri-Sciences Po; Billé R., Associate Researcher At Iddri-Sciences Po*
- 14:00 **Engaging business into biodiversity conservation: The case study of the French SNB voluntary instrument**  
*Anastasia Wolff, Agroparistech; Brodhag C., Umr CNRS; Gondran N., Umr CNRS*
- 14:15 **The ethics of offsetting biodiversity**  
*Sarah Bekessy, Santos M.J., Utrecht University;*







*Thorne J., University of California Davis; Pincetl S., University of California Los Angeles; Hui I., Stanford University; Christensen J., University of California;; Frank Z., Stanford University*

- 14:30 **Conservation ethics and risk perceptions associated with human-wildlife conflict: Implications for encouraging stewardship**  
*Michelle Lute, Indiana University; Gore M.L., Michigan State University*
- 14:45 **Halting the loss of European biodiversity and ecosystem services? Quantifying gains, losses and trade-offs due to land use change under a range of EU policy scenarios**  
*Astrid Van Teeffelen, Vu University Amsterdam; Schulp C., Vu University Amsterdam; Verburg P., Vu University Amsterdam*
- 14:50 **Behavioural changes in himalayan marmots in relation to human activities associated with traditional pastoralism**  
*Buddi Poudel, Institute for Land, Water, and Society; Spooner P., Institute For Land, Water And Society; Matthews A., Institute For Land, Water And Society*

## SYMPOSIUM: ECOSYSTEM-BASED ADAPTATION: FROM CONCEPTUAL BASIS TO IMPLEMENTATION AT GLOBAL SCALE - SESSION I

Room: Joffre A/B

Wednesday, 5 August, 13:30-15:00

*ORGANIZER(S): David Hole, Conservation International; Celia Harvey, Conservation International; Russell Wise, CSIRO, Black Mountain Laboratories*

Ecosystem-based adaptation (EbA) is an evolving discipline, nested within the broader field of climate change adaptation. While it has no strict definition, it is broadly accepted to "include the sustainable management, conservation and restoration of ecosystems to provide services that help people adapt to the adverse impacts of climate change." Significant progress has been made in operationalizing the concept of EbA, but it still lacks systematic frameworks to support its application - from its conceptual underpinnings to the monitoring and evaluation of projects - as well as policy and governance frameworks that adequately recognize the need for transformative change in both

ecological and social systems. These gaps hinder both its mainstreaming into broader climate change adaptation planning and its potentially significant gains for conservation. This symposium will synthesize existing knowledge and experience, and explore new developments in the operationalization of EbA.

- 13:30 **A rapid introduction to ecosystem-based adaptation and its potential role in conserving earth's biodiversity**  
*David Hole*
- 13:45 **The importance of forest and trees for ecosystem-based adaptation in rural landscapes**  
*Bruno Locatelli*
- 14:00 **Can ecosystem-based adaptation address the adaptation needs of smallholder farmers? Insights from smallholder coffee and subsistence farmers in Central America**  
*Celia Harvey*
- 14:15 **Ecosystem based adaptation (eba) for mountain ecosystems: Lessons and experiences from Nepal, Uganda and Peru**  
*Musonda Mumba*
- 14:30 **The future of marine ecosystem services in Kimbe Bay, Papua New Guinea: Implications for locally managed marine areas**  
*Russell Wise*
- 14:45 **Closing discussion**

## CONNECTIVITY CONSERVATION

Room: Joffre C/D

Wednesday, 5 August, 13:30-15:00

- 13:30 **Nomadic species and habitat fragmentation - A large scale conservation challenge from the Mongolian Gobi**  
*Petra Kaczensky, University of Veterinary Medicine, Vienna, Vienna, Austria; Payne J., Wildlife Conservation Society, Mongolia Program, Ulaanbaatar, Mongolia; Buuveibaatar B., Wildlife Conservation Society, Mongolia Program, Ulaanbaatar, Mongolia; Hosack D.A., Health, Safety, And Environment Department, Biodiversity*





*Team, Oyu Tolgoi Llc, Mongolia, Ulaanbaatar, Mongolia ; Purevsuren T., Health, Safety, And Environment Department, Biodiversity Team, Oyu Tolgoi Llc, Mongolia, Ulaanbaatar, Mongolia ; Amarsaikhan S., Health, Safety, And Environment Department, Biodiversity Team, Oyu Tolgoi Llc, Mongolia, Ulaanbaatar, Mongolia ; Walzer C., University of Veterinary Medicine, Vienna, Vienna, Austria*

**13:45 Within and among-individual variation may determine tiger occupancy and connectivity in human-dominated landscapes**

*Aditya Gangadharan, University of Alberta; Vaidyanathan S., Foundation For Ecological Research Advocacy & Learning; St. Clair C., University of Alberta*

**14:00 Targeted reforestation to combat declines in connectivity for understory birds in a tropical habitat corridor**

*Matthew Fagan, Nasa Goddard Space Flight Center; Defries R.S., Columbia University; Sesnie S.E., USFWS; Arroyo Mora J.P., McGill University; Chazdon R.L., University of Connecticut*

**14:15 How connected will tiger populations be in the future?**

*Prachi Thatte, National Center For Biological Sciences; Joshi A., Wildlife Conservation Trust; Vaidyanathan S., Foundation For Ecological Research, Advocacy And Learning, Auroville; Ramakrishnan U., National Center For Biological Sciences*

**14:30 Spatial prioritisation for multi-action connectivity conservation spending**

*Pia Lentini, The University of Melbourne; Wintle B., The University of Melbourne*

**14:45 New approaches to inform the connection and protection of the last vast places in the United States**

*Brett Dickson, Conservation Science Partners, Inc.; Zachmann L., Conservation Science Partners, Inc.; Albano C., Conservation Science Partners, Inc.*

**14:50 Designing a network of wildlife corridors across heterogeneous mountain landscape - The Carpathians case study**

*Dušan Romportl, Faculty Of Science, Charles University; Kutal M., Friends Of The Earth; Zyka V., Faculty Of Science, Charles University*

**14:55 Impalas on the road: Assessing ungulate behavioral responses to the heterogeneous road-network of Kruger National Park**

*Manuela Gonzalez Suarez, Estacion Biologica De Doñana CSIC; Mulero-Pàzmány M., Estacion Biologica De Doñana CSIC; D'Amico M., Estacion Biologica De Doñana CSIC*

**15:00 How wide should a corridor be? Using radio-tracking data to estimate the width of amphibian movement**

*Jessica Veysey Powell, University of New Hampshire*

**SYMPOSIUM: POWER TO THE PEOPLE? VALUING AND INTEGRATING LOCAL PERSPECTIVES IN CONSERVATION**

Room: Rondelet

Wednesday, 5 August, 13:30-15:00

*ORGANIZER(S): Emily Woodhouse, Wildlife Conservation Society / University College London, Samantha Earle, Imperial College London*

The aim of our symposium is to share, discuss and debate innovative methods and approaches for integrating local perspectives into conservation in order to inform socially-just policies and improve practices. We'll discuss: 1) Why should we value, understand and integrate local people's perspectives? 2) What theoretical and practical tools and approaches are available to conservationists? 3) How can conservationists improve local participation to confront power imbalances and promote social justice in complex multi-stakeholder scenarios?

**13:30 Conservationist vs local voices: Telling a story of conservation and conflict from different perspectives**

*Jevgeniy Bluwstein*

**13:45 Understanding locally defined human well-being to measure impacts of conservation projects on the northern plains of Cambodia**

*Emilie Beauchamp*





14:00 **We challenge you to create: A new citizen science model (contributory, collaborative, co-created)**

*Yogani Govender*

14:15 **Communities count: The role of local people in ecological monitoring**

*Samantha Earle*

14:30 **Panel discussion with Katherine Homewood, David Wilkie, WCS, and others**

## SYMPOSIUM: CHALLENGES AND OPPORTUNITIES FOR FOREST CONSERVATION IN HUMAN-MODIFIED AMAZONIAN LANDSCAPES

Room: Sully 1

Wednesday, 5 August, 13:30-15:00

ORGANIZER(S): *Toby Gardner, Stockholm Environment Institute*

Human-modified landscapes across the tropics exemplify many of the most pressing challenges facing efforts to foster a more sustainable and just stewardship of the earth's natural resources. The scale and intensity of land-use and environmental change in such landscapes cast a worrying specter over some of the most biodiverse regions on Earth.

This symposium brings together a synthesis of work from the Sustainable Amazon Network, arguably one of the most diverse research networks working on land-use sustainability in the Brazilian Amazon during the last decade. It will draw on detailed biodiversity, ecosystem service and social field surveys from over 500 rural properties in thirty six  $\approx$  5000 ha catchments to assess how human-modification has affected terrestrial and aquatic biodiversity, the implications of these changes for ecosystem function and service provision, the backdrop of social change and environment-development trade-offs that characterize the region, and the opportunities that exist for delivering long-term conservation gains at both local and regional scales.

13:30 **Challenges and opportunities facing sustainable land-use in frontier regions of the Amazon**

*Joice Ferreira*

13:45 **Quantifying the relative importance of forest quality and forest extent for the conservation of tropical biota**

*Jos Barlow*

14:00 **The implications of biodiversity loss for ecosystem function and services at the tropical deforestation frontier**

*Joseph Tobias*

14:15 **Landscape planning to allocate resources among forest restoration, rehabilitation and protection**

*Jim Thomson*

14:30 **Accounting for how landowner characteristics and behaviour influence conservation opportunities in the eastern Amazon**

*Gareth Lennox*

14:45 **Trade-offs and synergies in the social-ecological values associated with different land-uses in the eastern Amazon**

*Toby Gardner*

## ROLE OF EVOLUTION AND CONTEXT IN CONSERVATION

Room: Sully 2

Wednesday, 5 August, 13:30-15:00

13:30 **The lost generation hypothesis: Could climate change drive ectotherms into a developmental trap?**

*Dirk Maes, Research Institute For Nature And Forest (INBO); Van Dyck H., UCL; Bonte D., Ghent University; Puls R., Ghent University; Gotthard K., Stockholm University*

13:45 **Deer drive community and evolutionary changes in the threatened Garry Oak ecosystem**

*Cora Skaien, University of British Columbia; Arcese P., University of British Columbia*

14:00 **Bioeconomic optimization of interventions to aid evolutionary rescue of a population threatened by environmental change**

*Jaime Ashander, Ashander J., University of California -- Davis; Thompson L., University of California -- Davis, Regional San; Sanchirico*





*J., University of California -- Davis; Baskett M., University of California -- Davis*

**14:15 Predicting the effects of human developments on individual dolphins to understand potential long-term population consequences**

**Enrico Pirotta**, University of Aberdeen; Harwood J., University of St Andrews; Thompson P., University of Aberdeen; New L., U.S. Geological Survey, Washington DC, United States; Cheney B., University of Aberdeen; Arso Civil M., University of St Andrews; Hammond P., University of St Andrews; Donovan C., University of St Andrews; Lusseau D., University of Aberdeen

**14:30 A colourful history of a Polymorphic finch: A molecular analysis of demographic history and population structure in a threatened Australian finch (*Erythrura gouldiae*)**

**Peri Bolton**, Macquarie University; West A., Deakin University; Rollins L.A., Deakin University; Brazill-Boast J., Macquarie University; Legge S., Australian Wildlife Conservancy; Maute K., University of Wollongong; Griffith S., Macquarie University

**14:35 The effect of resource abundance and dispersion on the ranging behavior of African lions (*Panthera leo*)**

**Moreangels Mbizah**, University of Oxford; Valeix M., University of Oxford; Loveridge A., University of Oxford; Macdonald D., University of Oxford

**14:40 Investigation of reproductive biology of endangered Greater adjutant (*Leptoptilos dubius*) in Assam**

**Purnima Barman**, Aaranyak; Sharma D., Gauhati University

**14:45 Ecology and conservation of birds and carnivore species of Ranomafana National Park rainforest: Monitoring environmental and climatic change through camera trapping**

**A. Jean Claude R. Razafimahaimodison**, Centre Valbio Ranomafana

**14:50 Space use pattern of the Asiatic wild ass (*Equus hemionus*): Complementary insights of recursion in movement pattern and habitat selection analyses**

**Nina Giotto**, Jacob Blaustein Institutes For Desert Research; Gerard J-F., Institut National De La

*Recherche Agronomique; Bar-David S., Jacob Blaustein Institutes For Desert Research; Bouskila A., Ben-Gurion University of The Negev*

**14:55 Thermal landscapes and the migration of rattlesnakes in Canada**

**Karl Larsen**, Thompson Rivers University; Harper J., Thompson Rivers University

**SYMPOSIUM: GETTING SCIENTIFIC EVIDENCE USED IN PRACTICE: PROGRESS, BARRIERS AND SOLUTIONS - SESSION I**

Room: Sully 3

Wednesday, 5 August, 13:30-15:00

ORGANIZER(S): *Jessica Walsh and William Sutherland, University of Cambridge*

The continued pressure for practitioners to conduct effective conservation with reduced budgets, and for scientists to demonstrate the 'impact' of their research, means that the need for good quality and well-communicated scientific evidence has never been greater. Yet, the use of research findings to inform management decisions is rare, patchy and often unsystematic. This symposium will aim to assess how far we have come in applying research to conservation management and policy, determine which barriers continue to hinder progress and identify effective solutions for improving the use of evidence.

The first session of this symposium assesses how science is being applied to conservation decisions around the world and the development and application of new tools that can facilitate the use of science into conservation practice and policy, including the '4S' framework (studies, systematic reviews, summaries and decision support systems) for organising evidence. The second session provides a more detailed investigation into the range of barriers and solutions towards using scientific evidence in conservation, giving examples of successful interventions for facilitating knowledge exchange and research use.

