

TROND HALVOR LARSEN

Dept. of Ecology and Evolutionary Biology
Princeton University
Princeton, NJ 08544
tlarsen@princeton.edu
Phone (609) 258-7925, Fax (609) 258-7892
<http://www.princeton.edu/~tlarsen/>

EDUCATION

Princeton University, Princeton, NJ, USA. 2001-2006. Ph.D in Ecology and Evolutionary Biology. Centennial Fellowship

Duke University, Durham, NC, USA. 1994-1998. B.Sc. in Biology

School for International Training, Brattleboro, VT, USA. 1996. Natural and Cultural Ecology in Belize.

RESEARCH EXPERIENCE

I have conducted over 31 months of field research since 1996, primarily in remote sites, working in countries that include Belize, Costa Rica, Panama, Venezuela, Suriname, Peru, and Kenya. Although I have worked primarily with insects, my research interests cover many animal groups and also plants. I am involved with projects examining diversity patterns across habitats, landscapes, and elevational gradients; impacts of disturbances on biodiversity and ecosystem functioning; determinants of species' ranges; resource partitioning strategies; mating systems; and general natural history and behavior.

Science Director, 2006-present. Friends of the Osa, Puerto Jimenez, Costa Rica and Washington, DC, USA.

Director of biodiversity research and conservation in Osa Peninsula, Costa Rica.
Coordinator of ecological field courses with Princeton University and other universities.

Ph.D., 2001-2006, Dept. of Ecology & Evolutionary Biology, Princeton University, Princeton, NJ, USA.

Patterns, causes and functional consequences of changing biodiversity. Focus on effects of forest fragmentation on neotropical dung beetle communities (subfamily Scarabaeinae) and consequences for secondary seed dispersal and plant regeneration.

Research Associate, 2001-present; *Biodiversity Scientist*, 1999-2001; Member of founding board of directors, 1999. Amazon Conservation Association. Washington, DC, USA.

Role of habitat type and disturbance regimes in structuring Amazonian biodiversity mosaics at various spatial scales.

Research Collaborator, 1998-present, Entomology Dept., National Museum of Natural History, Smithsonian Institution. Washington, DC, USA.

Biodiversity assessments; taxonomy and curation of neotropical Scarabaeinae.

Principle Investigator, 2003-2005, Los Amigos Biological Research Station, Los Amigos, Peru.

- Monitoring of fruit-feeding butterfly and dung beetle communities across space and time.
- Researcher*, 2005, Conservation International, Washington, DC, USA.
Rapid Assessment Program (RAP) expedition to Nassau and Lely, Suriname.
- Researcher*, 2004, The Field Museum, Chicago, IL, USA.
Rapid Biological Inventories (RBI) expedition to Megantoni, Peru.
- Research Assistant*, 1997-1998, Dept. of Zoology, Duke University, Durham, NC, USA.
Spatial distribution of epigeic arthropods along a successional gradient in Duke forest;
focus on ants and feather-wing beetles (Family Ptiliidae).
- Resource Assistant*, 1997, Student Conservation Association, Gatlinburg, TN, USA.
Butterfly monitoring in Great Smoky Mountains National Park; distributional analysis of
scorpionflies (Order Mecoptera); aquatic invertebrate monitoring; orchid pollination
ecology.
- Student Researcher*, 1996, SIT Independent Study, Belize, Central America.
Natural history of insects at BFREE research station (Belize Foundation for Research and
Environmental Education); educational insect collection.

TEACHING EXPERIENCE

- Academic Instructor*, 2006. Princeton University, Panama, Central America.
Teaching assistant for Tropical Vertebrate Ecology, an undergraduate field course held in
Panama. Field projects and lecture.
- Academic Instructor*, 2002-2003, Princeton University, Princeton, NJ, USA.
Taught two laboratory sections of the Introduction to the Biology of Organisms. In lab
lectures, discussions, and hands-on learning; curriculum and assessment development;
weekly teaching development seminar.
- Environmental Educator*, 1997-1998, Wilderness & Outdoor Opportunities for Durham Students
(WOODS), Durham, NC, USA.
Environmental education and outdoor expeditions with underprivileged Durham youth,
ages 8-14.

I have also taught and assisted several students and assistants with their research projects at various sites in the field.

MANUSCRIPTS & PUBLICATIONS

- Nichols, E., Larsen, T.H., Spector, S., Davis, A., Vulinec, K., Escobar, F., & the Scarabaeinae
Research Network. 2006. Dung beetle response to tropical forest modification and
fragmentation: a review and meta-analysis. Submitted
- Larsen, T.H., A. Lopera, & A. Forsyth. 2006. Extreme trophic and habitat specialization by
Peruvian dung beetles. Submitted
- Larsen, T.H., N. Williams, & C. Kremen. 2005. Extinction order and altered community structure
rapidly disrupt ecosystem functioning. *Ecology Letters*, 8: 538-547

