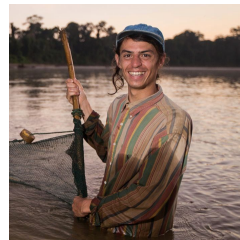




# Integrating food webs and food security: biodiversity, inland fisheries and human nutrition.

**Abstract:** Thousands of studies have shown that biodiversity has a positive influence on the magnitude and stability of ecosystem functions and motivate utilitarian concerns associated with the current extinction crisis. Few studies, however, have actually linked biodiversity loss to services that directly affect human well-being. Inland fisheries provide over 150 million people worldwide with nutrients essential to health (e.g., protein, fatty-acids, calcium, iron, zinc), but are increasingly threatened by hydropower development and overfishing. This talk will show how these anthropogenic changes are affecting freshwater biodiversity and nutritional outcomes in the Amazon. First, I'll present evidence for an overexploitation signature on fish biodiversity across the basin. Second, I'll show how these directional changes in biodiversity influence nutrient supplies available for people. Third, I'll discuss the potential for farmed animals, particularly chicken and aquaculture, to compensate for declines in nutrients derived from wild fish. Finally, I'll conclude by expanding on the environmental costs of increasing aquaculture

and poultry production in the Amazon, and how these results could apply globally. Ultimately, this talk will demonstrate that beyond biomass production, fisheries management and public health policy need to consider the vital role of biodiversity in sustaining the nutritional benefits people derive from fisheries.



Featuring

**Dr. Sebastian Heilpern**  
Presidential Postdoctoral  
Fellow  
Dept. of Natural Resources  
Cornell University

**3:00 p.m. Friday, November 13<sup>th</sup>, 2020**

**Remote Session via Zoom:**

<https://fiu.zoom.us/j/95135104846>

This event is free and open to the public

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