**13:30 Organising evidence for environmental management decisions: A '4s' hierarchy**

*Lynn Dicks*

**13:45 An evidence assessment tool for ecosystem services and conservation studies**

*Anne-Christine Mupepele*







- 14:00 **The role of systematic reviews in evidence-based conservation: Challenges and developments**  
*Neal Haddaway*
- 14:15 **A framework to use conservation evidence in a national management organisation: Experiences from the New Zealand Department of Conservation**  
*Richard Maloney*
- 14:30 **Assessing the use of scientific evidence in the management of Brazilian protected areas**  
*Eduardo L. H. Giehl*
- 14:45 **Using scientific evidence in conservation management: What are the barriers and solutions?**  
*Jessica C. Walsh*

## SYMPOSIUM: CREATING NATURAL CONNECTIONS IN UNNATURAL HABITATS THROUGH CITIZEN SCIENCE

Room: Antigone 1

Wednesday, 5 August, 15:30-17:00

ORGANIZER(S): *Stephanie Shuttler, North Carolina Museum of Natural Sciences*

The majority of people now live in developed areas including cities, suburbs, and residential environments. This means more people live in biologically impoverished environments farther from nature and spend most of their lives indoors. This reduced experience of nature in people's lives is endangering the potential to stimulate the needed broad-based support for conservation objectives. This presents a challenge: how to avert this extinction of experience in areas that are usually viewed as ecologically depauperate? We argue that conducting citizen science research can achieve this challenge by providing people the tools to connect them to the hidden, less-explored nature that exists in these areas. The goals of this symposium are to (1) demonstrate how citizen science research can be implemented in human-altered environments, (2) show how citizen science can enhance knowledge and conservation of the biodiversity in these ecosystems, and (3) provide opportunities for conference attendees to connect to presenters and gather information on how to conduct citizen science projects in their areas.

- 15:30 **Citizen science as a potential tool to prevent the extinction of experience**  
*Assaf Shwartz*
- 15:45 **What's in your backyard? Citizen science camera trapping as a lens to study mammal diversity in classrooms**  
*Stephanie Schuttler*
- 16:00 **Take back the block: An urban citizen science program**  
*Rebecca Jordan*
- 16:15 **Short and long term consequences of urban citizen-science projects to individual connection to nature**  
*Anne-Caroline Prevot*
- 16:30 **Using citizen-science and circuitscape to identify corridors and colonization sites in New York City and Long Island, NY**  
*Mark Weckel*
- 16:45 **Can citizen science motivate science-based rather than emotion-based management decisions for songbirds in a residential landscape?**  
*Caren Cooper*

## SYMPOSIUM: CONSERVATION TRADE-OFFS IN A RESOURCE-LIMITED WORLD

Room: Antigone 3

Wednesday, 5 August, 15:30-17:00

ORGANIZER(S): *Luis Roman Carrasco, National University of Singapore; Martina Di Fonzo, University of Queensland*

Conservation science is evolving from an ecologically-centered perspective to recognizing the interactions with economic and social systems. The analysis of trade-offs and synergies between biodiversity conservation and economic development or between ecosystem services and agricultural development are especially relevant in low-resource settings. Our knowledge on how these trade-offs are distributed spatially, dynamically and at different scales is however poor. This symposium will highlight the range of research relating to the trade-offs which arise from the conservation of nature. We will present new perspectives for achieving the greatest gains for biodiversity under scenarios where the project







budget is limited, and where the goal of economic development must also be achieved. We will tackle the financial, temporal and spatial trade-offs involved in conservation, with the aim of providing frameworks that policy-makers and natural resource managers can follow to maximize species richness and socioeconomic and agricultural benefits. Examples from a variety of systems and competing trade-offs will be presented.

- 15:30 **Spatial trade-offs between agricultural production and ecosystem services in the tropics**  
*Luis Roman Carrasco*
- 15:45 **Accounting for environmental and market feedbacks when prioritising land for conservation**  
*Cecilia Larrosa*
- 16:00 **Are “one-size-fits-all” targets for population size sensible under limited conservation resources?**  
*Martina Di Fonzo*
- 16:15 **Prioritizing levels of action effort to achieve cost-effective trade-offs in conservation management: A freshwater case study**  
*Lorenzo Cattarino*
- 16:30 **Leveraging the potential of high-yield farming to make space for nature**  
*Ben Phalan*
- 16:45 **Is no net loss possible? Evaluating policy instruments for reducing deforestation with a growing economy**  
*Megan Evans*

**SYMPOSIUM: RECENT TREND IN AGENT-BASED MODELS APPLIED TO BIODIVERSITY CONSERVATION: FROM SIMULATING POPULATION DYNAMICS AND HUMAN-ENVIRONMENT INTERACTIONS TO ENHANCING SOCIAL LEARNING - SESSION II**

Room: Room: Barthez 1

Wednesday, 5 August, 15:30-17:00

ORGANIZER(S): *Christophe Le Page, CIRAD; Raphaël Mathevet, CNRS*

Ecological models are increasingly used to improve understanding of ecosystems and the dynamics of species that are threatened or exploited by humans. Modelling proves to be very useful for observing complex systems, both in revealing their attributes and in exposing the gaps in knowledge, as well as in helping to define areas of research or to design actions for conservation purposes. In this symposium, we will show that agent-based models (ABM) allow researchers to dig deep into a social-ecological system's complexity, taking into account factors such as spatial effects, changes in scale and individual behaviour. Several examples will illustrate how ABMs contribute to biodiversity conservation either by modelling population dynamics in a heterogeneous and dynamic environment, or by modelling human-environment interactions. With computer simulations and/or role-playing games, ABMs can support participatory modelling approaches in which stakeholders involved in biodiversity management projects collectively construct and reflect together on land use and land planning scenarios. Lastly this symposium will discuss how participatory modelling and role-playing game experiments can give rise to social learning and social change that any integrated conservation project may need.

- 15:30 **AZTECA chess and agrodiversity: Educational tools to explore the emergence of functional biodiversity in agroecosystems**  
*Luis Garcia-Barrios*
- 15:45 **New district training tool: A distributed simulation to integrate biodiversity issues in periurban development projects**  
*Julie Latune*
- 16:00 **Tackling issues of coexistence between protected areas and communal lands: From a role playing game to an agent based model**  
*Arthur Perroton*
- 16:15 **From scientific models to companion modelling: Engaging a dialogue with local actors in an Amazonian floodplain about biodiversity management at a territorial level**  
*Pierre Bommel*
- 16:30 **Closing discussion**





## SYMPOSIUM: GREEN INFRASTRUCTURE, CONNECTIVITY, AND THE AGRICULTURAL LANDSCAPE

Room: Barthez 2

Wednesday, 5 August, 15:30-17:00

ORGANIZER(S): *Guy Pe'er, UFZ - Helmholtz Centre for Environmental Research*

Habitat loss, fragmentation and agricultural intensification, combined with humans' shift to (peri) urban areas, generate two types of disconnection: natural habitats become small and isolated by a harsh "matrix"; and humans become increasingly disconnected from nature. The EU's Green Infrastructure (GI) initiative sets very challenging goals of improving both the link between natural elements and between humans and nature; and to do so across scales, from local to continental. Implementing GI must fulfill various ecological and spatial requirements. Connectivity is a keyword for success, through corridors, stepping stones, or maintaining permeability of the agricultural matrix. Yet GI will also depend on existing Directives and Policies, and predominantly the Common Agricultural Policy (CAP) and its implementation by Member States. Additional national and regional-level regulations and policies, combined with a huge range of relevant stakeholders, will undoubtedly make GI implementation far from straightforward. This symposium aims at presenting state-of-the-art research, policy developments, and standing challenges in this context. To offer a "new path for conservation", we strive to balance the backgrounds of participants, and co-develop relevant solutions.

15:30 **Green infrastructure, connectivity, and the agricultural landscape: a story of dependency and conflicts**

*Guy Pe'er*

15:45 **How much and where: The most challenging question for enhancing biological diversity in fragmented landscapes**

*Janine Bolliger*

16:00 **From biodiversity conservation in agricultural landscapes to the promotion of functional biodiversity: Shifting a paradigm?**

*Philippe Jeanneret*

16:15 **The European Green Belt Initiative: Challenges, experiences and achievements**

*Tomas Ruzicka*

16:30 **Assessing the policy integration potential of the eu green infrastructure strategy on the example of the EU Common Agricultural Policy (CAP)**

*Jenny Schmidt*

16:45 **Synthesis and discussion: EU's green infrastructure strategy and the common agricultural policy – synergies and conflicts**

## CONSERVATION OF FORESTS AND FOREST DEPENDENT SPECIES II

Room: Joffre 5

Wednesday, 5 August, 15:30-17:00

15:30 **Conserving butterflies in plantation forest landscapes: Role of local and landscape factors**

*Inge Van Halder, INRA; Barbaro L., INRA; Jactel H., INRA*

15:45 **Conservation and biodiversity value in regenerating tropical forest**

*Andrew Whitworth, University of Glasgow; Downie R., University of Glasgow; Macleod R., University of Glasgow*

16:00 **Punan paths for biocultural conservation: Trailing forest uses and tree diversity in Borneo**

*Maximilien Gueze, Universitat Autònoma De Barcelona*

16:15 **Restoring populations of *Metrosideros robusta*, a once-common New Zealand Hemiepiphyte**

*Bruce Burns, University of Auckland*

16:30 **Effects of human land-use on Africa's only forest-dependent Felid: The African golden cat *Caracal aurata***

*Laila Bahaa-el-din, University of Kwazulu-Natal; Henschel P., Panthera; Sollmann R., North Carolina State University; Slotow R., University of Kwazulu-Natal; Macdonald D., Wildlife Conservation Research Unit (Wildcru); Hunter L., Panthera*

16:35 **Conserving biodiversity of Saproxylic insects - A matter of dead-wood amount or dead-wood**



**diversity?**

**Sebastian Seibold**, *Technical University of Munich*;  
Müller J., *Technical University of Munich*

16:40 **Succession of wood-decaying fungi  
in early-seral forests after natural  
disturbances**

**Kaisa Junninen**, *Metsähallitus*

16:45 **To set aside young forests may be a cost-  
efficient strategy for conserving dead wood-  
dependent species**

**Thomas Ranius**, *Swedish University of Agricultural  
Sciences*; Korosuo A., *Swedish University of  
Agricultural Sciences*; Roberge J-M., *Swedish  
University of Agricultural Sciences*; Mönkkönen  
M., *University of Jyväskylä*; Juutinen A., *University  
of Oulu*; Schroeder M., *Swedish University of  
Agricultural Sciences*

16:50 **Impacts on forest-bird diversity down to  
single individual's through recreational  
activities - An experiment**

**Yves Bötsch**, *Swiss Ornithological Institute*;  
Tablado Z., *Swiss Ornithological Institute*; Jenni-  
Eiermann S., *Swiss Ornithological Institute*; Almasi  
B., *Swiss Ornithological Institute*; Jenni L., *Swiss  
Ornithological Institute*

SYMPOSIUM: **ECOSYSTEM-BASED ADAPTATION: FROM  
CONCEPTUAL BASIS TO IMPLEMENTATION AT GLOBAL  
SCALE - SESSION II**

Room: Joffre A/B

Wednesday, 5 August, 15:30-17:00

ORGANIZER(S): *David Hole, Conservation International*;  
*Celia Harvey, Conservation International*; *Russell Wise,*  
*CSIRO, Black Mountain Laboratories*

Ecosystem-based adaptation (EbA) is an evolving discipline, nested within the broader field of climate change adaptation. While it has no strict definition, it is broadly accepted to "include the sustainable management, conservation and restoration of ecosystems to provide services that help people adapt to the adverse impacts of climate change." Significant progress has been made in operationalizing the concept of EbA, but it still lacks systematic frameworks to support its application - from its conceptual underpinnings to the monitoring and evaluation of projects - as well as

policy and governance frameworks that adequately recognize the need for transformative change in both ecological and social systems. These gaps hinder both its mainstreaming into broader climate change adaptation planning and its potentially significant gains for conservation. This symposium will synthesize existing knowledge and experience, and explore new developments in the operationalization of EbA.

