

Marine Mammal Conservation and Management ENV-272

Fall 2005

Tuesday & Thursday 12:00 PM – 1:15 PM
Pfahler 209

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Office hours: Mondays *by appointment*

Tuesdays 2:00pm – 4:00pm

Wednesdays 10:00am – 12:00pm

Overview and Course Objectives

The objectives of this course are to introduce you to historical and current issues concerning the conservation and management of marine mammals, including whales, dolphins, seals, sea lions, manatees, and sea otters, among others. We will explore the relationships between people and marine mammals throughout history and especially focus on the changing trends in the past century. We will read about and discuss some of the most significant and controversial issues in human-marine mammal interactions, including whaling, marine mammal-fisheries interactions, public display, and marine mammal-based tourism (such as whale watching). We will look at marine mammal issues from multiple perspectives, including biology and ecology, policy, economics, and ethics. We will discuss in some detail the trends in each of these areas – how marine mammals have fared over time, how our sense of the moral standing of marine mammals has changed over time, and what policy arenas have developed around marine mammals – on both the national and international scale.

In its essence, this is designed to be a fun class that challenges you to think, speak, and write about human-wildlife relationships. If it works as I hope it will the class should leave you with knowledge and perspectives that are new to you – that is, knowledge as well as ways of thinking about nature that will help you consider more broadly not only marine mammals, but the environment in its totality. I hope that you will bring your interests and expertise to bear on the class so that we can explore these issues together as fully as possible.

Readings

There are two textbooks for this class. They are:

Richard Ellis. 1991. *Men & whales*. The Lyons Press, New York.

John R. Twiss, Jr. and Randall R. Reeves. 1999. *Conservation and management of marine mammals*. Smithsonian Institution Press, Washington, D.C.

The Twiss and Reeves book is available in the bookstore.

I apologize for the gender-biased title of the whaling book; it's the best book of its kind. There are seven copies of it on reserve in the library, and I would like you to read from those copies, unless you want to purchase your own, in which case there are many inexpensive used copies available on Amazon.com, Half.com, and Booksfinder.com. The first reading for this book is due in a week and a half, so if you want to buy it and have it in time, you should act quickly.

There are also supplemental readings that are required, and which are listed by their author and title in the schedule below. I will make these readings available to you electronically either on a shared Ursinus network drive or by e-mail.

Evaluation

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| Class participation | 20% |
| Thought papers and short assignments | 20% |
| Analytical paper | 20% |
| Mid-term exam | 20% |
| Final exam | 20% |

Class participation. Attendance and active participation in class discussions are mandatory. As you may or may not be aware, there is a new attendance policy at Ursinus, as of spring 2005. It reads as follows:

In keeping with a strong liberal arts tradition that encourages active learning and complete participation in the education process, the college expects students to attend class. Specific attendance policies are set by individual instructors and indicated on the course syllabus at the beginning of each term. Warning slips will be issued by instructors for all students failing to meet the stated course attendance policies. Excessive absences by first year students and students on academic probation will be reported to the Dean's office. Students may be dropped from a course with a grade of F for failing to meet the stated policy.

In this class I will allow **two** unexcused absences without penalty. An excused absence is one about which you have contacted me prior to the class you will miss and/or have what in my view is a compelling reason to miss class. Although what constitutes an excused absence is a relative thing, I am the final arbiter of what is excusable and what is not. While I cannot describe for you every type of absence that is excusable, I can promise that I will be consistent in my definitions. Any unexcused absences beyond the allowable number of two will affect your final grade for the class. How your absences affect your final grade is also a relative thing: those who demonstrate less commitment to the class will suffer greater penalty than those who demonstrate a greater commitment to the class. This commitment is illustrated by your interest in preparing for class, meeting deadlines, doing what is asked of you by me and your classmates, and your interest in participating in class discussions.

