

Peter T Oboyski

Environmental Science, Policy, and Management
Division of Organisms and Environment
137 Mulford Hall MC-3114
University of California, Berkeley
Berkeley, CA 94708-3114

poboyski@berkeley.edu
(510) 847-0360
PO Box 11274
Berkeley CA 94712
<http://nature.berkeley.edu/~poboyski/>

Education:

PhD in Insect Biology, University of California, Berkeley CA, August 2011
MS in Entomology, Oregon State University, Corvallis OR, June 1996
BS in Ecology & Evolutionary Biology, University of Connecticut, Storrs CT, June 1991

Honors, Awards, Positions Held:

Outstanding Presentation, ESPM Graduate Research Symposium, UC Berkeley, 2007
Outstanding Graduate Student Presentation, 2nd place, Hawaii Conservation Conference, 2006
Walker Fund for systematics research in entomology, UC Berkeley, 2002, 2003, 2004, 2005
Outstanding Graduate Student Instructor Award, UC Berkeley, 2003-2004
Freitag Memorial Award for research in insect vector relationships, UC Berkeley, 2003-2004
GK-12 Teaching Fellowship, National Science Foundation, UC Berkeley, 2003-2004
Entomology Students Organization, President, UC Berkeley, 2003-2004
Graduate Assembly, Delegate, UC Berkeley, 2003-2004
DeWind Award (Xerces Society award for research leading to Lepidoptera conservation) 2003
Magy Award for excellence in entomological studies, UC Berkeley, 2002-2003
Keen Award for forest entomology, UC Berkeley, 2001-2002
Entomology Club, President, Oregon State University, 1994-1995
Outstanding Entomology Graduate Student Award, Oregon State University, 1994 & 1996

Research Experience:

January 2011 to present

Graduate Student Curator, Essig Museum of Entomology, University of California, Berkeley.
Developed training and reference documents to facilitate the integration of research collections by students and faculty into the Essig Museum collection. Trained graduate students in the use of the Essig Museum Database to track and deposit collections.

September 2010 to present

Graduate Student Researcher, University of California, Berkeley. "CalBug Project."
Coordinated and trained graduate and undergraduate students to database collection data from 1.2 million legacy specimens in the Essig Museum of Entomology. Helped design and streamline data capture techniques and adapt database structure to the needs of the project, and develop outreach and training materials. Coordinated with staff at other institutional collections on data capture and data sharing and worked with outside researchers and businesses to develop software to automate text recognition-to-database software.

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September 2008 to August 2010

Field Researcher, University of California, Berkeley. "Moorea BioCode Project." Collected, curated, cataloged, and databased terrestrial arthropods from the Island of Moorea (Society Islands, French Polynesia). Used complementary field techniques (uv light, malaise traps, pitfalls, vegetation beating, etc.), extracted and sequenced DNA, and maintained data in relational databases with the goal to acquire a mitochondrial DNA sequence of all species on the island. Responsibilities included supervising undergraduate research assistants.

September 2004 to August 2005

Graduate Student Curator, Essig Museum of Entomology, University of California, Berkeley. Assisted in the preparation of loans and curation of the Lepidoptera collection. Developed and implemented a loans database to track loan requests and specimens. Updated museum website, produced an annual bulletin, conducted outreach activities, and hosted visiting researchers.

August 2001 to present

Graduate Student Researcher, University of California, Berkeley. PhD dissertation project - "Ecology, Evolution, and Systematics of Hawaiian *Cydia* (Lepidoptera: Tortricidae)." Reviewed the cosmopolitan genus, *Cydia*. Conducted literature searches and field sampling of endemic Hawaiian Lepidoptera. Conducted morphological and molecular analyses to construct a phylogeny to test models of diversification and speciation. Described eight new species.