15:30 **Monitoring and evaluation of ecosystem-  
based adaptation projects**

*Camila Donatti*

15:45 **Ecosystem-based adaptation and  
transformation: Adaptation services and  
pathways**

*Michael Dunlop*

16:00 **Adapting the policy landscape for EBA**

*Raffaele Vignola*

16:15 **Moving forward from EBA:  
Transformative climate adaptation**

*Sandra Lavorel*

16:30 **Closing discussion**

**BUILDING COMMUNITIES AND CAPACITY FOR  
CONSERVATION**

Room: Joffre C/D

Wednesday, 5 August, 15:30-17:00

15:30 **Community based Asiatic wild dog and  
Chinese pangolin conservation in Eastern  
Himalayas of Nepal**

**Ambika Prasad Khatiwada**, *National Trust For  
Nature Conservation, Biodiversity Conservation  
Center, Ratnanagar Municipality*; *Waterman C.,  
Zoology Society of London, Conservation Program*;  
*Kunkel K., University of Montana*; *Pokharel  
Khatiwada M., Tribhuvan University, Central  
Department of Zoology*

15:45 **Drivers and motivations for community-based  
conservation: Insights from Latin America**

**Isabel Ruiz-Mallen**, *Universitat Autònoma De  
Barcelona, Bellaterra*; *Schunco C., University of  
Natural Resources And Life Sciences*; *Corbera E.,  
Universitat Autònoma De Barcelona, Bellaterra*





16:00 **Engaging local communities in conservation in Papua New Guinea: Case studies from the one of the world's most biologically and culturally diverse countries**

*Richard Cuthbert, Wildlife Conservation Society*

16:15 **Building capacity of the next generation of Liberian conservation professionals**

*Mary Molokwu, Fauna & Flora International; Hodgkinson C., Fauna & Flora International; Varney M., Fauna & Flora International; Woods J., University of Liberia; Freeman T., Forestry Development Authority; Tuagben D., Forestry Development Authority; Shutt K., Fauna & Flora International*

16:30 **Online learning: How can we best use it to strengthen capacity for conservation?**

*Lucy Tallents, University of Oxford; Amin R., Zoological Society of London; Macdonald D., University of Oxford*

16:45 **Property rights complexity of Brazil-nut harvest and their implications for Amazon forest conservation**

*Raquel Rodrigues dos Santos, Núcleo De Apoio A População Ribeirinha Da Amazônia; Muniz Da Silva D., Universidade Federal De São Carlos*

16:50 **Investing in communities: Partnerships promoting research and conservation in Serengeti, Tanzania**

*Graham Wallace, Frankfurt Zoological Society; Kideka F.J., Frankfurt Zoological Society; Naiman L.C., Frankfurt Zoological Society; Wallace A.P.C., Frankfurt Zoological Society*

16:55 **Promoting sustainable community-based sea turtle conservation in Akassa Wetlands, Bayelsa State, Nigeria**

*Kelechi Eleanya, Federal University Dutsin-Ma; Ijeomah H., University of Port Harcourt*

17:00 **Towards more effective governance of community-based wildlife management**

*Oria Jamar de Bolsée, Colorado State University; Yeh D., Colorado State University*

17:05 **A comparative analysis of tourism oriented models for conservation and development; lessons from Uganda**

*Wilber Ahebwa*

## SYMPOSIUM: HUMAN BEHAVIOR AND NATURE CONSERVATION

Room: Rondelet

Wednesday, 5 August, 15:30-17:00

*ORGANIZER(S): Sheila Walsh Reddy, Jensen Montambault, and Yuta Masuda, The Nature Conservancy*

This symposium examines new ways of thinking and a research agenda for human behavior in the context of conservation science, practice, and policy. The study of human behavior in the context of conservation science, practice, and policy is a new and growing research area. Interdisciplinary collaborations are forming to address questions about how human knowledge, attitudes, motivations, and behavior influence and are influenced by nature conservation. The results have important implications for conservation practice and policy because current global conservation challenges require new ways to influence human behavior beyond parks and other traditional conservation tools. New insights into behavioral nudges, novel communication strategies and collaborative processes, behavioral constraints, and institutional arrangements provide promising new paths for mainstreaming conservation into practices and policies.

15:30 **Understanding human behavior and nature to uncover new conservation strategies**

*Sheila Walsh Reddy*

15:45 **Why and how people matter: Conservation psychology and pro-conservation behaviors**

*Stanley Asah*

16:00 **Threatening messages in environmental communication: A dreadful idea?**

*Tim Scharks*

16:15 **The importance of social networks in effecting behavior change through policy**

*Sarah Galey*

16:30 **How conservation science innovations spread and change practitioner behavior in large institutions**

*Jensen Montambault*

16:45 **Navigating overlapping and multiple accountabilities in multiscale conservation networks: Lessons from the collaborative**







## forest landscape restoration program

*William Butler*

### PROTECTED AREA MANAGEMENT

Room: Sully 1

Wednesday, 5 August, 15:30-17:00

- 15:30 **The global database on protected area management effectiveness: History, global statistics, and further development**  
*April Eassom, Juffe Bignoli D., UNEP World Conservation Monitoring Centre; Bhola N., UNEP World Conservation Monitoring Centre; Eassom A., UNEP World Conservation Monitoring Centre; Goncalves De Lima M., UNEP World Conservation Monitoring Centre; Kingston N., UNEP World Conservation Monitoring Centre*
- 15:45 **The influence of protected area selection criteria on measures of conservation effort**  
*Daniele Baisero, Sapienza Università Di Roma; Rondinini C., Sapienza Università Di Roma*
- 16:00 **Effects and mechanisms of protected areas on natural capital and human well-being in Cambodia**  
*Wu Yang, Conservation International; Bottrill M., Conservation International; Turner W., Conservation International; Cano C., Conservation International; Wright M., Conservation International; Steinger M., Conservation International; Olsson A., Conservation International; Farrell T., Conservation International*
- 16:15 **Mapping change in human pressure globally on land and within protected areas**  
*Jonas Geldmann, University of Copenhagen; Joppa L., Microsoft Research; Burgess N., UNEP World Conservation Monitoring Centre*
- 16:30 **The role of scale and spatial patterns in people's attitudes and perceptions of protected areas**  
*Teri Allendorf, University of Wisconsin-Madison; Radeloff V., University of Wisconsin-Madison; Keuler N., University of Wisconsin-Madison*

- 16:45 **In defense of small reserves: A case study on the role of environmental education programs in protected area design and planning**  
*Matthew Crane, Suranaree University of Technology; Strine C., Suranaree University of Technology; Silva I., Centre For Ecology, Evolution And Environmental Changes, University of Lisbon; Artchawakom T., Sakaerat Environmental Research Station, Thailand Institute Of Scientific And Technological Research*

- 17:00 **"Shaken, not stirred:" Stakeholder mapping and social network analysis of a protected area buffer zone in the temperate rainforest of southern Chile**  
*Gonzalo Mardones, University of Otago*

### INFRASTRUCTURES AND CONSERVATION I

Room: Sully 2

Wednesday, 5 August, 15:30-17:00

- 15:30 **Can powerline rights-of-way contribute to conservation of grassland butterflies?**  
*Erik Öckinger, Swedish University of Agricultural Sciences; Berg Å., Swedish University of Agricultural Sciences*
- 15:45 **Household level influences on fragmentation in an African park landscape**  
*Sadie Ryan, University of Florida; Southworth J., University of Florida; Hartter J., University of Colorado; Fuda R., Suny ESF; Dowhaniuk N., University of New Hampshire; Diem J., Georgia State University*
- 16:00 **Tracking diversity: Swedish birds respond to forest road openings**  
*Paul Caplat, Lund University; Solbär L., Umeå University; Lindström Å., Lund University,*
- 16:15 **Cascading effect of prey abundance on carnivore mortality near motorways**  
*Aimara Planillo, Universidad Autónoma De Madrid; Mata C., Universidad Autónoma De Madrid; Fernández-Rubio B., Universidad Autónoma De Madrid; Ruiz-Capillas P., Obrascón Huarte Lain S.A. (Ohl); Malo J.E., Universidad Autónoma De Madrid*







16:30 **How to overcome a busy road: The wolf *Canis lupus* movement across motorways in Poland**  
*Robert Myslajek, University of Warsaw, Faculty Of Biology; Nowak S., Association For Nature 'Wolf'*

4:45 **Roads and African elephants in a small South African private game reserve: A call for greater understanding of the impacts of roads on space use of wildlife**  
*Katherine Orrick, Columbia University*

**SYMPOSIUM: GETTING SCIENTIFIC EVIDENCE USED IN PRACTICE: PROGRESS, BARRIERS AND SOLUTIONS - SESSION II**

Room: Sully 3

Wednesday, 5 August, 15:30-17:00

*ORGANIZER(S): Jessica Walsh and William Sutherland, University of Cambridge*

The continued pressure for practitioners to conduct effective conservation with reduced budgets, and for scientists to demonstrate the 'impact' of their research, means that the need for good quality and well-communicated scientific evidence has never been greater. Yet, the use of research findings to inform management decisions is rare, patchy and often unsystematic. This symposium will aim to assess how far we have come in applying research to conservation management and policy, determine which barriers continue to hinder progress and identify effective solutions for improving the use of evidence.

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15:30 **The art of conservation science in the field: Barriers to the use of evidence**  
*Alex Diment*

15:45 **Leopard research in South Africa: Responsible science or academic indulgence?**  
*Guy Andrew Balme*

16:00 **What research do practitioners have access to and how can access be improved?**  
*Richard Fuller*

16:15 **Conservation biology: Is there evidence that it is still a displacement behaviour for academia?**  
*Tony Whitten*

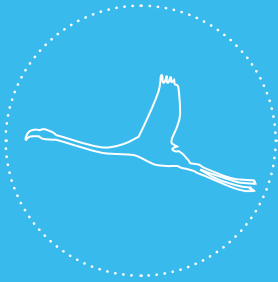
16:30 **Achieving conservation science that bridges the knowledge-action boundary**  
*Carly N. Cook*

16:45 **Closing discussion**



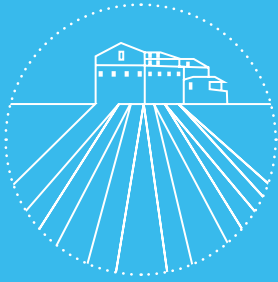


# CONGRESS SCHEDULE



3 AUGUST 2015

MONDAY



4 AUGUST 2015

TUESDAY



5 AUGUST 2015

WEDNESDAY



6 AUGUST 2015

THURSDAY





# THURSDAY, 6 AUGUST 2015

# SCHEDULE AT A GLANCE

ROOM:	BERLIOZ	ANTIGONE 1	ANTIGONE 3	ROUNDELET	BARTHEZ 1	BARTHEZ 2	JOFFRE A/B	JOFFRE C/D	JOFFRE 5	SULLY 1	SULLY 2	SULLY 3
8:30	Open for registration											
9:00-10:00	Plenary: Ana Rodrigues	No sessions scheduled										
10:00 - 10:30	Break											
10:30 - 12:00		SYMP Compensation, insurance, and other financial instruments to mitigate human-wildlife conflict: promise, pitfalls, and practice	SYMP Integrated social-ecological framework to support marine spatial planning	SYMP Science-society dialogue - from citizen science to co-design	SYMP Barriers to biodiversity in fluvial ecosystems	Conservation sociology, psychology & politics	Risk assessment and uncertainty	Impacts of climate change on ecosystems and species	Remote sensing and conservation GIS	Overexploitation of natural resources	Pollinator conservation	Infrastructures and conservation II
12:00-13:30 (Lunchtime meetings)		Camera trapping for conservation: presenting the zsl camera trapping and data analysis tool	The path worth taking: working with the private sector for biodiversity conservation	Swedish chapter establishment meeting	Barriers to biodiversity in fluvial ecosystems	Can evidence-based evaluation help us understand how capacity development contributes to meeting biodiversity conservation goals?	Marine section business meeting	Improving geographic representation in conservation biology	Improving conservation practice through evaluative thinking	Degrowth: a new opportunity for biodiversity conservation?	Europe section business meeting follow-up	Chapter luncheon and annual business meeting
13:30-15:00		SYMP Connecting people with nature	SYMP Conservation at the cross-roads: how roads and other linear infrastructure influence conservation	SYMP New technologies, data collection methods and means of analysis for improving conservation decision making and outcomes	SYMP Forging a path from space observations to action on the ground: satellite remote sensing for conservation applications	SYMP Biodiversity and infectious diseases: a role for conservation biology?	Wildlife trade I	Advocacy and engagement	Wetland conservation	Conservation biogeography	Conservation in hotspots	Historical ecology and conservation
15:00-15:30	Break											
15:30 - 17:00		SYMP Connecting people with nature	SYMP Conservation at the cross-roads: how roads and other linear infrastructure influence conservation	SYMP New technologies, data collection methods and means of analysis for improving conservation decision making and outcomes	SYMP Using the movement patterns of reintroduced animals to improve reintroduction success	SYMP Biodiversity and infectious diseases: a role for conservation biology?	Wildlife trade II	Conservation genetics III	Ecological restoration	Endangered species recovery	Conservation policy and ethics II	Miscellaneous topics iv
17:00-17:15	Break											
17:15-18:30	SCB Member's Meeting & Student Awards (Berlioz)											
18:30-19:30	Plenary: Carl Jones	No sessions scheduled										
19:30-0100	Closing Party (Parc Méric)											



## THURSDAY, 6 AUGUST MORNING SESSIONS

### SYMPOSIUM: **COMPENSATION, INSURANCE, AND OTHER FINANCIAL INSTRUMENTS TO MITIGATE HUMAN-WILDLIFE CONFLICT: PROMISE, PITFALLS, AND PRACTICE**

Room: Antigone 1

Thursday, 6 August, 10:30-12:00

ORGANIZER(S): *Simon Hedges & Krithi Karanth, Wildlife Conservation Society, Global Conservation Programs*

Human-wildlife conflict (HWC) is a common, severe, and growing problem around the globe that affects people in highly developed nations as well as in the poorest. People affected by HWC typically demand protection or compensation from the government authorities who are often seen as the owners of the wildlife, and if such assistance is not forthcoming or is ineffective – as is all too often the case – farmers will often retaliate by killing the ‘problem animals’ or by sabotaging conservation and development projects. It is clear, therefore, that conservationists and governments need more effective methods for mitigating HWC. This symposium gathers a trans-disciplinary group of experts, ranging from economists to wildlife biologists as well as people with direct experience of compensation and insurance schemes, to review examples of successes and failures, elucidate general principles, and make recommendations for best practice based on a sound understanding of the biological, political, and societal context of HWC.

