

Holly Jones, Ph.D.
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Education History

Ph.D. (Forestry & Environmental Studies) – Yale University (2010)
Committee: Oswald Schmitz, David Post, Peter Raymond, and David Towns
M.Ph. (Forestry & Environmental Studies) – Yale University (2007)
B.Sc. (Ecology & Evolutionary Biology/Marine Biology) – University of California, Santa Cruz (2003)

Awards and Honors

National Science Foundation Doctoral Dissertation Enhancement Project Grant (2009)
National Geographic Committee for Research Exploration Grant (2008)
Leopold Schepp Foundation Fellow (2006, 2007)
Sophie Danforth Conservation Biology Fund (2007)
Yale Institute for Biospheric Studies Pilot Grant (2006)
American Philosophical Society Lewis and Clark Exploration Grant (2006, 2007)
Honorable Mention – National Science Foundation Pre-doctoral Fellowship (2005, 2006, 2007)

Publications

Peer reviewed journal articles

Jones, H.P. and Kress, S.W. 2012. Global review of active seabird restoration projects. *Journal of Wildlife Management*, in press. Featured on the journal cover.
Jones, H.P. 2010. Seabird islands take mere decades to recover following rat eradication. *Ecological Applications* 20(8): 2075-2080. Featured on the journal cover.
Jones, H.P. 2010. Prognosis for ecosystem recovery following rodent eradication and seabird restoration in an island archipelago. *Ecological Applications* 20(5):1204-1216. Reviewed on Faculty 1000.
Jones, H.P. and O.J. Schmitz. 2009. Rapid recovery of damaged ecosystems. *PLoS ONE* 4(5): e5653. doi:10.1371/journal.pone.0005653. Featured on NPR, in *The Economist Magazine*, Faculty 1000 and Nature Research Highlights.
Jones, H.P., B.R. Tershy, E.S. Zavaleta, D.A. Croll, B.S. Keitt, and M.E. Finkelstein. 2008. Severity of the effects of invasive rats on seabirds: A global review. *Conservation Biology* 22(1): 16-26. Featured on the journal cover.
Jones, H.P., R.W. Henry III, G.R. Howald, B.R. Tershy, and D.A. Croll (2005). Predation of artificial Xantus's Murrelet nests before and after black rat eradication. *Environmental Conservation* 32(4): 320-325.

Peer reviewed book chapters

Jones, H.P. The impact of ecological restoration on ecosystem services. In preparation for 2013 release. In S. Levin, editor. *The Encyclopedia of Biodiversity*, 2nd Edition.
Jones, H.P., D.R. Towns, T. Bodey, C.M. Miskelly, J. Ellis, M.J. Rauzon, S.W. Kress, and M. McKown. 2011. Chapter 11: Recovery and restoration on seabird islands in C.P.H. Mulder, D.R. Towns, W.B. Anderson, and P.J. Bellingham, editors. *Seabird Islands: Ecology, Invasion, and Restoration*. Oxford University Press, Oxford.

Towns, D.R., G.V. Byrd, H.P. Jones, M.J. Rauzon, J.C. Russell and C. Wilcox. 2011. Chapter 3: Impacts of introduced predators on seabirds in C.P.H. Mulder, D.R. Towns, W.B. Anderson, and P.J. Bellingham, editors. *Seabird Islands: Ecology, Invasion, and Restoration*. Oxford University Press, Oxford.

Schmitz, O.J., H. P. Jones and B.T. Barton (2007). Scavengers. *Encyclopedia of Ecology*. Elsevier, UK.

Manuscripts in Revision

Jones, H.P., D. Hole, and E.S. Zavaleta. Harnessing nature to help people adapt to climate change. In revision at *Nature Climate Change*.

Submitted Manuscripts

Kappes, P. and H.P. Jones. Restoring island ecosystems: Is eradication enough or can we do more? Submitted to *Restoration Ecology*.