February 1997 to August 2001

Entomology Research Specialist, Research Corporation of the University of Hawaii, Volcano, Hawaii. Project leader for US Geological Survey, Biological Resources Division projects - "The ecology, biology, and restoration of palila (*Loxioides bailleui*)" and "The role of insects in the restoration of Kipuka Alala, Hawaii". Designed and implemented research on the role of insects in the recovery of palila, an endangered Hawaiian forest bird. Designed and implemented research on the potential impacts and mitigation of alien insects (ants, yellowjackets, etc.) as part of an effort to restore the native ecosystem at Kipuka Alala, Pohakuloa Training Area, US Army Garrison, Hawaii. Hired and supervised a crew of four technicians and two interns. Research results were disseminated through technical reports, presentations at entomological and conservation conferences, and peer-reviewed articles.

June 1996 to February 1997

Research Assistant, Oregon State University, Corvallis, Oregon. Principle research assistant on National Biological Survey project - "Response of macrolepidoptera to forest management strategies in Douglas-fir forests in western Oregon." Sampled forest moths in old growth, clear cut, and managed and unmanaged mature stands of Douglas-fir using ultraviolet light traps. Designed and maintained relational databases on caterpillar-host plant interactions and moth distributions.

January 1992 to June 1996

Graduate Research Assistant, Oregon State University, Corvallis, Oregon. Masters thesis - "Riparian insect communities on vine maple, red alder, and sitka alder in the central western Cascade Mountains, Oregon."

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Peripheral Projects:

Hawaiian Insect – Plant Host Database. Independent project to develop an online searchable database of herbivorous insects in Hawaii using HTML, MySQL and PERL. Populated the database with information from “Forest Entomology in Hawaii” (Swezey, 1954), including updated taxonomy of insects and hosts. This is an ongoing project to assist in insect identification, understanding food web dynamics, tracking distributions, and carrying out biological control in Hawaii. <http://nature.berkeley.edu/~poboyski/hawaii/InsectPlant.htm>

Lepidoptera of French Polynesia. Cooperative research project focusing on Lepidoptera for NSF-funded “Biotic Survey of French Polynesia” and Moore Foundation-funded Moorea BioCode Project. Field collection and laboratory identification of butterflies and moths from Society Islands and Marquesas Islands. Developed and maintain a website that includes an online searchable of database of synonyms, distribution, and biology of South Pacific Lepidoptera, along with an image gallery and bibliography. <http://nature.berkeley.edu/~poboyski/Lepidoptera/SocietyIslands.htm>

Teaching and Outreach Experience:

Invited Lectures at UC Berkeley

“Invasive Species” – ESPM C11: Americans and the Global Forest

“Phylogeny of the Lepidoptera” – ESPM 298: Insect Systematics

“Natural History of the Lepidoptera” – ESPM 42: Natural History of Insects

“Lepidoptera” – ESPM 140: General Entomology

“Pollination” – ESPM 140: General Entomology

“Insect Diversity” – ESPM 42: Natural History of Insects

August 2007 to June 2008

Lecturer/Instructor, University of California, Berkeley. ES 196 – “Senior Thesis for Environmental Science Majors.” Mentored and graded senior undergraduate students on their thesis projects including guidance on project design, data collection, data analysis, and scientific writing and presentation. Supervised Graduate Student Instructors, developed course curriculum, presented lectures and facilitated activities in conducting and peer-reviewing research.

August 2006 to June 2007

Graduate Student Instructor, University of California, Berkeley. ES 196 – “Senior Thesis for Environmental Science Majors.” Mentored senior undergraduate students on their thesis projects including guidance on project design, data collection, data analysis, and scientific writing and presentation.

August 2005 to June 2008

Discussion group facilitator, University of California, Berkeley. Conceived, organized, and lead workshops and discussion groups on “Science Outreach,” “Relational Databases,” “Biology of the Lepidoptera,” and “Morphological Techniques in Entomology.”

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July 2003 to June 2004

GK-12 Teaching Fellow, University of California, Berkeley. High school special lecturer - Pittsburg High School, Pittsburg, California. NSF-funded program placing graduate students in the biological sciences into public school classrooms to foster science education in K-12 school program. Designed curricula to teach techniques in biological data collection and understanding of concepts and standards related to biodiversity and conservation.

January 2003 to May 2003

Graduate Student Instructor, University of California, Berkeley. Laboratory instructor - ESPM 140, "General Entomology." Taught insect identification to undergraduate and graduate students. Prepared laboratory presentations and materials for family level identification of common insect groups.