And speaking of: we should have many active discussions in this class. It is up to you to participate in discussions, and I hope that you will. The more active your participation in class discussions is, the more fulfilling those discussions will be. I will sometimes call on people who are not speaking up very much, but if you choose never to speak in class and I do not call on you, it will still negatively affect your class participation grade. Taking part in class discussions can be a challenge, but it is always rewarding for me to hear from you, so please speak up! Please note that I believe that oral participation is a relative thing. It's a fact of life that some folks love to talk and some do not. If your personality is such that you never speak in class, now is the time to work on it, and I will reward even small steps toward conquering your aversion to being in the spotlight. But this means that even the quietest among you must contribute to discussions to receive a full class participation grade.

Thought papers. I will assign a number of short (2-5 page) papers corresponding to topics we will be covering. The goals for the short papers are to give you the opportunity to exercise your brain around the topics and ideas we will read about and discuss in class, make sure that you are grasping the concepts we discuss, and help you improve your writing skills. I will evaluate your papers on the basis of both form (how well you write) and content (how well you address the assigned topic).

Short assignments. I will also assign a number of short projects which some or all of you will have to do for a specified class. I will provide more details about these in class, but they may include simple internet research and presentations, leading discussion, holding a debate, and other activities.

Analytical paper. There will be one research paper for the semester, due near the end of the semester. This paper is on an open topic of your choice, but you must prepare a topic proposal that includes some preliminary research and citations to indicate that it is a suitable topic. The proposal is due Sept. 15th. Look over the syllabus for interesting topics or e-mail me with your general ideas or interests and I'll help you find a topic.

Exams. There will be two exams: a mid-term and a final. The final will be at least in part comprehensive. Both exams will be mixed-format, probably consisting of identifications, short answers, and essays.

Course Schedule

| Date | Subject | Assignment |
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| T 8/30 | Welcome to Marine Mammal Conservation and Management | |
| TH 9/1 | Introduction to marine mammal conservation and management and attitudes about marine mammals | Norris, "Marine mammals and man" Anderson, "Marine mammals in the next one hundred years: twilight for a Pleistocene megafauna?" Marsh et al., "Strategies for conserving marine mammals" <i>First thought paper due</i> |

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| T 9/6 | Attitudes about marine mammals (yours, mine, society's) | Twiss and Reeves, chapter 2 (Lavigne et al.) |
| TH 9/8 | Early whaling | Ellis, pp. 1-71 |
| T 9/13 | Coastal whaling and the sperm whale fishery | Ellis, pp. 80-168 |
| TH 9/15 | Toward modern whaling | Ellis, pp. 223-247 and 255-271 <i>Research paper topic proposal due</i> |
| T 9/20 | Aboriginal whaling | Ellis, pp. 272-298 Twiss and Reeves, chapter 8 (Gambell) |
| TH 9/22 | The international regulation of whaling | Ellis, pp. 386-395 Burns and Wadsworth-Smith, "The International Whaling Commission and the future of cetaceans in a changing world" The IWC web site: http://www.iwcoffice.org/ |
| T 9/27 | Whales and climate change | Root and Schneider, "Climate change: overview and implications for wildlife" Würsig, et al., "Global climate change and marine mammals" Ono, "The effects of climate change on marine mammals in the far north" |
| TH 9/29 | <i>Class does not meet at regular time; instead please attend these special sessions with climate change guru Stephen Schneider:</i> 4:30pm – informal discussion, location TBA 7:30pm – "The Truth about Climate Change" in Olin Auditorium | Schneider, "Earth systems engineering and management" Other readings TBA |
| Sunday 10/2 | <i>Field Trip: Whale and dolphin watching cruise from Cape May, NJ</i> | |
| T 10/4 | The international regulation of whaling, continued | <i>Second thought paper due</i> |
| TH 10/6 | Modern whaling | Ellis, pp. 395-430, 450-456, 469-502 |
| T 10/11 | Modern whaling, continued: The anti-whaling movement, Greenpeace and the Humane Society | Ellis, pp. 434-450 Stroud, "The ethics and politics of whaling" Morton, "Whaling: when is enough, enough?" Aron, et al., "The whaling issue" Brooke, "An environmentalist who loves to eat whales" HSUS whaling web site: http://www.hsus.org/marine_mammals/what_are_the_issues/whaling/ |