- 10:30 **The good, the bad, and the well-intentioned: The evolution of compensation and insurance programs as wildlife conflict mitigation tools**  
*Philip Nyhus*
- 10:45 **Lessons from 15 years of human-elephant conflict mitigation: Management considerations involving biological, physical and governance issues in Africa**  
*Richard Hoare*
- 11:00 **An assessment of the feasibility of insurance schemes to mitigate human-elephant conflict in Sumatra, Indonesia**  
*Simon Hedges*
- 11:15 **Developing a spatially-explicit, sustainable, and risk-based insurance scheme to mitigate human-wildlife conflict in China**  
*Becky Shu Chen*
- 11:30 **Payments to encourage coexistence: Financial instruments to pay for predator conservation and encourage human-carnivore coexistence**  
*Ewan Macdonald*
- 11:45 **Closing discussion**

### SYMPOSIUM: **INTEGRATED SOCIAL-ECOLOGICAL FRAMEWORK TO SUPPORT MARINE SPATIAL PLANNING**

Room: Antigone 3

Thursday, 6 August, 10:30-12:00

ORGANIZER(S): *Lisa Wedding, Stanford University; Camille Parrain, University of La Rochelle, France; Simon Pittman, NOAA Biogeography Branch*

In an era of intensified and diversified ocean uses, a holistic framework for ecosystem-based management that integrates social and ecological interactions is required to address the many challenges of marine biodiversity conservation. Recognizing that marine and coastal systems exhibit complex ecological patterning, interdependencies, and material flows, a systems perspective is required to understand, help maintain, enhance and assess risk in the systems' ability to provide ecosystem goods and services for society. Managing for a sustainable future in a spatially dynamic environment, with multiple competing societal interests, requires both







the synthesis of vast amounts of data to understand the key drivers of change and a thoughtful integration of social-ecological framework. This symposium seeks to bridge the gap between the reductionist view of quantitatively assessing and modeling ecosystem state and services and the holistic view that historically integrates people with nature. This symposium will discuss the tools and techniques needed to support this shift from a view focused on quantifying human impacts on ecosystems to a view that includes society as a beneficiary, using an ecosystem services assessment approach that is linked directly to biodiversity conservation and social welfare outcomes.

10:30 **Biogeographic assessments: An integrative framework for information synthesis in marine spatial planning**

*Simon Pittman*

10:45 **Marine spatial planning: Toward ecosystem-based management**

*Charles Ehler*

11:00 **Achieving sustainability in coastal management: Embracing the social-ecological systems approach to small-scale fisheries**

*Elodie Le Cornu*

11:15 **Defining seascapes: Social-ecological lessons learned from focus group exercises**

*Camille Parrain*

11:30 **Synthesis for integrated social-ecological framework to support marine spatial planning**

*Christopher Lepczyk*

**SYMPOSIUM: BARRIERS TO BIODIVERSITY IN FLUVIAL ECOSYSTEMS**

Room: Barthez 1

Thursday, 6 August, 10:30-12:00

ORGANIZER(S): *Stephanie Januchowski-Hartley, University of Exeter*

Globally, marked declines in aquatic biodiversity are linked to anthropogenic barriers such as dams and levees, as well as chemical and thermal barriers, which interfere with ecological processes. Improved understanding of barrier impacts on aquatic ecosystems has led to increased mitigation and remediation of

barriers, including improvements in fish passage technologies and levee setback projects. On the other hand, in our increasingly connected world, barriers can also be a cost-effective tool for managing threats to native biodiversity, such as the propagation of invasive species and diseases, creating refuge areas for native biodiversity and helping reduce economic losses caused by native wildlife or invasive species. Additionally, barriers such as dams are increasingly being installed around the globe as way to meet increasing global energy and water storage concerns, as well as flood hazard reduction efforts. With all of this in mind, it is clear that decision making about the removal, retention or implementation of barriers is complicated and requires consideration of both the costs and benefits to nature and humans.

This symposium will highlight the myriad impacts, and potential benefits, to aquatic biodiversity and humans from anthropogenic barriers and identify potential best practices that could help guide the removal, retention and implementation of barriers to benefit both nature and people.

10:30 **Barriers to biodiversity in fluvial ecosystems-systematic planning of disconnection to enhance conservation success in a modified world**

*Virgilio Hermoso Lopez*

10:45 **Not all small dams are benign: A study on their cumulative impacts in South Africa**

*Sukhmani Mantel*

11:00 **Thermal barriers to habitat connectivity of juvenile steelhead trout**

*Raymond Timm*

11:15 **Salt water barriers in a tropical estuarine system: Impacts on biodiversity and human life**

*Dharma Rajan Priyadarsanan*

11:30 **Using bio-assessment of DNA in the environment to infer species distribution**

*Scott Blankenship*

11:45 **Barriers to biodiversity in fluvial ecosystems relying on historical ecology to plan the recovery of the European eel**

*Miguel Clavero*





## CONSERVATION SOCIOLOGY, PSYCHOLOGY AND POLITICS

Room: Barthez 2

Thursday, 6 August, 10:30-12:00

- 10:30 **Social-ecological trajectories of protected areas: Lessons learnt from the French nature reserves network**  
*Clara Therville, CNRS; Mathevet R., CNRS; Bioret F., Institut De Géoarchitecture, Université De Bretagne Occidentale*
- 10:45 **Gamers like it green: Virtual biophilia-like experience in the world of warcraft**  
*Minh-Xuan Truong, French National Museum Of Natural History; Prevot A.C., French National Museum Of Natural History; Clayton S., College Of Wooster*
- 11:00 **The social impacts of protected areas: Insights from 100 villages in Indonesia**  
*Michael Mascia, Conservation International; Pakiding F., Papua State University; Glew L., WWF*
- 11:15 **Border zone expansion: New state approach to regulate environmental crimes in non-democratic regimes**  
*Ilya Ermolin, Russian Presidential Academy Of National Economy And Public Administration (RAPNE); Svolkinas L., Russian Sturgeon Poaching Research Laboratory (RSPRL)*

## REMOTE SENSING AND CONSERVATION GIS

Room: Joffre 5

Thursday, 6 August, 10:30-12:00

- 10:30 **Cumulative impacts of human activities on coral reefs in Brazil**  
*Rafael Almeida Magris, James Cook University; Grech A., Macquarie University; Pressey R.L., James Cook University*
- 10:45 **Large-scale decline of bats and bush-crickets revealed thanks to automatic acoustic monitoring scheme**  
*Yves Bas, MNHN; Kerbiriou C., MNHN; Jeliaskov A., MNHN; Le Viol I., MNHN; Julien J-F., MNHN*

- 11:00 **Smart fire monitoring**  
*William Temperley, Joint Research Centre Of The European Commission; Palumbo I., Joint Research Centre Of The European Commission; Amin R., ZSL; Peedell S., Joint Research Centre Of The European Commission*
- 11:15 **Mapping Natura 2000 habitat conservation status in a Pannonic Salt Steppe with airborne laser scanning**  
*András Zlinszky, Centre For Ecological Research, Hungarian Academy Of Sciences; Deák B., MTA-DE Biodiversity And Ecosystem Services Research Group; Kania A., Atmoterm S.A; Schroiff A., Yggdrasildiemer; Pfeifer N., Department of Geodesy And Geoinformation, Vienna University of Technology*
- 11:20 **Identifying classes of degraded forests in an Amazonian landscape from remote-sensing**  
*Lilian Blanc, Bourgoin C., CIRAD; Baghdadi N., IRSTEA; Blanc L., CIRAD; Ferreira J., Embrapa; Gond V., CIRAD; Mazzei L., Embrapa; Ozwald Y., Université Rennes; Thales M.C., Museu Paraense Emilio Goeldi*

## RISK ASSESSMENT AND UNCERTAINTY

Room: Joffre A/B

Thursday, 6 August, 10:30-12:00

- 10:30 **Who to trust? Assessing and improving expert performance in conservation biology**  
*Victoria Hemming, The University of Melbourne*
- 10:45 **Managing scale dependence of distribution maps in ecosystem risk assessment**  
*Nicholas Murray, University of New South Wales; Keith D., University of New South Wales*
- 11:00 **Assessing at-risk status of Athabasca River rainbow trout with lots of poor resolution catch data**  
*John Robert Post, University of Calgary; Ward H., University of Calgary; Taylor E., University of British Columbia; Sterling G., Alberta Environment And Sustainable Resource Development*
- 11:15 **Methods for eliciting and combining expert opinions about facts**  
*Mark Burgman, University of Melbourne*





## IMPACTS OF CLIMATE CHANGE ON ECOSYSTEMS AND SPECIES

Room: Joffre C/D

Thursday, 6 August, 10:30-12:00

- 10:30 **Endemic species perilously restricted to small climate patches**  
*Juan Zuloaga*, University of Ottawa; *Kerr J.T.*, University of Ottawa
- 10:45 **Modeling direct and indirect climate change impacts on key habitat of grassland birds: A case study on breeding habitat of Dutch meadow birds**  
*Jerry Van Dijk*, Utrecht University; *Van Der Vliet R.*, Utrecht University; *De Jong H.*, District Water Control Board De Stichtse Rijnlanden; *Zeylmans Van Emmichoven M.*, Utrecht University; *Van Hardeveld H.*, District Water Control Board De Stichtse Rijnlanden; *Dekker S.*, Utrecht University; *Wassen M.*, Utrecht University
- 11:00 **A tree-ring perspective on the impact of climate change on North American tree growth**  
*Margaret Evans*, Charney N., University of Arizona; *Babst F.*, University of Arizona; *Poulter B.*, Montana State University; *Record S.*, Bryn Mawr College; *Enquist B.*, University of Arizona; *Trouet V.*, University of Arizona; *Evans M.*, University of Arizona
- 11:15 **Implications of physiological tolerances and evolutionary adaptation on conservation of species and communities under climate change**  
*Alex Bush*, CSIRO; *Catullo R.*, CSIRO; *Mokany K.*, CSIRO; *Ferrier S.*, CSIRO
- 11:30 **Vital signs: Sustaining ecosystem services in the context of agricultural intensification and climate change**  
*Sandy Andelman*, Conservation International
- 11:45 **Heat stress in African penguins in the face of climate change**  
*Noelle Tubbs*, Percy Fitzpatrick Institute, University of Cape Town; *Pichegru L.*, Percy Fitzpatrick Institute, Nelson Mandela Metropolitan University; *Ryan P.G.*, Percy Fitzpatrick Institute, University of

Cape Town; *Green J.A.*, School Of Environmental Sciences, University of Liverpool

- 11:50 **Adding up the effects of climate change for montane amphibians: Stage-specific effects of warming, drying, and increased climatic variability**  
*Amanda Kissel*, Simon Fraser University; *Palen W.*, Simon Fraser University; *Ryan M.*, Simon Fraser University; *Adams M.*, U.S. Geological Survey
- 11:55 **Biotic and climatic velocity identify contrasting areas of vulnerability to climate change**  
*Carlos Carroll*, KCCR; *Lawler J.*, University of Washington; *Roberts D.*, University of Alberta; *Hamann A.*, University of Alberta
- 12:00 **Which method is best? The IUCN SSC's new guidelines for assessing climate change vulnerability of species**  
*Wendy Foden*, IUCN Species Survival Commission

## SYMPOSIUM: SCIENCE-SOCIETY DIALOGUE - FROM CITIZEN SCIENCE TO CO-DESIGN

Room: Rondelet

Thursday, 6 August, 10:30-12:00

ORGANIZER(S): *Aletta Bonn* and *Anett Richter*, German Centre for Integrative Research (iDiv)

The aim of this symposium is to inform and to debate how to succeed in co-production and co-design at the science-society interface. How do we integrate different knowledge forms using citizen science through to co-design processes? How and when does this lead to better research with added value for science and society – and when not? What role do new technologies play in enhancing participation and broadening science? Are there good practice examples that can be shared? Experts from science, policy and the citizen science practice will provide input on advances and challenges in citizen science and participatory co-design. This science-society dialogue symposium will provide an opportunity for scientists, practitioners and policy makers to learn about and discuss the latest developments in citizen science to better implement joint study and monitoring programs with the public, and thereby ultimately enhance conservation of biodiversity.





