

## DIET, HEALTH, AND CONSERVATION

A Proposal for a New Society for Conservation Biology Working Group

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Food availability, its production and distribution, and diet choices have profound impacts on our environment and health. The United Nation's Food and Agriculture Organization reported in 2006 "the livestock sector is by far the single largest anthropogenic use of land... livestock production accounts for 70% of all agricultural land, and 30% of the land surface of the planet." Its impacts on atmosphere, biodiversity, and climate are quantified globally. By 2008 over 400 coastal dead zones were reported in global waters with fertilizer runoff being a causative factor (Diaz *et al.*, 2008). We lost about 8,000,000 hectares per year of tropical forest between 1990 and 2010 (Achard et al., 2014); forest conversion to cattle pasture is a primary driver of this causing an estimated 17% loss of Amazon forest in the last 50 years (WWF, 2015). Meanwhile, children born today will have a shorter lifespan than their parents due to diet-related disease (Physician's Committee for Responsible Medicine, 2014). In the United States, only 24% of its population consumed recommended amounts of fruit, and only 13% of vegetables, between 2007-2010 (Moore and Thompson, 2015). Nearly 35% of American adults are obese (Ogden *et al.*, 2014).

Global population continues to climb as does per capita consumption of protein, particularly protein supplied from livestock in developing areas of Asia (FAO, 2006). NASA reports the global concentration of atmospheric CO<sub>2</sub> now reaches 400 ppm for the first time in recorded history (2015). The current Sixth Mass Extinction is common industry-speak— We are reaching our tipping point.

During this critical time, **diet, health, and conservation** is a powerful nexus of connected issues summoning collaboration across disciplines. I seek to form a SCB working group of committed members representing these various specialties throughout academia and professional sectors (recruiting representation where needed). We will dialogue, meet, and work creatively in a structured and accountable context for biodiversity conservation and sustainability. I hope to promote resonance across our disciplines, to stimulate research, knowledge-sharing, and dissemination and outreach to various audiences using a unified, multi-disciplinary voice. My ultimate intent is to positively influence cultural behavior by 1) empowering individuals with rigorous, broad-based knowledge so a person, their families, social circles, and societies can make informed diet and lifestyle choices, better understanding the scope of their individual and collective decisions including health impacts and environmental externalities; and 2) empowering students and professionals of these disciplines to approach their work in a more informed way, and to produce deliverables with broader, more overtly communicated application.

Please contact Christa Rose at ChristaRose.NSS@gmail.com if you are interested in working with me to found the new Diet, Health, and Conservation working group to ultimately serve SCB's mission: *advance the science and practice of conserving the Earth's biological diversity*. Thank you!