- Larsen, T.H. & A. Forsyth. 2005. Trap spacing and transect design for dung beetle biodiversity studies. *Biotropica*, 37(2): 322-325
- Larsen, T.H. 2004. Dung Beetles/Escarabajos peloteros. *In*: C. Vriesendorp, L. Rivera Chavez, D. Moskovits and J. Shopland (eds.) Peru: Megantoni. Rapid Biological Inventories Report 15, pp. 77-84, 185-192. Chicago, Illinois: The Field Museum
- Loss of dung beetles puts ecosystems in deep doo-doo. 2004. News focus on T. Larsen research. *Science* 305(5688): 1230a
- Larsen, T.H. 2005. Conserving biodiversity, plant-animal interactions, and ecosystem integrity in tropical Peru. *Al Día*, Latin American Studies newsletter, Fall 2005.
- Larsen, T.H. 2005. Dung Beetles. *In*: Suriname: Lely and Nassau. Rapid Assessment Program Report, Conservation International. In preparation
- Rao, M. & T.H. Larsen. 2005. Ecological consequences of extinction. Synthesis Document, Wildlife Conservation Society. In preparation
- Larsen, T.H., Lopera, A., Forsyth, A. & F. Genier. 2005. Rapid ecological transition from coprophagy to predation. In preparation
- Lopera, A., T.H. Larsen, & A. Forsyth. 2005. Assessing and classifying species' response to disturbance: dung beetles, density functions and forest fragmentation. In preparation
- Larsen, T.H., A. Lopera, A. Forsyth, & C. Marshall. 2005. Identification Guide to Dung Beetles of the Southwest Amazon. In preparation
- Larsen, T.H. 2003. <http://www.princeton.edu/~kremen>. Website developed for the Kremen research lab at Princeton University
- Larsen, T.H. 2001. Searching for Scorpionflies. *ATBI Quarterly*. 2(3):8
- Larsen, T.H. 1999. www.bertholletia.org. Website developed for Brazil nut project of Amazon Conservation Association

ORAL PRESENTATIONS

- Larsen, T.H. 2005. Diversity patterns and interactions between disturbance regimes, dung beetle communities and plant regeneration. DIVERSITAS Open Science Conference, Oaxaca, Mexico.
- Larsen, T.H. 2005. Session Chair, Animal Ecology and Forest Dynamics, Association for Tropical Biology and Conservation Annual Meeting, Uberlandia, Brazil.
- Larsen, T.H. 2005. Consequential Coprophages: Diversity patterns, species ranges, and interactions between disturbance regimes, dung beetle communities and plant regeneration. Society for Conservation Biology Annual Meeting, Brasilia, Brazil.
- Larsen, T.H. 2005. Explaining the commonness of rarity. Association for Tropical Biology and Conservation Annual Meeting, Uberlandia, Brazil.
- Larsen, T.H. 2004. Linking patterns, causes and functional consequences of changing biodiversity. Society for Conservation Biology Annual Meeting, New York, NY, USA.
- Larsen, T.H. 2004. Interactions between disturbance, dung beetles, and seeds: Does dung beetle diversity help maintain plant diversity? Invited symposium speaker, Association for Tropical Biology and Conservation Annual Meeting, Miami, FL, USA.
- Larsen, T.H. 2004. Moving beyond their beauty: the utility of dung beetles for understanding the structure of biodiversity patterns and ecological function. Invited speaker, CICRA, Peru.
- Larsen, T.H. 2004. Extinction order and altered community structure rapidly disrupt ecosystem functioning. Dept of Ecology & Evolutionary Biology, Princeton University, USA.
- Larsen, T.H. 2002. Structuring of a neotropical dung beetle guild and consequences for community function. Invited symposium speaker, Association for Tropical Biology Annual Meeting, Panama.

Larsen, T.H. 2002. Trait-dependent extinction mechanisms and loss of functional diversity.
Invited speaker, University of Pennsylvania, USA.

Larsen, T.H. 2002. Effects of forest fragmentation on biological communities and the functions they perform. Program in Latin American Studies, Princeton University, USA.

GRANTS, AWARDS & HONORS

- Dean's Fund for Scholarly Travel Grant, 2005
- Society for Conservation Biology conference, Brazil, 2005, student award, best paper
- APGA Summer Travel Grant, 2005
- Society for Conservation Biology conference, New York, 2004, student award, best paper
- Research Fellowship Program Grant, Wildlife Conservation Society, 2003-2004
- Amazon Conservation Association Grant, 2003-2005
- NSF Graduate Research Fellowship, 2003-2005
- Program in Latin American Studies Research Grant, Princeton University, 2003
- Exploration Fund Research Grant, Explorer's Club, 2002
- Program in Latin American Studies Research Grant, Princeton University, 2002
- Centennial Fellowship, Princeton University, 2001-2006
- Species names: *Coprophanaeus larseni* Arnaud, *Athyreus larseni* Howden

SKILLS

- Spanish verbal and written proficiency
- Macrophotography (<http://www.princeton.edu/~tlarsen/Photos/photos.html>), photos published electronically and in print (e.g. www.princeton.edu/artofscience/gallery2006/index.html%3Fp=2.html, www.blackwell-synergy.com/toc/ele/8/5)
- Graphics and image processing software including Photoshop & Illustrator
- GIS and related software including Arcview
- Website design and development

PROFESSIONAL AFFILIATIONS & SERVICE

- Member of Ecological Society of America, Society for Conservation Biology, Association for Tropical Biology and Conservation, Explorers Club
- Research Collaborator with Smithsonian Institution; Research Associate with Amazon Conservation Association
- Reviewer for Biological Conservation, Biotropica, Conservation Biology, Diversity and Distributions, Ecography, Ecology Letters, Journal of Tropical Ecology, Annals of the Entomological Society of America, Journal of the New York Entomological Society, Journal of the Kansas Entomological Society, Systematic Entomology