April 2002 to present

Cal Day Assistant, Division of Insect Biology, University of California, Berkeley. Prepared displays and answered questions for East Bay children and adults at Cal Day, a yearly community outreach program (1 day event) of the University of California.

August 2002 to December 2002

Graduate Student Instructor, University of California, Berkeley. Field Instructor - ESPM 107, "Biology and Geomorphology of Tropical Islands." Assisted upper-division undergraduate students with project design, analysis, and reporting of independent projects at the Gump Research Station on the island of Moorea, French Polynesia. Supervised all aspects of student research, housing, and conduct.

March-August, 2000 to 2006

Summer Field Camp Instructor, Tropical Restoration and Ecology Education (TREE) program, Kealahou, Hawaii. Presented information and displays related to insects in tropical environments, including the role of native and invasive insects in ecology and restoration of native Hawaiian ecosystems to students age 10 to 14. Conducted field exercises including insect observation, collection, and identification. 4 days each summer.

September 1992 to June 1996

Graduate Teaching Assistant, Oregon State University, Corvallis, Oregon. Laboratory instructor - Entomology 460, "Forest insect and disease management"; and Biology 103, "Introduction to biology." Prepared laboratory presentations and materials for graduate and undergraduate students. Topics included insect identification (Ent 460), and general biology principles (Bio 103).

March 1993 to October 1995

Museum Day Assistant, Department of Entomology, Oregon State University. Prepared displays and answered questions for City of Corvallis children and adults at Museum Day, a quarterly community outreach program (2 day event) of the Department of Entomology.

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March 1992 to June 1995

Guest Lecturer, Corvallis Public Elementary Schools, Corvallis, Oregon. Presented information and displays on insects and related arthropods to kindergarten through third grade students. Included question and answer period.

October 1994

Guest Lecturer, Lebanon High School Senior Biology Class, Lebanon, Oregon. Conducted classroom discussions and led field exercises for senior high school students studying insects and related arthropods. Included collection and identification of insects.

July 1994 to August 1994

Co-Instructor, Adventures in Learning, Oregon State University Higher Education. Developed and presented exercises for "Insects Around Us" (5 week) course, designed to stimulate TAG (talented and gifted) 10-12 year old students. Included field and laboratory exercises.

September 1990 to October 1991

Guest Lecturer, Guilford Public Elementary Schools, Guilford, Connecticut. Presented information and displays on insects and related arthropods to kindergarten through third grade students. Included question and answer period.

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Publications:

Banko PC, **Oboyski PT**, Slotterback JW, et al. 2002. Availability of food resources, distribution of invasive species, and conservation of a Hawaiian bird along a gradient of elevation. *Journal of Biogeography* 29(5-6):789-808.

Brenner GJ, **Oboyski PT**, Banko PC. 2002. Parasitism of *Cydia* spp. (Lepidoptera: Tortricidae) on *Sophora chrysophylla* (Fabaceae) along an elevation gradient of dry subalpine forest on Mauna Kea, Hawaii. *Pan-Pacific Entomologist* 78(2):101-109.

Oboyski PT, Slotterback JW, Banko PC. 2004. Differential parasitism of seed-feeding *Cydia* (Lepidoptera: Tortricidae) by native and alien wasp species relative to elevation in subalpine *Sophora* (Fabaceae) forests on Mauna Kea, Hawaii. *Journal of Insect Conservation* 8(2-3): 229-240.

Paynter, Q, Gourlay AH, **Oboyski PT**, Fowler SV, Hill RL, Withers TM, Parish H, and Hona S. 2008. Why did specificity testing fail to predict the field host-range of the gorse pod moth in New Zealand? *Biological Control* 46:453-462.

Technical Reports, etc.:

Banko PC, Dougill S, Goltz D, Johnson L, **Oboyski PT**, et al. 2001. Palila restoration project annual report 2001. Technical Report to US Army Garrison, Hawaii. US Geological Survey, Biological Resources Division.