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| | | <i>Research on radicals due</i> |
| TH 10/13 | TBA | |
| T 10/18 | No Class – Fall Break | |
| TH 10/20 | The gray whale: bridging consumptive and non-consumptive uses | Ellis, pp. 464-469 Dedina, “The natural history and human exploitation of the gray whale” and “The battle over San Ignacio Lagoon” <i>Third thought paper due</i> |
| T 10/25 | Whale watching and other “non-consumptive” uses of marine mammals | Barstow, “Non-consumptive utilization of whales” Tilt, “Whalewatching comes of age” Corkeron, “Whale watching, iconography, and marine conservation” Hoyt, “Whale watching 2001 Executive Summary” (for full report, see http://www.ifaw.org/data/573_0.pdf) |
| TH 10/27 | Marine mammal conservation in the U.S. | Twiss and Reeves, chapter 3 (Baur et al.) The Marine Mammal Protection Act: http://www.nmfs.noaa.gov/pr/laws/mmpa.htm Read and Wade, “Status of marine mammals in the United States” |
| T 11/1 | Marine mammal conservation in the U.S., continued | Wallace, “Social influences on conservation: lessons from U.S. recovery programs for marine mammals” <i>Fourth thought paper due</i> |
| TH 11/3 | The Makah whale hunt | Chivers, “A big game” Christie, “The Makah whale hunt – a Pandora’s Box?” Russell, “Tribal tradition and the spirit of trust” Aradanas, “Aboriginal whaling – biological diversity meets cultural diversity” Good, if pro-Makah, history of the case: http://www.cnie.org/NAE/cases/makah/ Official Makah web site: http://www.makah.com/whaling.htm |
| T 11/8 | The Makah whale hunt debate | <i>Debate assignment due and fifth thought paper due</i> |
| TH 11/10 | Marine mammal-fisheries interactions: an introduction | Twiss and Reeves, chapter 5 (Northridge and Hofman) DeMaster, et al., “Predation and competition: the impact of fisheries on marine mammal populations over the next one hundred years” |

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| | | Read, “Incidental catches of small cetaceans” |
| T 11/15 | The tuna-dolphin controversy | Twiss and Reeves, chapter 6 (Gosliner) Marquis, “Ruling favors tuna fisheries” and “Rule weakening definition of ‘dolphin safe’ is delayed” |
| TH 11/17 | More fisheries conflicts: (1) otters and shellfish and (2) seals, sea lions, and salmon | Scheffer, “Sea otters or shellfish: a choice” Twiss and Reeves, chapter 7 (Fraker and Mate) |
| T 11/22 | The Hawaiian monk seal | Twiss and Reeves, chapters 10 (Ragen and Lavigne) and 11 (Lavigne) |
| TH 11/24 | <i>No Class – Thanksgiving!</i> | |
| T 11/29 | The Florida manatee | Twiss and Reeves, chapter 12 (Reynolds) Reynolds and Laist, “Florida manatees, warm-water refuges, and an uncertain future” |
| TH 12/1 | The northern right whale | Twiss and Reeves, chapter 14 (Katona and Kraus) Knowlton and Kraus, “Mortality and serious injury of northern right whales (<i>Eubalaena glacialis</i>) in the western North Atlantic Ocean” Kraus et al., “Northern right whales in crisis” NPR Radio report on right whales: http://www.npr.org/templates/story/story.php?storyId=4658917 |
| T 12/6 | Marine mammal conservation: guiding principles | Twiss and Reeves, chapters 15 (Domning) and 20 (Meffe et al.) |
| TH 12/8 | Wrap-up and exam review | <i>Analytical paper due</i> |
| T 12/13 | <i>Final Exam 9:00 a.m. – 12:00 p.m.</i> | |