Manuscripts in Preparation

Jones, H.P. and C. Miskelly. Population demography of a restored population of diving petrels (*Pelecanoides urinatrix*) and the concomitant ecosystem restoration on Mana Island following rodent eradication. For *Notornis*.

Gaddis, J., T.E. Graedel, G. Grant, H. P. Jones, L. Robb, O.J. Schmitz, K. Seto, and K. Hébert. Linkages of sustainability: Education in complexity. For *Solutions*.

Professional Experience

Ecosystem Recovery and Resilience Consultant, The Nature Conservancy (TNC) and UC Santa Cruz (January 2011 - current)

I am working with Peter Kareiva of TNC, Erika Zavaleta at UCSC, and Michelle Marvier at Santa Clara University to examine the role of active restoration in ecosystem recovery rates using both meta-analysis and modeling. This is an extension of the database of ecosystem recovery that I already published and will be used to provide a scientific understanding of where TNC should focus their restoration efforts.

Ecosystem-based Adaptation Consultant, Conservation International and UC Santa Cruz (current)

I am working with Conservation International and Erika Zavaleta at UCSC to develop a global prioritization strategy for funding their Ecosystem-based Adaptation (EbA) projects to better help people adapt to climate change. This consists of compiling a large database of existing projects, comparing their effectiveness and costs with hard engineered solutions, and writing a policy perspective manuscript with an overview of global EbA strategies. We are using spatial mapping to identify the areas that are most exposed to climate-induced adverse effects, the people that are most susceptible to those effects, and the adaptive capacity of people to cope with climate-induced stressors.

Ph.D. Candidate, Yale University; (2005-2010)

My dissertation looked at island ecosystem recovery following invasive rodent removal on offshore islands in New Zealand. It linked ecosystem resilience theory with on-the-ground conservation actions to ask the question of whether restoration actions have been successful in New Zealand.

Field Technician / Field Leader / Research Biologist, Island Conservation (IC); (July 2002-August 2005)

I was hired to manage IC's photo database and library but was quickly promoted to logistics manager and field technician for the Anacapa Island Restoration Project. After a year as a field

technician, I was promoted to field leader and supervised field crews. In addition to fieldwork, I worked with the National Park Service (NPS) to design a plan for preventing the introduction of invasive species to the Channel Islands. I also worked in the Farallon Islands, California to assess the feasibility of mouse eradication. With colleagues from IC, I have been co-author on various environmental policy documents such as Environmental Assessments, Environmental Impact Statements, and eradication feasibility reports.

Biological Field Technician, U.S. Fish and Wildlife Service – Aleutian Islands Unit; (May 2004-July 2004)

This project aimed to remove invasive Norway rats from various small islands in the Bay of Islands of the Aleutian Island chain as a pilot study for the larger rat eradication that was recently carried out on Rat Island in the Aleutians. As the project was in its beginning stages, I helped design a research strategy and rat removal plan to take advantage of the many islands not only for conservation, but also for ecosystem-scale manipulation studies.

Biological Field Technician, University of Alaska, and New Zealand Department of Conservation; (January 2004-May 2004)

This was a cooperative project funded by NSF and Marsden Grants, resulting in a collaboration of University of Alaska, Landcare Research, and the New Zealand Department of Conservation. It was a large-scale project studying 20 New Zealand islands to investigate the effects of invasive rats on island seabirds, vegetation, and soil nutrient cycling. I developed key contacts while working on this project, which eventually ensured that my doctoral research in New Zealand was a success.

Teaching Experience

Lecturer; The Physical and Chemical Environment; University of California, Santa Cruz (2011). I developed the syllabus and taught this introductory biogeochemistry course for Environmental Studies majors in the summer session at UC Santa Cruz. This course covered all Earth's different "spheres," elemental cycles, climate change, agriculture and the environment, energy issues, coupled-human-natural systems, ecosystem repair and recovery, and sustainability issues.

Teaching Fellow; Ecosystems Patterns and Processes; Yale School of Forestry and Environmental Sciences (2008). Led lab section and organized field trips. Held office hours, helped design exams, graded papers and exams.

