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CURRENT POSITIONS

NSF Bioinformatics Postdoctoral Fellow, UC Santa Cruz & Boston University (Jan 1, 2010)
Postdoctoral Researcher, Center for Ecology and Conservation Biology, Boston University
Courtesy Research Fellow, Department of Ecology and Evolutionary Biology, UC Santa Cruz
Research Director, Central Coast Bat Research Group, Aptos, CA

EDUCATION

- 2008 Postdoctoral Research, Center for Ecology and Conservation Biology, Boston University. Project: *Advances in aeroecology: modeling aerial population dynamics of Brazilian free-tailed bats using 3-D visualization of NEXRAD radar data*. Supervisor: Thomas H. Kunz
- 2007 Ph.D., Forest Science, Oregon State University. Dissertation: *Influences of island characteristics on community structure and species incidence of desert bats in a near-shore archipelago, Baja California, Mexico*. Advisor: John P. Hayes
- 1999 Post-baccalaureate coursework, School for Field Studies, Kenya
- 1998 B.A. in Environmental Studies, University of California, Santa Cruz

HONORS & AWARDS

- 2006 Koopman Award for Research Excellence, North Am. Symposium of Bat Research
- 2004 Outstanding New Graduate Student, The Wildlife Society, Oregon Chapter
- 2003-06 National Science Foundation Graduate Research Fellow
- 2003 Xi Sigma Pi Forestry Honor Society
- 1998 Phi Beta Kappa Society
- 1998 Highest Honors in Environmental Studies, UC Santa Cruz
- 1998 College Honors, UC Santa Cruz

GRANTS

- 2009 USFWS Research Grant, "*Baseline data relevant to the White Nose Syndrome crisis: Analysis of survival, fecundity and colony population trends of Myotis lucifugus in the northeastern US for the past 15 years*" PI (\$20,400)
- 2008 National Geographic Society CRE #8539-08 "*Bats of the Chilean temperate rainforest: elucidating patterns of landscape occurrence and use in a mosaic of land-use types within a South American biodiversity hotspot*" Co-PI (\$23,279)
- 2008 UC Mexus Small Grant July 2008 "*Co-evolution of nectar-feeding bats and columnar cacti in Baja California*" Co-PI (\$1,500)
- 2008 UC Mexus Small Grant March 2008 "*Co-evolution of nectar-feeding bats and columnar cacti in Baja California*" Co-PI (\$1,500)

- 2007 National Geographic Society CRE #8169-07, “*Pollinating pallid bats: An investigation into flower-feeding behavior in the insectivorous pallid bat (Antrozous pallidus) in Baja California Sur, Mexico*” Co-PI (\$19,998)

FELLOWSHIPS

- 2010-2011 National Science Foundation Bioinformatics Postdoctoral Fellowship (\$123,000)
2003-06 National Science Foundation Graduate Research Fellowship (\$139,000)
2004 P.F. Yerex & Nellie Buck Yerex Graduate Fellowship, OSU (\$7,000)
2004 Schutz Family Fund Fellowship, College of Forestry, OSU (\$1,000)
2002 Saubert Family Fund Fellowship, College of Forestry, OSU (\$600)
2002 Supplemental Oregon Laurels Graduate Scholarship, OSU (\$3,952)
2002 Moltke Memorial Fellowship, College of Forestry, OSU (\$2,000)

TEACHING EXPERIENCE

- 2008 **Instructor**, Animal Ecology and Conservation, UC Santa Cruz Summer Session
2007 **Guest Instructor**, Animal Ecology and Conservation, UC Santa Cruz (2 lectures)
2006 **Instructor**, Análisis de Ecolocación de Murciélagos Usando Anabat, Universidad Autónoma de Baja California, Ensenada. 2-day workshop (In Spanish)
2006 **Teaching Assistant**, Natural Resource Research Planning graduate course, OSU
2002-04 **Guest Instructor**, Ecological Field Methods, UC Santa Cruz (bat field methods)
2000 **Writing Tutor**, Introduction to Field Methods, UC Santa Cruz
1998 **Teaching Assistant**, National Environmental Policy, UC Santa Cruz
1998 **Writing Tutor**, National Environmental Policy, UC Santa Cruz
1998 **Reader**, Ecology and Biology of Vertebrates, UC Santa Cruz
1997 **Teaching Assistant**, Ecology for a Sustainable Biosphere, UC Santa Cruz

RESEARCH EXPERIENCE

- 2008- **Postdoctoral Research:** Advances in aeroecology: modeling aerial population dynamics of Brazilian free-tailed bats using 3-D visualization of NEXRAD radar data. Funded by NSF-ITR grant awarded to Dr. T.H. Kunz, Boston University.
- 2008- **Postdoctoral Research:** Annual survival and breeding propensity in little brown bats (*Myotis lucifugus*) in response to climate variability. Funded by USFWS grant: \$20,400. In collaboration with Dr. T.H. Kunz, Boston University, & Dr. D.S. Reynolds, St. Paul’s School, NH.
- 2008- **Collaborative Research:** Bats of the Chilean temperate rainforest: elucidating patterns of landscape occurrence and use in a mosaic of land-use types within a South American biodiversity hotspot. Funded by National Geographic Society Grant: \$23,279. In collaboration with Dr. C.N. Meynard, Université Montpellier, France, Dr. M. Soto Gamboa. Universidad Austral de Chile, Valdivia, Chile & P.A. Heady III, Central Coast Bat Research Group.