- 10:30 **Ten principles of citizen science: Sharing best practice amongst the citizen science community**  
*Lucy Robinson*
- 10:45 **Celebrating 50 years of the biological records centre**  
*Helen Roy*
- 11:00 **Potential of digital technologies to enhance openness in learning and science**  
*Marisa Ponti*
- 11:15 **Citizen science, social learning and transforming expertise**  
*Taru Peltola*
- 11:30 **Extreme citizen science: Socio-political impact of citizen science**  
*Muki Haklay*
- 11:45 **The citizen science strategy 2020 for Germany**  
*Anett Richter*

## OVEREXPLOITATION OF NATURAL RESOURCES

Room: Sully 1

Thursday, 6 August, 10:30-12:00

- 10:30 **Leopard-prey distribution in the Iranian steppes suggests response to poaching intensity**  
**Arash Ghoddousi**, Georg-August-University Göttingen; Kh. Hamidi A., Persian Wildlife Heritage Foundation; Soofi M., Georg-August-University Göttingen; Khorozyan I., Georg-August-University Göttingen; H. Kiabi B., Shahid Beheshti University, G.C.; Waltert M., Georg-August-University Göttingen
- 10:45 **Are alternative livelihoods projects effective at delivering conservation results?**  
**Francesca Booker**, Roe D., International Institute For Environment & Development; Booker F., IIED & CIFOR; Day M., IIED & CIFOR; Zhou W., Centre For International Forestry Research; Kümpel N., Zoological Society of London; Sunderland T., Centre For International Forestry Research
- 11:00 **Protecting marine ecosystems: Prescriptive regulation vs market incentives**  
**Steve Miller**, University of California, Santa Barbara; Deacon R., University of California, Santa

Barbara

- 11:15 **Threats to biodiversity in Pakistan: A case study of rare and endemic plants in Chitral Valley**  
**Haidar Ali**, University of Swat; Qaiser M., University of Karachi
- 11:30 **Toward a hunting footprint: Regional patterns of wild game depletion and dependence in eastern and Southern Africa**  
**Alex McInturff**, University of California Berkeley; Brashares J., University of California Berkeley; Nunez T., University of California Berkeley; Gaynor K., University of California Berkeley; Abrahms B., University of California Berkeley; Withey L., University of California Berkeley; Fiorella K., University of California Berkeley; Marsh R., University of California Berkeley; Seto K., University of California Berkeley
- 11:45 **Impacts of institutional change on resource sustainability: Edible caterpillars and Miombo woodland conservation in Northern Zambia**  
**Rhoda Nthema Kachali**, Zambia Wildlife Authority; Gambiza J., Rhodes University; Wallace E.G., Frankfurt Zoological Society; Wallace P.C.A., Frankfurt Zoological Society
- 11:50 **Reframing the concept of 'alternative livelihoods'**  
**Juliet Helen Wright**, Imperial College London, ZSL Institute Of Zoology; Hill N.A.O., Zoological Society of London, University of Cambridge; Rowcliffe J.M., Zsl Institute Of Zoology; Kümpel N.F., Zoological Society of London; Roe D., International Institute For Environment And Development; Booker F., International Institute For Environment And Development, Center For International Forestry Research; Day M., International Institute For Environment And Development, Center For International Forestry Research; Milner-Gulland E.J., Imperial College London

## POLLINATOR CONSERVATION

Room: Sully 2

Thursday, 6 August, 10:30-12:00

- 10:30 **Negative insecticide impacts on pollinators are reduced in complex small-scale**





**agricultural landscapes**

**Mark Otieno**, Embu University College; Sidhu C.S., Department of Entomology, University of California, Riverside; Woodcock B.A., Nerc Centre For Ecology And Hydrology; Wilby A., Lancaster Environment Centre, University of Lancaster; Vogiatzakis I.N., School Of Pure And Applied Sciences, Open University of Cyprus; Mauchline A.L., Centre For Agri-Environmental Research, University of Reading; Gikungu M.W., Zoology Department, National Museums Of Kenya; Potts S.G., Centre For Agri-Environmental Research, University of Reading

10:45 **Low-input farming practices support better pest control through higher abundance of natural enemies in Hungary**

**Zoltán Elek**, Mta-Elte-Mtm Ecology Research Group, Eötvös Loránd University;; Boros G., Mta Ök Lendület Ecosystem Services Research Group; Ádám R., Mta Ök Lendület Ecosystem Services Research Group; Kovács-Hostyánszki A., Mta Ök Lendület Ecosystem Services Research Group; Molnár D.M., Mta Ök Lendület Ecosystem Services Research Group; Somay L., Mta Ök Lendület Ecosystem Services Research Group; Báldi A., Mta Ök Lendület Ecosystem Services Research Group

11:00 **Bumblebee diversity and densities in moderately intensified northern farmlands**

**Eveliina Kallioniemi**, Norwegian Institute For Nature Research; Åström J., Norwegian Institute For Nature Research; Åström S., Norwegian Institute For Nature Research; Dahle S., Norwegian Institute For Nature Research; Gjershaug J.O., Norwegian Institute For Nature Research; Myklebost H., Norwegian Institute For Nature Research; Staverløkk A., Norwegian Institute For Nature Research; Rusch G., Norwegian Institute For Nature Research

11:15 **Creating a buzz in the city: An experimental cross-city comparison of the public's preferences and values for conserving urban pollinators**

**Tristan J. Pett**, Durrell Institute Of Conservation And Ecology, School Of Anthropology And Conservation, University of Kent; Dallimer M., Sustainability Research Unit, School Of Earth And Environment, University of Leeds; Goddard M.A., School Of Civil Engineering & Geosciences, Newcastle University; Roberts D.L., Durrell Institute Of Conservation And Ecology, School Of Anthropology And Conservation, University of Kent;

Davies Z.G., Durrell Institute Of Conservation And Ecology, School Of Anthropology And Conservation, University of Kent

11:30 **Bee richness response to warming can be modified by landscape structure**

Alexandra Papanikolaou, Helmholtz Centre For Environmental Research; Schweiger O., Helmholtz Centre For Environmental Research; Kühn I., Helmholtz Centre For Environmental Research

**INFRASTRUCTURES AND CONSERVATION II**

Room: Sully 3

Thursday, 6 August, 10:30-12:00

10:30 **Effects of oil and gas infrastructure and operating noise on grassland songbirds in Alberta, Canada**

**Nicola Koper**, University of Manitoba; Bernath-Plaisted J., University of Manitoba; Nenninger H., University of Manitoba; Antze B., University of Manitoba

10:45 **Do roads influence predator activity in intact landscapes?**

**Keren Raiter**, University of Western Australia; Hobbs R., University of Western Australia; Prober S., Csiro Land And Water Flagship, Floreat; Valentine L., University of Western Australia; Possingham H., School Of Biological Sciences, University of Queensland

11:00 **Harvesting renewable energy while protecting biodiversity**

**Andrea Santangeli**, University of Helsinki; Toivonen T., University of Helsinki; Pouzols F., University of Helsinki; Pogson M., Academic Group Of Engineering, Sports And Sciences, University of Bolton; Hastings A., Institute Of Biological And Environmental Sciences, University of Aberdeen; Smith P., Institute Of Biological And Environmental Sciences, University of Aberdeen; Moilanen A., University of Helsinki

11:15 **A new tool to calculate roadless space in forest landscapes, applied in the Congo Basin**

**Fritz Kleinschroth**, CIRAD; Gourlet-Fleury S., CIRAD; Mortier F., CIRAD; Healey J.R., Bangor University; Stoica R., Universite Lille







- 11:30 **A flexible and efficient modelling approach to target road fragmentation mitigation at the impact assessment phase**  
*Hadrien Vanthomme*, Smithsonian Institution;  
*Kolowski J.*, Smithsonian Institution; *Nzamba B.*,  
*Université Des Sciences Et Techniques De Masuku*;  
*Alonso A.*, Smithsonian Institution
- 11:35 **Integrating biodiversity research for impact mitigation on a Trans-Andean Megaproject: Case study from Peru**  
*A. Alonso*, *Dallmeier F.*, Smithsonian Conservation  
Biology Institute; *Sahley C.*, Smithsonian  
Conservation Biology Institute; *Vildoso B.*, Peru  
Lng; *Linares R.*, Smithsonian Conservation Biology  
Institute; *Taborga P.*, Peru Lng, Lima, Peru ; *Ledesma  
K.*, Smithsonian Conservation Biology Institute;  
*Casaretto C.*, Peru Lng; *Alonso A.*, Smithsonian  
Conservation Biology Institute
- 11:40 **Modelling the combined effects of habitat heterogeneity and roads on landscape functional connectivity in a Mediterranean forest carnivore**  
*Filipe Carvalho*, Research Center In Biodiversity  
And Genetic Resources (CIBIO/INBIO-UE),  
University of Évora; *Carvalho R.*, Research Center In  
Biodiversity And Genetic Resources (CIBIO/INBIO-  
UE), University of Évora; *Mira A.*, Research Center In  
Biodiversity And Genetic Resources (CIBIO/INBIO-  
UE), University of Évora; *Beja P.*, Edp Biodiversity  
Chair, Research Center In Biodiversity And Genetic  
Resources (CIBIO/INBIO-UE), University of Porto,  
Campus Agrário De Vairão, Vairão
- 11:45 **Do limits to the global oil supply increase the rate of deforestation and biodiversity loss?**  
*Rowan Eisner*, University of Queensland; *Seabrook  
L.*, University of Queensland; *Mcalpine C.*, University  
of Queensland
- 11:50 **Behavioural response of two grassland songbirds to noise pollution from energy development in the Canadian prairie**  
*Claire Curry*, University of Manitoba; *Antze B.*,  
University of Manitoba; *Des Brisay P.*, University of  
Manitoba; *Nenninger H.*, University of Manitoba;  
*Warrington M.*, University of Manitoba; *Koper N.*,  
University of Manitoba

## AFTERNOON SESSIONS

### SYMPOSIUM: CONNECTING PEOPLE WITH NATURE - SESSION I

Room: Antigone 1

Thursday, 6 August, 13:30-15:00

ORGANIZER(S): *Danielle Shanahan and Richard Fuller*,  
*University of Queensland*

In this solution-focused forum we aim to gather an interdisciplinary panel of scientists to explore how connecting people with nature might help forge a new path for conservation into the future.

The symposium will first explore a variety of scientific approaches to understanding people's connection with nature. We will then contextualize this by examining the benefits that arise from fostering a connection for people and conservation.

#### 13:30 **Connecting people with nature - extinction of experience: Causes and consequences**

*Kevin Gaston*

#### 13:45 **One size does not fit all: Case studies in using values framing for connecting families to nature**

*Tara Teel*

#### 14:00 **A social-ecological approach to reconnect urban people with the rest of the biosphere**

*Matteo Giusti*

#### 14:15 **Garden bird feeding: Our desire for connection**

*Daniel Cox*

#### 14:30 **Community-based conservation with an urban public**

*Dave Kendal*

### SYMPOSIUM: CONSERVATION AT THE CROSS-ROADS: HOW ROADS AND OTHER LINEAR INFRASTRUCTURE INFLUENCE CONSERVATION - SESSION I

Room: Antigone 3

Thursday, 6 August, 13:30-15:00

ORGANIZER(S): *Kylie Soanes and Rodney van der Ree*,





*University of Melbourne; Daniel J Smith, University of Central Florida; and Clara Grilo, Universidade de Aveiro*

Roads, railways and utility lines affect huge areas of land, ecosystems and species. While interactions are often complex, there is a large body of literature demonstrating that linear infrastructure and traffic have predominantly negative effects on the environment. These negative effects range from the obvious impact of wildlife mortality, through to the less obvious barrier-to-movement effects, habitat degradation and flow-on effects that occur after roads are built – all of which contribute to the decline of biodiversity. The success of conservation efforts will depend on being able to avoid or mitigate the negative effects of linear infrastructure on the environment. This symposium will showcase how road ecology has matured as a discipline in the last 10 years and identify new directions for the next 10 years and will include 'overview' talks on hot-topics in road ecology, as well as case studies that highlight the unique approaches/tools that have been developed to address road ecology research questions.

- 13:30 **Road impacts: The history so far**  
*Clara Grilo*
- 13:45 **Can species traits influence their vulnerability to road impacts?**  
*Ana Ceia-Hasse*
- 14:00 **The consequences and opportunities of rapid expansion of linear infrastructure in the developing world**  
*Sanjay Gubbi*
- 14:15 **Using volunteer science, social networking and emerging technologies to efficiently and accurately collect data on the impacts of roads and traffic on wildlife**  
*Neftalí Sillero*
- 14:30 **The promise and reality of using genetic techniques to quantify the impacts of linear infrastructure and evaluate the effectiveness of mitigation**  
*Kylie Soanes*

- 14:45 **Evaluating when and where to implement road mitigation for wildlife with roadkill modelling: Three international case studies**  
*Fernanda Zimmermann Teixeira*

**SYMPOSIUM: FORGING A PATH FROM SPACE OBSERVATIONS TO ACTION ON THE GROUND: SATELLITE REMOTE SENSING FOR CONSERVATION APPLICATIONS**

Room: Barthez 1

Thursday, 6 August, 13:30-15:00

*ORGANIZER(S): Graeme Buchanan, RSPB; Allison K. Leidner, Universities Space Research Association/NASA Earth Science Division*

The potential for satellite remote sensing to forge new and exciting paths for biodiversity conservation has been recognized for over a decade by the biodiversity research and conservation applications community. The past few years have seen an increase in the amount and type of satellite data collected, the ease of access to such data, and a proliferation of policies that have promoted free and open data. Concurrently, there has been an increase in the dialogue between the remote sensing/ data providing community and conservationists that has included the launch of the Conservation Remote Sensing Network (CRSNet). These collaborations are producing data products and tools, as well as generating novel research, that can be applied at levels ranging from global policy to on-the-ground action. This symposium will focus on the contributions of new remote sensing technologies to advancing successful local to regional scale conservation and resource management projects and policies. Speakers will discuss how remote sensing has forged a way from the scientific research realm to being a tool that is regularly applied for a variety of terrestrial and marine conservation initiatives, informing monitoring efforts, identifying priority actions, and guiding conservation strategies and local policy.

- 13:30 **Remote sensing for conservation: Networks hold the key**  
*Woody Turner*

- 13:45 **Online tool to monitor fires in global protected areas**  
*Ilaria Palumbo*





- 14:00 **Demonstrating effective biodiversity conservation outcomes with the use of geotechnologies in Paraguay and the Americas**  
*A. Alberto Yanosky*
- 14:15 **A decision support system to monitor chimpanzee habitat health in Africa using landsat satellite imagery, crowdsourcing and open standards**  
*Lilian Pinteá*
- 14:30 **Demonstrating an effective marine biodiversity observation network in the Santa Barbara Channel: The role of remote sensing**  
*Robert Miller*
- 14:45 **Integrating ocean observing data to model marine animal distributions and densities: Contemporaneous versus climatological considerations**  
*Patrick Halpin*

## SYMPOSIUM: BIODIVERSITY AND INFECTIOUS DISEASES: A ROLE FOR CONSERVATION BIOLOGY? - SESSION I

Room: Barthez 2

Thursday, 6 August, 13:30-15:00

ORGANIZER(S): *Benjamin Roche, on behalf of the BIODIS CESAB Working Group*

An increasing body of literature addresses the link between biodiversity and infectious diseases. This is especially true for zoonotic diseases (diseases whose etiologic agents are shared between vertebrate animals and humans), which represent 62 to 75% of emerging diseases. Vertebrate diversity is associated with a large pool of pathogens, suggesting the maximum diversity of zoonotic pathogens should be in areas of greatest biodiversity (e.g., the tropics). Nevertheless, emergence of some new diseases and increasing incidence of some endemic diseases have been associated with anthropogenic disturbance and concomitant loss of biodiversity. Recent investigations have supported a protective effect of biodiversity for several vector-borne or directly transmitted zoonoses. Our aim is to explore the mechanisms by which biodiversity, can negatively impact transmission of some pathogens while positively contributing to pathogen diversity, and how this paradox relates to human health. This will include discussion of

the direct threat of emerging zoonotic diseases, as well as more indirect effects including the beneficial ecosystem services provided by potentially pathogenic organisms, implications for food safety and security, and how these issues relate to economic consequences, and costs and benefits of preparedness and prevention.