Teaching Fellow; Linkages to Sustainability; Yale School of Forestry and Environmental Sciences (2009). This was a new course and a new way of teaching at Yale and I helped design the syllabus, lectured, and taught a section for the course. It consisted of a faculty team comprised of an ecologist, an anthropologist, a geographer, and an engineer sought to encourage interdisciplinary thinking and problem solving. Throughout the course, students were deliberately encouraged to abandon the expectation of the professors and teaching fellows as "providers" and the student as "consumers" of knowledge. We instead challenged students to develop their own conceptual frameworks for engaging in integrative problem-solving, formed on the basis of guiding principles provided through lectures, readings, and discussions. I helped design the ecology component of the syllabus, delivered two course lectures, taught a section, and graded concept assessments and papers. This experimental approach to interdisciplinary teaching was so successful that the school has mandated students take it as part of their core coursework.

Teaching Fellow; Biodiversity Conservation; Yale School of Forestry and Environmental Sciences (2009). This new course was spawned out of my discussions with Master's students

that identified a need for a basic conservation course at Yale. My advisor and I designed the course to meet that need. I helped choose course readings, design the syllabus, and develop the lectures. I gave five of the course lectures on topics ranging from biodiversity to ecosystem resilience. I helped develop the concept assessments and exams and graded all assignments, papers, and exams. I also developed and independently taught the lab component of the course where we covered key conservation applications such as population viability and gap analysis.

Additional Teaching Activities

Undergraduate Mentor (2011)

I mentored students for a UCSC GIS class who did a final project based on my work with CI on Ecosystem-based Adaptation priorities. I helped them pick research questions relevant to their interests and the project's goals and find data to answer their research questions.

SAT Tutor (2006-2009)

Tutored high school students to improve their SAT scores.

High School Science Fair Judge (2008-2009)

Judged Middle and High School science fair projects in New Haven, CT.

Guest Lecturer, Conservation Biology Course, Victoria University, Wellington (2008, 2009)

"Evaluating ecosystem recovery following invasive rodent removal on islands"

Undergraduate and Master's Student Advisor (2006-2008)

Trained and mentored one undergraduate and three Master's students as part of my field work in New Zealand.

Symposia and Professional Speaking

Island Restoration Symposium, Society for Conservation Biology (2011) – I organized and chaired a symposium on the restoration and conservation outcomes on islands following invasive species eradication. I gave a talk at the symposium, "Taking eradication funding and measurable outcomes one step further – Restoring island ecosystems."

25th Meeting of the Society for Conservation Biology (December 2011). "Repair and recovery of damaged nature."

UC Santa Cruz Environmental Studies Seminar Series (February 2011) – "Setting ecosystem-based adaptation goals for climate change and prioritizing restoration projects."

World Seabird Conference (September 2010). "Worldwide seabird restoration projects." Invited presentation.

1st International Wildlife Reintroduction Conference (April 2008). "Review of seabird reintroduction projects worldwide."

3rd Joint Conference of the NZ Ecological Society and the Ecological Society of Australia (August 2006). "What makes seabirds defenseless to invasive rats? An analysis of seabird characteristics affecting vulnerability."

20th Meeting of the Society for Conservation Biology (June 2006). "What makes seabirds defenseless to invasive rats? An analysis of seabird characteristics affecting vulnerability."

6th California Islands Symposium (2003). "Predation of artificial Xantus Murrelet nests before and after black rat eradication."

Service

Outside reviewer for *Ecology Letters*

Outside reviewer for *Biological Conservation*

Outside reviewer for *Animal Conservation*

Outside reviewer for *Oecologia*
Outside reviewer for *Population Ecology*
Outside reviewer for *New Zealand Journal of Ecology*
Outside reviewer for Natural Sciences and Engineering Research Council of Canada (NSERC)
Tutor for high school SAT Students
Volunteer New Haven Science Fair Mentor and Judge (2005 – 2009)
Member Yale University Graduate Student Assembly (2008)

References

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Donald Croll, Professor
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