

CURRICULUM VITAE

SEBASTIAN A. HEILPERN

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EDUCATION

2015 - 2020: **Ph.D Student, Columbia University.** Ecology, Evolution & Environmental Biology. Advisor: Dr. Shahid Naeem

2012 - 2015: **M.Sc., University of Chicago.** Ecology & Evolution. Advisor: Dr. Tim Wootton. Thesis title: "Cross-ecosystem exchanges of process catalyzers: The role of large woody debris in tropical floodplain river food web dynamics"

2007 - 2010: **B.S. Magna Cum Laude** with distinction in Research, **Cornell University.** Biology, concentration in Ecology & Evolutionary Biology. Advisor: Dr. Alex Flecker. Honors thesis: "The impacts of non-native grazers on community structure: Changes in macroinvertebrate communities in response to armored catfish (Siluriformes: Loricariidae) invasion"

RESEARCH POSITIONS

2013 – 2015: **Young Explorer**, National Geographic Society

- Project title: "Ecosystem engineering by a migratory grazer: Can habitat alteration influence aquatic-terrestrial subsidies?"

2012 – 2015: **Department of Education GAANN Fellow in Quantitative Ecology**, University of Chicago

- Conducting dissertation research to understand how aquatic and terrestrial ecosystems are linked, and how anthropogenic activities may alter this relationship

2010: **National Science Foundation REU Fellow**, School of Marine and Atmospheric Sciences at SUNY Stony Brook

- Researched the effects of temperature on the short-term ability of marine fish species to cope with a warming climate
- Maintained daily animal care and participated in an ichthyology survey in Bimini, Bahamas

2008 - 2010: **Research Assistant**, Alex Flecker, Cornell University

- Investigated the long-term effects of agriculture on stream ecosystems in upstate NY
- Interfaced with landowners to gain access to private land to survey biological communities

2008: **Research Assistant**, Krista Capps, Cornell University

- Conducted research for my honors thesis on the impacts armored catfish invasion on ecosystem and community processes in the Usumacinta River Basin, Mexico
- Collaborated with Mexican landowners and academics to collect data on aquatic biological communities

2007: **Research Assistant**, Alison Power, Cornell University

- Project consisted of conducting a meta-analysis on the influence of landscape matrix on insect communities in agricultural fields

PROFESSIONAL EXPERIENCE

2010 - 2012: **Program Officer, Latin America and Caribbean Program**, Wildlife Conservation Society

- Coordinated and supported writing and revising grants, reports, newsletters, media outreach strategies and website content, and project implementation and strategic planning
- Supported management and administrative tasks related to the program's multi-million dollar budget

2008 - 2010: **Compost Manager**, Watermargin Cooperative

- Oversaw daily organic waste disposal at an approximately 30 people household
- Conducted outreach activities on composting for the cooperative and community at large

2006 - 2007: **Greenhouse Manager**, Hamilton College

- Oversaw daily maintenance of plant research facilities

2005 - 2006: **Inside View Program Fellow**, American Museum of Natural History

- Set up and contributed to the daily maintenance of the Museum's butterfly exhibit
- Communicated with and guided visitors through the exhibit

GRANTS, FELLOWSHIPS AND AWARDS

Grants

2013: National Geographic Society Young Explorer's Grant, \$4,200

2013: Center for Latin American Studies Travel Grant, University of Chicago, \$2,200

2009: Morely Student Research Award, Cornell University, \$1,500

2008: Latin America Studies Program Travel Grant, Cornell University, \$1,200

2008: Dextra Undergraduate Research Fund, Cornell University, \$1,500

2007: Dextra Undergraduate Research Fund, Cornell University, \$1,500

Fellowships

2015: Dean's Diversity Fellowship, Columbia University

2014: IIE Fulbright Fellowship, Peru (*rejected*)

2012 - 2015: Department of Education GAANN in Quantitative Ecology Fellow, University of Chicago