- 13:30 **How biodiversity conservation can prevent pandemics**  
*Peter Daszak*
- 13:45 **On the theoretical generality of dilution effect**  
*Benjamin Roche*
- 14:00 **Context dependent effects of biodiversity loss on disease**  
*Hillary Young*
- 14:15 **Host diversity and disease prevalence: A case study based on barley and cereal yellow dwarf viruses**  
*Christelle Lacroix*
- 14:30 **Microscopic aquatic predators dictate infection dynamics of a globally emerged pathogen**  
*Dirk Schmeller*
- 14:45 **Landscape-scale protection of biodiversity against the devastating plant pathogen *Phytophthora cinnamomi***  
*Renée-Claire Hartley*

## WETLAND CONSERVATION

Room: Joffre 5

Thursday, 6 August, 13:30-15:00

- 13:30 **How can we restore pollination webs in wetlands?**  
*Anne-Laure Jacquemart, Université Catholique De Louvain; Michez D., Université De Mons; Moquet L., Université Catholique De Louvain*
- 13:45 **Modeling the impact of hydrological alterations: Shifts in Eurasian spoonbill habitat in Poyang Lake, China**  
*Benjamin Sullender, University of Wisconsin-Madison; Silbernagel J., University of Wisconsin-Madison; Barzen J., International Crane Foundation*





14:00 **Assessing transferability of habitat models for a widespread marsh bird in the southeastern United States: Implications for conservation planning**

**Nicolette Roach**, Clemson University; Barrett K., Clemson University; Hunter E., University of Georgia; Nibbelink N., University of Georgia

14:15 **Irrigation tanks, bird sanctuaries or wetlands—the management dilemma**

**Avantika Bhaskar**, Care Earth Trust; Vencatesan J., Care Earth Trust

14:30 **Climate change could truncate the world's major migration flyways**

**Richard Fuller**, Wauchope H., University of Queensland; Shaw J., Australian Antarctic Division; Varpe Ø., University Centre In Svalbard; Lappo E., Russian Academy Of Sciences; Boertmann D., Aarhus University; Tomkovich P., Lomonosov Moscos State University; Fuller R., University of Queensland

14:45 **30 years of land use dynamics in the coastal Mediterranean wetlands**

**Marianne Bernard**, Tour Du Valat; Beltrame C., Tour Du Valat; Leviol I., Muséum National D'Histoire Naturelle; Galewski T., Tour Du Valat

14:50 **Habitat conservation priority: A floristic approach applied to Mediterranean wetlands**

**Claudia Angiolini**, University of Siena; Viciani D., University of Florence; Bonari G., University of Siena; Lastrucci L., University of Florence

**WILDLIFE TRADE I**

Room: Joffre A/B

Thursday, 6 August, 13:30-15:00

13:30 **Live capture and ownership of lemurs in Madagascar: Extent and conservation implications**

**Kim Reuter**, Temple University; Gilles H., Temple University; Wills A., Mpingo Conservation & Development Initiative; Sewall B., Temple University

13:45 **Trade in orchids for Chinese markets**

**Sophie Williams**, Xishuangbanna Tropical Botanic Garden; Gao J., Xishuangbanna Tropical Botanic Garden

14:00 **Evaluating the drivers of trade on avian body parts in southeast Nigeria: Implications for biodiversity conservation in protected areas**

**Fidelis Atuo**, Oklahoma State University; O'Connell T., Oklahoma State University; Abanyam P., Wildlife Conservation Society

14:15 **Identifying African protected areas at risk from the illegal wildlife trade**

**Olena Kovalenko**, University of Helsinki; Moilanen A., University of Helsinki; Di Minin E., University of Helsinki

14:30 **The changing trends in bushmeat exploitation in Ghana**

**Hannah Naa Kai Sackey**, University of Ghana, Department of Animal Biology And Conservation Science; Amponsah-Mensah K., University of Ghana, Department of Animal Biology And Conservation Science; Owusu E.H., University of Ghana, Department of Animal Biology And Conservation Science; Ntiamao-Baidu Y., University of Ghana, Centre For African Wetlands

14:45 **Hunting for the problem: Investigating bushmeat use around North Luangwa National Park, Zambia**

**Emily King**, Imperial College London; Keane A., Edinburgh University; Wallace A., Frankfurt Zoological Society; Wallace G., Frankfurt Zoological Society

**ADVOCACY AND ENGAGEMENT**

Room: Joffre C/D

Thursday, 6 August, 13:30-15:00

13:30 **Phoenix flagships: Conservation values and guanaco reintroduction in an anthropogenic landscape**

**Meredith Root-Bernstein**, Lindon A.; Root-Bernstein M., Aarhus University

13:45 **Framing the private land conservation conversation**

**Alexander Kusmanoff**, Rmit University; Raymond C., University of South Australia; Hardy M., Rmit University; Maffey G., University of Aberdeen; Reed M., Birmingham City University; Bekessy S., Rmit University







- 14:00 **Quantifying the impact of billions of dollars of GEF support to conservation in protected areas**  
*Ian Craigie*, James Cook University; Barnes M., Australian Research Council Centre Of Excellence For Environmental Decisions, The University of Queensland; Geldmann J., Center For Macroecology, Evolution And Climate, Natural History Museum Of Denmark, University of Copenhagen; Woodley S., Iucn World Commission On Protected Areas
- 14:15 **Understanding partnerships for delivering conservation outcomes: How and why do corporations and NGOs collaborate?**  
*Janna Steadman*, Durrell Institute Of Conservation And Ecology, University of Kent; Armsworth P.R., Department of Ecology And Evolution, University of Tennessee; Dallimer M., School Of Earth And Environment, University of Leeds; Hornibrook S., Kent Business School, University of Kent; St John F.A.V., Durrell Institute Of Conservation And Ecology, University of Kent; Davies Z.G., Durrell Institute Of Conservation And Ecology, University of Kent
- 14:30 **Changing conservation policy and management - Some experiences from the swamps**  
*Richard Kingsford*, Centre For Ecosystem Science
- 14:45 **Evolution of systematic conservation planning (SCP) work in Turkey - Advances, adaptations and possible contributions**  
*Ayşe S. Turak*, Zeydanli U., Nature Conservation Centre; Turak A.S., Nature Conservation Centre; Ambarli D., Nature Conservation Centre; Balkiz O., Nature Conservation Centre; Ozut D., Nature Conservation Centre; Bilgin C.C., Metu
- 15:00 **Wisconsin chapter of SCB: A case study in fostering collaboration in conservation**  
*Caitlin Williamson*, Natural Resources Foundation of Wisconsin

## SYMPOSIUM: NEW TECHNOLOGIES, DATA COLLECTION METHODS AND MEANS OF ANALYSIS FOR IMPROVING CONSERVATION DECISION MAKING AND OUTCOMES - SESSION I

Room: Rondelet

Thursday, 6 August, 13:30-15:00

ORGANIZER(S): Elizabeth Lonsdorf, Franklin and Marshall College; Richard Bergl, North Carolina Zoo

Recent advances in technology and novel approaches to analysis have drastically increased the availability of data relevant for improving the effectiveness of conservation actions. This symposium will demonstrate the application of a wide variety of new approaches to the collection and application of conservation-relevant data, including examples of where such data have resulted in measurable, positive conservation outcomes. Examples are drawn primarily from primate research and conservation initiatives, but presentations will demonstrate how the methods and tools discussed can be applied in a wide variety of contexts.

- 13:30 **Integrated non-invasive health-monitoring for disease risk analysis in wild apes**  
*Elizabeth Lonsdorf*
- 13:45 **Identifying hotspots for zoonotic transmission: Quantifying fine-scale movement of domesticated animals relative to chimpanzees at gombe stream National Park, Tanzania**  
*Thomas Gillespie*
- 14:00 **Gorillas in the cloud: Integrating electronic data collection and a web-hosted database to better study and protect mountain gorillas**  
*Damien Caillaud*
- 14:15 **Towards the automated detection of primates using passive acoustic monitoring: Progress and challenges**  
*Ammie Kalan*
- 14:30 **Conservation drones and monitoring of biodiversity**  
*Serge Wich*
- 14:45 **Field sensor technology for improving conservation effectiveness: Opportunities, limitations and future horizons**  
*Emma Stokes*





**CONSERVATION BIOGEOGRAPHY**

Room: Sully 1

Thursday, 6 August, 13:30-15:10

13:30 **Exploring the biogeography of herbivore - plant community interactions and ecosystem functioning**

**Leigh Moorhead**, *The University of Tennessee: Knoxville, Center For Macroecology, Evolution, And Climate; University of Copenhagen; Sanders N., Center For Macroecology, Evolution, And Climate; University of Copenhagen, The University of Tennessee: Knoxville; Classen A., Center For Macroecology, Evolution, And Climate; University of Copenhagen, The University of Tennessee: Knoxville*

13:45 **Landscape change, human population growth and oil development in a Ugandan protected area landscape: A case-study from Murchison Falls conservation area**

**Nicholas Dowhaniuk**, *University of New Hampshire; Hartter J., University of Colorado; Congalton R.G., University of New Hampshire; Palace M.W., University of New Hampshire; Ryan S.J., University of Florida*

14:00 **A global database of river and catchment attributes to facilitate aquatic ecosystem modelling and conservation planning**

**Simon Linke**, *Griffith University; Lehner B., McGill University*

14:15 **Beyond delineation: Exploring the biological significance of global zoogeographical units**

**Rubén Bernardo-Madrid**, *Biological Station Of Donana; González-Suárez M., Biological Station Of Donana; Calatayud J., University of Alcalá, Natural Museum Of Natural Sciences; Revilla E., Biological Station Of Donana*

14:30 **Extinction and invasion risk are not two sides of the same coin, at least not for reptiles**

**Aimee Tallian**, *Beard K., Utah State University; Tingley R., The University of Melbourne; Mahoney P., Utah State University; Durso A., Utah State University; Tallian A., Utah State University; Morán-Ordóñez A., The University of Melbourne*

14:45 **Identification of geophysically diverse locations that may facilitate species'**

**persistence and adaptation to climate change**

**Christine Albano**, *Conservation Science Partners; Dickson B., Conservation Science Partners*

**CONSERVATION IN HOTSPOTS**

Room: Sully 2

Thursday, 6 August, 13:30-15:00

13:30 **Loss and conservation of phylogenetic diversity in the Mediterranean basin**

**Simon Veron**, *Muséum National D'Histoire Naturelle; Clergeau P., Muséum National D'Histoire Naturelle; Pavoine S., Muséum National D'Histoire Naturelle*

13:45 **Representation of the protected area systems in the Indo-Burma hotspot: Increasing completeness**

**Naruemon Tantipisanuh**, *Kmutt; Savini T., Kmutt; Gale G., Kmutt*

14:00 **Evaluating wildlife conservation strategies in West African rainforests**

**Denis Kupsch**, *Georg-August University Göttingen; Bobo K.S., University of Dschang; Waltert M., Georg-August University Göttingen*

14:15 **Cryptic diversity and conservation planning: The case of amphibians and reptiles in Algeria**

**Menad Beddek**, *Centre D'Ecologie Fonctionnelle Et Evolutive; Peyre O., Bureau D'Études Naturalia-Environnement; Geniez P., Ecole Pratique Des Hautes Etudes; Brito J-C., Cibio, Centro De Investigação Em Biodiversidade E Recursos Genéticos Da Universidade Do Porto / Instituto De Ciências Agrárias; Crochet P-A., Centre D'Ecologie Fonctionnelle Et Evolutive*

14:30 **Terrestrial mammal communities in forests of central Panama, bottleneck of the Isthmus of Panama: An assessment using camera traps**

**Ninon Meyer**, *El Colegio De La Frontera Sur/ Smithsonian Tropical Research Institute; Esser H., Wageningen University; Moreno R., Yaguara Panama; Van Langevelde F., Wageningen University; Liefting Y., Wageningen University; Ros Oller D., Wageningen University; Vogels C., Yaguara Panama; Carver A., Asociacion Panamericana Para La Conservacion; Nielsen C., Southern Illinois University; Jansen P., Wageningen University*





**14:35 Losing the apex predator: An evaluation of the remaining jaguar populations of the Atlantic Forest of South America**