Howarth FG, Brenner GJ, Preston DJ, and **Oboyski PT**. 1999. An arthropod assessment within selected areas of Mauna Kea Science Reserve, Final Report. Hawaii Biological Survey. BP Bishop Museum, Honolulu. Technical Report to Institute of Astronomy. 59 pp.

Oboyski PT. 1995. Macroarthropod communities on vine maple, red alder, and sitka alder along riparian zones in the central Western Cascade Range, Oregon. MS Thesis. Oregon State University, Corvallis. 50 pp.

Oboyski PT. 1998. Inventory of terrestrial arthropods of Pohakuloa Training Area, Hawaii. Technical Report to US Army Garrison, Hawaii. The Nature Conservancy of Hawaii's Natural Heritage Program. Honolulu, Hawaii. 56 pp.

Oboyski PT. 2000. Insects and other arthropods. In L. Beletsky (ed.) *Hawaii: The ecotravellers' wildlife guide*. Academic Press. New York. Pp. 197-202

Oboyski PT, Gregor AJ, Passerello LB, Weber J, and Banko PC. 2002. Kipuka Alala terrestrial arthropod survey. Technical Report to US Army Garrison, Hawaii. US Geological Survey, Biological Resources Division. Volcano, Hawaii.

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Conference Presentations:

Banko, PC, Dougill S, Gold L, Goltz D, Johnson L, **Oboyski PT**, and Slotterback J. 2003. "Removing a diverse suite of invasive threats to recover an endangered Hawaiian bird species and its dry forest habitat." Turning the tide: the eradication of invasive species: Proceedings of the International Conference on eradication of island invasives

Gregor AJ, Passerello LB, Weber JP, and **Oboyski PT**. 2001. "Kipuka Alala Arthropod Survey Results." Society for Conservation Biology. Annual Meeting - August 2001. Hilo, Hawaii. Poster presentation.

Oboyski PT. 2011. "Biogeography and evolution of Pacific Islands Tortricidae (Lepidoptera)." Evolution of life on Pacific Islands and reefs: Past, present and future – May 2011. Honolulu, Hawaii. Oral Presentation.

Oboyski PT and Banko PC. 1998. "Arthropod research projects of the Palila Restoration Project." Hawaiian Entomological Society. Annual Meeting - February 1998. Honolulu, Hawaii. Oral Presentation.

Oboyski PT and Banko PC. 2001. "Insect parasitism and conservation of an endangered bird." Society for Conservation Biology. Annual Meeting - August 2001. Hilo, Hawaii. Invited Oral Presentation.

Oboyski PT, Brenner GJ, and Banko PC. 1997. "Parasitism of endemic Hawaiian *Cydia* (Lepidoptera: Tortricidae) along an elevation gradient." Wildlife Society, Western Branch. Annual Meeting - August 1997. Sacramento, California. Oral Presentation.

Oboyski PT and Roderick GK. 2009. "Biogeography of tortricid moths (Lepidoptera) of Oceania." Pacific Science Intercongress - March 2009. Tahiti, French Polynesia.

Professional Societies:

Entomological Society of America, Hawaiian Entomological Society, Society of Systematic Biologists, Society for Conservation Biology, Lepidopterists' Society

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References:

George Roderick. Major research/academic advisor: 2001- present
Environmental Science, Policy, and Management, UC Berkeley
137 Mulford Hall MC 3114, Berkeley, California, 94708-3114
roderick@berkeley.edu (510) 642-3326

Rosemary Gillespie. Research/academic advisor: 2001- present
Environmental Science, Policy, and Management, UC Berkeley
137 Mulford Hall MC 3114, Berkeley, California, 94708-3114
gillespie@berkeley.edu (510) 642-3445

Jerry Powell. Research/academic advisor: 2001-present
Environmental Science, Policy, and Management, UC Berkeley
137 Mulford Hall MC 3114, Berkeley, California, 94708-3114
powellj@berkeley.edu (510) 642-3207

Stephen Welter. Supervisor – ES196, Trophic Lunch
Environmental Science, Policy, and Management, UC Berkeley
137 Mulford Hall MC 3114, Berkeley, California, 94708-3114
welters@berkeley.edu (510) 642- 2355