2013: Pilot Research Fellowship, Organization for Tropical Studies

2010: National Science Foundation, REU Fellow, SoMAS SUNY Stony Brook

Awards

2014 – 2016: AAAS/Science Program for Excellence in Science

2013: 3rd place, National Science Innovation in Graduate Education Challenge (Team leader: S.A. Heilpern; with C. Stepien, C. Kyle, B. Krinsky, and R. Arthur)

TEACHING

Teaching Assistantships

2014: *Animal Behavior*, S. Pruett-Jones, University of Chicago

2013: *Tropical Ecology: Biodiversity and Human Impacts*, E. Larsen, University of Chicago

2010: *International Conservation and Development: Communities and the Management of Natural Resources*, J. Lassoie, Cornell University

Guest Lecturer

2013: Field Techniques and Tropical Ecology, Cocha Cashu Biological Station

SERVICE

Peer Reviewer for Conservation Biology

Member: Society for Conservation Biology, Ecological Society of America, Association for Tropical Biology, AAAS

2013 – 2015: Ecology and Evolution Graduate Student Representative, University of Chicago
2012 - 2015: Department Organizer, Graduate Students United, University of Chicago
2012 - 2015: Board Member, Multicultural Graduate Community, University of Chicago

PUBLICATIONS

Heilpern, S.A., and J.T. Wootton. *In prep.* Cross-ecosystem exchange of process catalyzers in Amazonian Floodplain river systems: understanding the role of large woody debris using experiments, observations and path analysis.

Pitman, N., C. Vriesendorp, D. Alvira, J.A. Markel, M. Johnston, E. Ruelas Inzunza, A. Lancha Pizango, G. Sarmiento Valenzuela, P. Álvarez-Loayza, J. Homan, T. Wachter, Á. del Campo, D.F. Stotz y/and **S.A. Heilpern**. 2014. *Perú: Cordillera Escalera-Loreto*. Rapid Biological Inventories Report 26. The Field Museum of Natural History, Chicago. 396 Pages.

Heilpern, S.A. 2015. Biodiversity: Include freshwater species. *Nature* 518: 167.

Pitman, N., C. Vriesendorp, D. Alvira, J.A. Markel, M. Johnston, E. Ruelas Inzunza, A. Lancha Pizango, G. Sarmiento Valenzuela, P. Álvarez-Loayza, J. Homan, T. Wachter, Á. del Campo, D.F. Stotz y/and **S.A. Heilpern**. 2014. *Perú: Cordillera Escalera-Loreto*. Rapid Biological Inventories Report 26. The Field Museum of Natural History, Chicago. 396 Pages.

Capps, K. A. , L. G. Nico, M. Mendoza Carranza, W. Arevalo-Frias, A. J. Ropicki, **S.A. Heilpern**, R. Rodiles-Hernandez. 2011. Salinity tolerance of the exotic armored catfish (Siluriformes: Lorcaridae) in southern Mexico: potential new pathways for invasion. *Aquatic Conservation: Marine and Freshwater Ecosystems* 21: 528-540.

PRESENTATIONS

Heilpern, S.A. 2016 Protected areas and food security in Loreto, Peru, Servicio Nacional de Areas Protegidas, Iquitos, Peru.

Heilpern, S.A and T. Wootton. 2016. Disentangling the ecosystem consequences of deforestation and overfishing in a lowland Amazonian floodplain river system, Annual Princeton, Penn, Rutgers and Columbia Conference, Philadelphia, PA

Heilpern, S.A. Disentangling the ecosystem consequences of deforestation and overfishing in a lowland Amazonian floodplain river system, Cocha Cashu Biological Station, Peru.

Capps, K.,**S.A. Heilpern**, G. Ng, A. Fortman, R. Rodiles-Hernandez, and A.S. Flecker. 2009. Non-native grazers in novel environments: Consequences of introduced armored catfish in stream ecosystems. The Ecological Society of America, Austin, Texas.

ADDITIONAL TRAINING

2013: "Tropical Biology: An Ecological Approach", Organization for Tropical Studies

2013: "Neotropical Ecology and Conservation", Organization for Tropical Studies

2013: "Teaching Assistant Training", University of Chicago