**Agustin Paviolo**, Instituto De Biología Subtropical, Conicet-Universidad Nacional Of Misiones And Ceiba; Ferraz K., Departamento De Ciências Florestais, Esalq, Universidade De São Paulo And Instituto Pró-Carnívoros; De Angelo C., Instituto De Biología Subtropical, Conicet-Universidad Nacional Of Misiones And Ceiba; Morato R., Centro Nacional De Pesquisa E Conservação De Mamíferos Carnívoros-Icmbio And Instituto Pró-Carnívoros; Srbek-Araujo A., Programa De Pós-Graduação Em Ecologia De Ecossistemas, Universidade Vila Velha; Lima F., Instituto De Pesquisas Ecológicas; Beisegel B., Centro Nacional De Pesquisa E Conservação De Mamíferos Carnívoros-Icmbio; Velázquez M., Fundación Moisés Bertoni; Xavier Da Silva M., Instituto Pró-Carnívoros; Sana D., Secretaria De Meio Ambiente Rs And Instituto Pró-Carnívoros; Cullen L., Instituto De Pesquisas Ecológicas; Crawshaw P., Centro Nacional De Pesquisa E Conservação De Mamíferos Carnívoros-Icmbio; Cunha De Paula R., Centro Nacional De Pesquisa E Conservação De Mamíferos Carnívoros-Icmbio And Instituto Pró-Carnívoros; Jorge M.L., Vanderbilt University; Martinez Pardo J., Instituto De Biología Subtropical, Conicet-Universidad Nacional Of Misiones And Ceiba; Galetti P., Departamento De Genética E Evolução, Universidade Federal De São Carlos; Di Bitetti M.S., Instituto De Biología Subtropical, Conicet-Universidad Nacional Of Misiones And Ceiba; Souza A.S.M., Departamento De Genética E Evolução, Universidade Federal De São Carlos; Cruz P., Instituto De Biología Subtropical, Conicet-Universidad Nacional Of Misiones And Ceiba; Quiroga V., Instituto De Biología Subtropical, Conicet-Universidad Nacional Of Misiones And Ceiba; Nakano E., Instituto De Pesquisas Cananéia; Ramírez Pinto F., Fundación Moisés Bertoni; Fernández S., Fundación Moisés Bertoni; Costa S., Instituto De Biología Subtropical, Conicet-Universidad Nacional Of Misiones And Ceiba; Aide T.M., Department Of Biology, University Of Puerto Rico; Amorim E., Consultant; Eizirik E., Faculdade De Biociências - Pucrs; Azevedo F., Departamento De Ciências Naturais - Universidade Federal De São João Del Rei And Instituto Pró-Carnívoros; Perrilli M., Consultant

**14:40 Large-scale compliance with sugarcane sustainability standards could result in mixed conservation outcomes**

**William Smith**, Luc Hoffmann Institute, Institute On The Environment, University Of Minnesota; Johnson J.A., Institute On The Environment, University Of Minnesota; Mieno T., Luc Hoffmann Institute, Institute On The Environment, University Of Minnesota; Nelson E., Bowdoin College; Gerber J.S., Institute On The Environment, University Of Minnesota; West P.C., Institute On The Environment; Polasky S., Institute On The Environment, University Of Minnesota; Siebert S., Institute Of Crop Science And Resource Conservation, University Of Bonn; Lambin E.F., School Of Earth Sciences And Woods Institute For The Environment, Stanford University; Brauman K.A., Institute On The Environment, University Of Minnesota; Carlson K.M., Institute On The Environment, University Of Minnesota; Arbuthnot M., World Wildlife Fund; Pennington D.N., World Wildlife Fund

**14:45 Integrating bird taxonomic, functional and phylogenetic diversity for conservation management in highly threatened ecosystems of the Colombian Andes**

**H. Garcia**, Gonzalez M., Instituto De Recursos Biologicos Alexander Von Humboldt; Tenorio E., Instituto De Recursos Biologicos Alexander Von Humboldt; Cortes A., Instituto De Recursos Biologicos Alexander Von Humboldt; López J.P., Instituto De Recursos Biologicos Alexander Von Humboldt; Montoya P., Instituto De Recursos Biologicos Alexander Von Humboldt; Paz A., Instituto De Recursos Biologicos Alexander Von Humboldt; Pinto A., Instituto De Recursos Biologicos Alexander Von Humboldt; Salgado-Negret B., Instituto De Recursos Biologicos Alexander Von Humboldt

## HISTORICAL ECOLOGY AND CONSERVATION

Room: Sully 3

Thursday, 6 August, 13:30-15:00

**13:30 A century-old grassland legacy on plants and butterflies in Swedish production forestry clear-cuts**

**Dennis Jonason**, Linköping University; Blixt T., Linköping University; Ibbe M., Linköping University;



Milberg P., Linköping University; Tunér A., Linköping University; Westerberg L., Linköping University; Bergman K-O., Linköping University

13:45 **Modelling the pre-whaling distribution and abundance of the endangered North Atlantic Right whale from historical whaling records of a congeneric species**

**Sophie Monsarrat**, Centre D'Ecologie Fonctionnelle Et Evolutive, CNRS; Pennino M.G., Universidade Federal Do Rio Grande Do Norte, Departamento De Botânica, Zoologia E Ecologia; Smith T.D., World Whaling History; Reeves R.R., Okapi Wildlife Associates; Meynard C.N., Virginia Institute Of Marine Science, College Of William & Mary; Kaplan D.M., Virginia Institute Of Marine Science, College Of William & Mary; Rodrigues A., Centre D'Ecologie Fonctionnelle Et Evolutive, CNRS

14:00 **When common birds became rare: Historical records shed light on long-term responses of bird community to global changes in the largest French wetland**

**Thomas Galewski**, Tour Du Valat; Devictor V., Institut Des Sciences De L'Evolution

14:15 **Linking historic land-use change and shifts in pollinator communities**

**Deepa Senapathi**, University of Reading; Carvalheiro L.G., University of Leeds; Biesmeijer J.C., Naturalis Biodiversity Centre; Dodson C.A., University of Reading; Evans R.L., University of Reading; Mckerchar M., University of Leeds; Morton R.D., Centre For Ecology And Lacaster; Moss E.D., University of Reading; Roberts S.P.M., University of Reading; Kunin W.E., University of Leeds; Potts S.G., University of Reading

14:30 **The human and natural history of a biological invasion: The case of Gorse (*Ulex europaeus*) on the island of Réunion (Indian Ocean)**

**Nathalie Udo**, CNRS/Université De Rennes; Tarayre M., CNRS/Université De Rennes; Atlan A., CNRS/Université De Rennes

**SYMPOSIUM: CONNECTING PEOPLE WITH NATURE - SESSION II**

Room: Antigone 1

Thursday, 6 August, 15:30-17:00

ORGANIZER(S): Danielle Shanahan and Richard Fuller, Fuller Lab, School of Biological Sciences, University of Queensland

In this solution-focused forum we aim to gather an interdisciplinary panel of scientists to explore how connecting people with nature might help forge a new path for conservation into the future.

The symposium will first explore a variety of scientific approaches to understanding people's connection with nature. We will then contextualize this by examining the benefits that arise from fostering a connection for people and conservation.

15:30 **Natural neighbourhoods for city children**

Yolanda Van Heezik

15:45 **Boosting biodiversity and contact with nature through sown meadows in urban green spaces**

Georgina Southon

16:00 **Urbanisation and green-space: Influences on human well-being, biodiversity knowledge and conservation support**

Debbie Coldwell

16:15 **Human happiness versus urban biodiversity? Public perception of designed urban planting in a warming climate**

Helen Hoyle

16:30 **The connection between people, nature and health**

Danielle Shanahan

16:45 **Panel discussion: The importance of a connection to nature for conservation**

**SYMPOSIUM: CONSERVATION AT THE CROSS-ROADS: HOW ROADS AND OTHER LINEAR INFRASTRUCTURE INFLUENCE CONSERVATION - SESSION II**

Room: Antigone 3

Thursday, 6 August, 15:30-17:00

ORGANIZER(S): Kylie Soanes and Rodney van der Ree, University of Melbourne; Daniel J Smith, University of Central Florida; and Clara Grilo, Universidade de Aveiro





Roads, railways and utility lines affect huge areas of land, ecosystems and species. While interactions are often complex, there is a large body of literature demonstrating that linear infrastructure and traffic have predominantly negative effects on the environment. These negative effects range from the obvious impact of wildlife mortality, through to the less obvious barrier-to-movement effects, habitat degradation and flow-on effects that occur after roads are built – all of which contribute to the decline of biodiversity. The success of conservation efforts will depend on being able to avoid or mitigate the negative effects of linear infrastructure on the environment. This symposium will showcase how road ecology has matured as a discipline in the last 10 years and identify new directions for the next 10 years and will include 'overview' talks on hot-topics in road ecology, as well as case studies that highlight the unique approaches/tools that have been developed to address road ecology research questions.

- 15:30 **Why remaining road-free matters: The importance of protecting roadless and low-traffic areas for conserving biodiversity under global change**  
*Nuria Selva*
- 15:45 **Linear infrastructure planning at landscape scales: Impacts, costs and collaboration**  
*Jonathan Rhodes*
- 16:00 **The role of roadside habitats for the conservation of biodiversity**  
*Jan Olof Helldin*
- 16:15 **Fish, waterways and roads: The challenges of combining hydrology and dynamic systems with stationary and static infrastructure**  
*Fabrice Ottburg*
- 16:30 **Mitigating the negative effects of roads and traffic on wildlife: How effective are our strategies?**  
*Edgar Alexander Van Der Grift*
- 16:45 **The road ahead: The future of road ecology in a rapidly changing world**  
*Rodney Van Der Ree*

## SYMPOSIUM: USING THE MOVEMENT PATTERNS OF REINTRODUCED ANIMALS TO IMPROVE REINTRODUCTION SUCCESS

Room: Barthez 1

Thursday, 6 August, 15:30-17:00

ORGANIZER(S): *Oded Berger-Tal, UCLA and the San Diego Zoo; Orr Spiegel, University of California, Davis*

Despite being a central part of species conservation and management, reintroductions are still a risky endeavor and on many occasions they fail, highlighting the need for more efficient post-release monitoring techniques. Reintroduced animals go through a unique process in which they are transported from their natal habitat and placed in an unfamiliar landscape, where they must explore their surroundings to gain knowledge in order to survive. According to theory, knowledge gain should be followed by subsequent changes to the animal's behavior, as the animal shifts from the exploration phase to the resource-exploitation phase within established boundaries of a familiar area (e.g., a home range). These changes in behavior should all be manifested in the reintroduced animal's movements, making movement behavior an excellent indicator of reintroduction progress. In this symposium we aim to conceptually and empirically present the monitoring of animals' post-release movement behavior as a simple and easy-to-implement approach that can provide a quantitative indicator to the adjustment of the reintroduced animals to their new habitat and improve reintroduction success within an adaptive management framework.

- 15:30 **Post-release behavioral modifications in reintroduced animals and their importance for conservation**  
*David Saltz*
- 15:45 **The big move: Habitat selection, dispersal and reintroduction**  
*Ronald Swaisgood*
- 16:00 **Behavioral and environmental factors influencing the viability of translocated elk in Ontario**  
*John Fryxell*
- 16:15 **A comparison of soft and hard reintroductions of the critically endangered Wyoming toad (*Anaxyrus baxteri*)**  
*Luke Linhoff*







16:30 **Potential limiting factors of reintroduction success across multiple spatial scales: An example with the Iberian lynx**

*Eloy Revilla*

16:45 **The effects of learning on the movement patterns of reintroduced Persian fallow deer and Arabian oryx**

*Oded Berger-Tal*

**SYMPOSIUM: BIODIVERSITY AND INFECTIOUS DISEASES: A ROLE FOR CONSERVATION BIOLOGY? SESSION II**

Room: Barthez 2

Thursday, 6 August, 15:30-17:00

ORGANIZER(S): *Benjamin Roche, on behalf of the BIODIS CESAB Working Group*

An increasing body of literature addresses the link between biodiversity and infectious diseases. This is especially true for zoonotic diseases (diseases whose etiologic agents are shared between vertebrate animals and humans), which represent 62 to 75% of emerging diseases. Vertebrate diversity is associated with a large pool of pathogens, suggesting the maximum diversity of zoonotic pathogens should be in areas of greatest biodiversity (e.g., the tropics). Nevertheless, emergence of some new diseases and increasing incidence of some endemic diseases have been associated with anthropogenic disturbance and concomitant loss of biodiversity. Recent investigations have supported a protective effect of biodiversity for several vector-borne or directly transmitted zoonoses. Our aim is to explore the mechanisms by which biodiversity, can negatively impact transmission of some pathogens while positively contributing to pathogen diversity, and how this paradox relates to human health. This will include discussion of the direct threat of emerging zoonotic diseases, as well as more indirect effects including the beneficial ecosystem services provided by potentially pathogenic organisms, implications for food safety and security, and how these issues relate to economic consequences, and costs and benefits of preparedness and prevention.

15:30 **Metacommunity theory and infectious diseases: Empirical data at local and broader scales**

*Gerardo Susan*

15:45 **Environmental refugia and connectivity sustain amphibian metapopulations afflicted by disease**

*Geoff Heard*

16:00 **A ticking time bomb? Lyme disease implications for conservationists**

*Holly Donohoe*

16:15 **Conservation at the science-policy interface: Leveraging health connections for a new path**

*Catherine Machalaba*

16:30 **Disease control in wildlife: Evaluating a test and cull programme for bovine tuberculosis in African buffalo**

*Nikki le Roex*

16:45 **Panel discussion**

**ECOLOGICAL RESTORATION**

Room: Joffre 5

Thursday, 6 August, 15:30-17:00

15:30 **Does replanting native trees create a functioning coastal forest?**

*Jacqueline Beggs, University of Auckland; Wallace S., University of Auckland; Gardner-Gee R., Plant & Food Research*

15:45 **Effects of artificial canopy gaps on restoring tree diversity in boreal conservation areas**

*Hannes Pasanen, University of Eastern Finland; Rouvinen S., University of Eastern Finland; Kouki J., University of Eastern Finland*

16:00 **Multi-ecotype mixtures in restoration: A case study on *Elymus glaucus*, a North American bunchgrass**

*Jennifer Balachowski, University of California; Young T., University of California; Rice K., University of California*

16:15 **Environmental flows at work: Restoring floodplain wetlands through return of historical conditions**

*Samantha Dawson, Centre For Ecosystem Sciences, University of New South Wales; Kingsford R.T., Centre For Ecosystem Sciences, University*







of New South Wales; Catford J.A., School Of Biosciences, The University of Melbourne, Fenner School Of Environment And Society, The Australian National University, Department of Ecology, Evolution And Behavior, University of Minnesota; Berney P., National Parks And Wildlife Services, Office Of Environment And Heritage; Keith D., Centre For Ecosystem Sciences, University of New South Wales, New South Wales Office Of Environment And Heritage

- 16:30 **Enhancing reforestation in degraded tropical peatlands**  
**Maija Lampela**, University of Helsinki; Jauhiainen J., University of Helsinki; Vasander H., University of Helsinki

## WILDLIFE TRADE II

Room: Joffre A/B

Thursday, 6 August, 15:30-17:00

- 15:30 **The consumers of ivory and rhino horns**  
**Trang Nguyen**, University of Cambridge
- 15:45 **Extinction risk in animals worth more than their weight in gold**  
**Loren McClenachan**, Colby College; Dulvy N., Simon Fraser University; Cooper A., Simon Fraser University
- 16:00 **A legal trade in horn for improved rhino protection and sustainable development**  
**Enrico Di Minin**, University of Helsinki; Laitila J., University of Helsinki; Montesino-Pouzols F., University of Helsinki; Leader-Williams N., University of Cambridge; Slotow R., University of Kwazulu-Natal; Goodman P., Ezemvelo Kzn Wildlife; Conway A., Ezemvelo Kzn Wildlife; Moilanen A., University of Helsinki
- 16:15 **Perceptions and information on elephant ivory trade in China: Appraisal and recommendations**  
**Yufang Gao**, Yale School Of Forestry & Environmental Studies; Clark S., Yale School Of Forestry & Environmental Studies

- 16:30 **Managing black rhinoceros population recovery in Kwazulu-Natal, South Africa: An assessment of population performance and programme outcomes**  
**Peter Goodman**, Wildlife Conservation Soutions; Conway A., Ezemvelo Kzn Wildlife; Flamand J., WWF

## CONSERVATION GENETICS III

Room: Joffre C/D

Thursday, 6 August, 15:30-17:00

- 15:30 **New prospects for standardized microsatellite genotyping using high throughput sequencing**  
**Marta De Barba**, Univ. Joseph Fourier; Miquel C., Univ. Joseph Fourier; Lobreaux S., Univ. Joseph Fourier; Boyer F., Univ. Joseph Fourier; Swenson J., Norwegian University of Life Sciences, Ås, Norway; Taberlet P., Univ. Joseph Fourier
- 15:45 **The legal background and genetic conflict of preserving wall lizards in central Europe**  
**Axel Hochkirch**, Trier University; Beninde J., Trier University; Schulte U., Trier University
- 16:00 **Using eco-evolutionary individual-based models to investigate spatially-dependent processes in conservation genetics**  
**Jennifer Day**, University of Washington; Schumaker N., US Environmental Protection Agency
- 16:15 **Population genomics of the invasive lionfish, *Pterois volitans*: Impacts of drift and selection on genetic diversity during rapid range expansions**  
**Eleanor Bors**, Woods Hole Oceanographic Insitution; Morris Jr. J.A., National Oceanic And Atmospheric Association; Schultz T.F., Duke Univserity Marine Lab; Shank T.M., Woods Hole Oceanographic Insitution
- 16:30 **Wild populations and protection of dispersal corridors are vital for the conservation of genetic diversity and gene flow in North African Dorcas gazelle**  
**Teresa L Silva**, CIBIO/INBIO, Centro De Investigação Em Biodiversidade E Recursos Genéticos, Campus Agrário De Vairão, Departamento De Biologia, Faculdade De Ciências, Universidade Do Porto, Rua Do Campo Alegre S/N, Estación Experimental De Zonas Áridas (EEZA), CSIC, Carretera De Sacramento





*S/N; Abáigar T., Estación Experimental De Zonas Áridas (EEZA), CSIC, Carretera De Sacramento S/N; Godinho R., CIBIO/INBIO, Centro De Investigação Em Biodiversidade E Recursos Genéticos, Campus Agrário De Vairão, Departamento De Biologia, Faculdade De Ciências, Universidade Do Porto, Rua Do Campo Alegre S/N; Alves P.C., CIBIO/INBIO, Centro De Investigação Em Biodiversidade E Recursos Genéticos, Campus Agrário De Vairão, Departamento De Biologia, Faculdade De Ciências, Universidade Do Porto, Rua Do Campo Alegre S/N, Wildlife Biology Program, University of Montana; Brito J.C., CIBIO/INBIO, Centro De Investigação Em Biodiversidade E Recursos Genéticos, Campus Agrário De Vairão, Departamento De Biologia, Faculdade De Ciências, Universidade Do Porto, Rua Do Campo Alegre S/N*

**SYMPOSIUM: NEW TECHNOLOGIES, DATA COLLECTION METHODS AND MEANS OF ANALYSIS FOR IMPROVING CONSERVATION DECISION MAKING AND OUTCOMES - SESSION II**

Room: Rondelet

Thursday, 6 August, 15:30-17:00

*ORGANIZER(S): Elizabeth Lonsdorf, Franklin and Marshall College; Richard Bergl, North Carolina Zoo*

Recent advances in technology and novel approaches to analysis have drastically increased the availability of data relevant for improving the effectiveness of conservation actions. This symposium will demonstrate the application of a wide variety of new approaches to the collection and application of conservation-relevant data, including examples of where such data have resulted in measurable, positive conservation outcomes. Examples are drawn primarily from primate research and conservation initiatives, but presentations will demonstrate how the methods and tools discussed can be applied in a wide variety of contexts.

**15:30 SMART: A new tool for monitoring and increasing the effectiveness of conservation law enforcement**  
*Richard Bergl*

**15:45 How to make the most of it: Nationwide conservation triage across a West African biodiversity hotspot**  
*Jessica Junker*

**16:00 The Pan African Chimpanzee Programme: Remote video, organic and ecological sampling at 40 temporary research sites across Africa**  
*Mimi Arandjelovic*

**16:15 Forest watcher mobile app: A new tool to inform habitat monitoring and law enforcement**  
*Tanya Birch*

**16:30 Tracking technologies and great ape translocation: challenges and potentials**  
*Tatyana Humle*

**16:45 Panel discussion**

**ENDANGERED SPECIES RECOVERY**

Room: Sully 1

Thursday, 6 August, 15:30-17:00

**15:30 Move it or lose it: A systematic review of the motivations, species, regions, and outcomes of North American conservation translocations**  
*Typhenn Brichieri-Colombi, Calgary Zoological Society; Moehrenschrager A., Calgary Zoological Society*

**15:45 A global assessment of the consideration of genetic factors in threatened species recovery plans**  
*Jennifer Pierson, The Australian National University; Coates D., Flora Conservation And Herbarium Program, Department of Environment And Conservation; Oostermeijer J.G., Institute For Biodiversity And Ecosystem Dynamics, University of Amsterdam*

**16:00 A process for selecting priority species for direct conservation action by the zoological community.**  
*Sandra Elvin, Association Of Zoos And Aquariums; Boyle P., Association Of Zoos And Aquariums*

**16:15 Formalized conservation strategies to arrest and reverse rapid declines and range contractions of two endangered endemic passerines on Kauai, Hawaii**





*Lisa Crampton, Hawaii Division Of Forestry And Wildlife; Paxton E.H., United States Geological Survey; Behnke L., The Nature Conservancy; Vetter J., Hawaii Division Of Forestry And Wildlife; Laut M., Us Fish And Wildlife Service; Pejchar L., Colorado State University; Morey S., Us Fish And Wildlife Service*

**16:30 Jaguars in the greater Lacandona Ecosystem, Mexico: Conservation strategy and long term monitoring.**

*Valeria Towns, National Autonomus University of Mexico; De La Torre A., National Autonomus University of Mexico; Medellin R., National Autonomus University of Mexico*

**16:45 A strategic action plan for conservation and management of the last surviving population of Morocco's Dorcas gazelle, *Gazella dorcas massaesyla* (Bovidae: Antilopinae) in M'sabih Talaa Reserve, West Central Morocco**

*Mohammed Znari, Cadi Ayyad University, Faculty Of Science-Semlalia; Ait Baamrane M.A., Cadi Ayyad University, Faculty Of Science-Semlalia; Naimi M., Cadi Ayyad University, Faculty Of Science-Semlalia; El Mercht S., Regional Center Of Forestry Research; Loggers C., United States Forest Service, Colville National Forest, Washington*

**17:00 Recovering the last wild blue-throated macaws**

*Igor Berkunsky, Universidad Nacional Del Centro De La Provincia De Buenos Aires; Kacolis F.P., Universidad Nacional De La Plata; Daniele G., Universidad Nacional De La Plata; Aramburú R.M., Universidad Nacional De La Plata*

## CONSERVATION POLICY AND ETHICS II

Room: Sully 2

Thursday, 6 August, 15:30-17:00

**15:30 Evaluating conservation planning success: Addressing the societal and governance factors behind effective conservation actions**  
*Emma McIntosh, University of Oxford*

**15:45 Mental modeler: Incorporating scientific and local expertise into conservation planning through a fuzzy-logic cognitive mapping software tool**  
*Steven Gray, University of Massachusetts*

**16:00 The network of knowledge approach - Managing the complexities of knowledge integration across scales and knowledge domains**

*Marie Vandewalle, Neßhöver C., Helmholtz Centre For Environmental Research - Ufz; Vandewalle M., Helmholtz Centre For Environmental Research - Ufz; Geijzendorffer I., IMBE; Görg C., Helmholtz Centre For Environmental Research - Ufz; Jongman R., Alterra; Livoreil B., FRB; Schindler S., Univie; Santamaria L., CSIC; Settele J., Helmholtz Centre For Environmental Research - Ufz; Sousa Pinto I., Ciimar; Torok K., Hungarian Academy Of Science; Van Dijk J., Nina; Wittmer H., Helmholtz Centre For Environmental Research - Ufz; Young J., CEH*

**16:15 Carnivore management in western-Canada: Perceptions of a lethal management paradigm**

*Victoria Lukasik, University of Calgary; Alexander S.M., University of Calgary*

**16:30 A closer look at Brazil's forest code: Assessing the new law impacts**

*Thaís Nícia Azevedo, Earthwatch Institute; Giorgi A.P., Earthwatch Institute; Costa K., Usp; Mills M., University of Queensland*

**16:35 Anti-birds netting in fish ponds: Assessing the advantages for fisheries versus damage for birds**

*Gilad Ben Zvi, Ben Gurion University; Leshem Y., Tel Aviv University; Yom-Tov Y., Tel Aviv University*

**16:40 Dolphins and fisheries: Can they co-exist?**

*Gopal Khanal, Tribhuvan University; Behera S.K., National Mission For Clean Ganga; Awasthi K.D., Tribhuvan University; Lewis J., Tropical Dolphin Research Foundation*

**16:45 Experiences of stakeholder engagement in policy-driven research: a systematic review perspective**

*Sif Johansson, Mistra Eviem; Haddaway N., Mistra Eviem; Bernes C., Mistra Eviem; Land M., Mistra Eviem; Lönnstedt O., Mistra Eviem; Miljand M., Mistra Eviem; Svensson M., Swedish Agency For Marine And Water Management; Zetterberg H., Mistra Eviem*





## MISCELLANEOUS TOPICS IV

Room: Sully 3

Thursday, 6 August, 15:30-17:00

- 15:30 **Is my species distribution model fit for purpose? Matching data and models to applications**  
*Jose Lahoz-Monfort*
- 15:45 **Can protected areas mitigate climate change impacts on species and communities?**  
*Pierre Gaüzère*
- 16:00 **Landscape relatedness: Insights into contemporary spatial structure of a top predator**  
*Anita J. Norman*
- 16:15 **High plant and arthropod diversity in grassland and savanna field margin habitats of South Africa**  
*Monique Botha*
- 16:30 **Is bigger better? Understanding the efficiency of expanding protected areas**  
*Laurel Fink*



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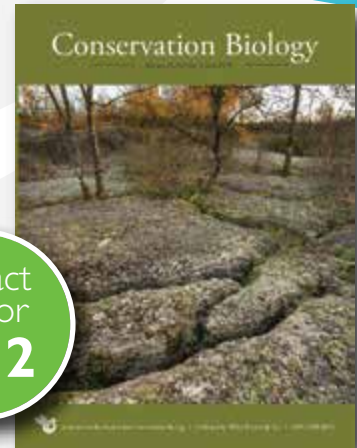
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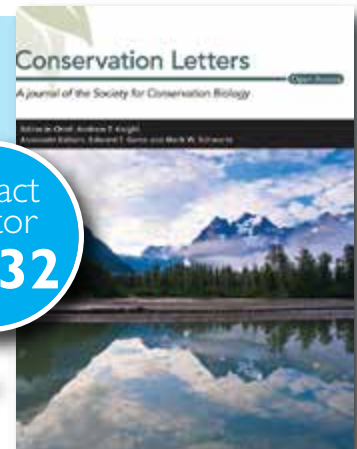
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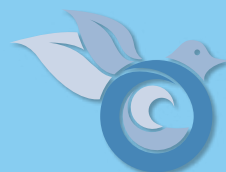
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