- 2008- **Postdoctoral Research:** Coevolution of nectar-feeding bats and columnar cacti. Funded by UC Mexus Small Grants, \$3,000. In collaboration with Dr. Kathleen Kay, UC Santa Cruz, Dr. Francisco Molina-Freaner, Universidad Autonoma, Hermosillo, Mexico & Dr. Ted Fleming, University of Miami (emeritus).
- 2008 **Collaborative Research:** Development of nest-monitoring equipment and protocol for the endangered El Oro parakeet in southwestern cloud forests of Ecuador. In collaboration with P.A. Heady III, Central Coast Bat Research Group, and I. Samuels, Jocotoco Fundación.
- 2007- **Collaborative Research:** Flower-feeding behavior of an insectivorous bat (*Antrozous pallidus*) in bat-adapted flowers of columnar cacti in Baja California Sur, Mexico. Funded by National Geographic Society Grant: \$19,998. In collaboration with Dr. John P. Hayes, University of Florida, & P.A. Heady III, Central Coast Bat Research Group.
- 2007- **Collaborative Research:** Impacts of wind turbine-related fatalities on bat population growth and viability. Funded by Bat Conservation International: \$10,400. In collaboration with Dr. J.F. Pollock, UC Santa Cruz.
- 2006- **Collaborative Research:** Response of an endemic bat species, the fish-eating bat (*Myotis vivesi*) to eradication of an invasive species (*Rattus rattus*) on Isla San Pedro Mártir, Sonora, Mexico. In collaboration with Araceli Samaniego, Conservación de Islas, Ensenada, Baja California, Mexico and P.A. Heady III, Central Coast Bat Research Group.
- 2003-07 **Doctoral Research:** Island biogeography and community ecology of bats in Baja California, Mexico. Funded by National Science Foundation Graduate Research Fellowship, \$139,000.
- 2003-06 **Graduate Research:** Potential impacts of environmental contamination on demography and population growth of Yuma myotis. In collaboration with Dr. E.D. Pierson, ED Pierson Consulting, and Dr. W.E. Rainey, UC Berkeley.
- 2003 **Graduate Research:** The effects of fire on forest bat activity in the Southern Sierra Nevada. In collaboration with Dr. J.P. Hayes, University of Florida, & P.A. Heady III, Central Coast Bat Research Group.
- 1998-02 **Pre-Doctoral Research:** The demography of peregrine falcon recovery in California. In collaboration with Dr. M.J. Kauffman, then at UC Santa Cruz.
- 1999 **Pre-Doctoral Research:** Land-use practices of the Maasai on Kuku Group Ranch in Southern Kenya. School for Field Studies Program, Kenya.

ENVIRONMENTAL CONSULTING EXPERIENCE

- 2000- Research Director of Central Coast Bat Research Group (CCBRG). Conducted numerous bat inventory and habitat-use assessments for both private and public land agencies, including: US Forest Service, California Parks and Recreation, National Parks Service, US Military, California Department of Transportation, and Mid-Peninsula Regional Open Space District.

SCIENTIFIC PUBLICATIONS

- Frick, W.F.**, D.S. Reynolds, T.H. Kunz. *Submitted*. Influence of climate and reproductive timing on demography of little brown bats (*Myotis lucifugus*). *Ecology*
- Frick, W.F.**, P.A. Heady III, J.P. Hayes. *In Press*. Facultative nectar-feeding in an insectivorous bat (*Antrozous pallidus*). *Journal of Mammalogy*
- Frick, W.F.**, J.P. Hayes, and P.A. Heady III. 2009. Nestedness of a desert bat assemblage: species composition patterns in insular and terrestrial landscapes. *Oecologia*. 158: 687-697.
- Frick, W.F.**, J.P. Hayes, and P.A. Heady III. 2008. Patterns of island occupancy in bats: Influences of area and isolation on insular incidence of volant mammals. *Global Ecology and Biogeography*. 17: 622-632.
- Frick, W.F.**, J.P. Hayes, and P.A. Heady III. 2008. Island biogeography of bats in Baja California, Mexico: Patterns of bat species richness in a desert archipelago. *Journal of Biogeography*. 35: 353-364.
- Frick, W.F.**, W.E. Rainey, and E.D. Pierson. 2007. Potential effects of environmental contamination on Yuma myotis demography and population growth. *Ecological Applications*. 17(4): 1213-1222.
- Kauffman, M.J., **W.F. Frick**, and J. Linthicum. 2003. Estimation of habitat-specific demography and population growth for peregrine falcons in California. *Ecological Applications*. 13(6): 1802-1816.

MANUSCRIPTS IN PREPARATION

- Frick, W.F.** P. Cortés, and R. Martínez-Gallardo. Ecology and conservation of bats of the Baja California peninsula and islands in the Sea of Cortéz. Book Chapter in *Synthesis Series: Environmental status of the ecosystems of northwestern Mexico*. Ed. By E. Ezcurra, S. Alvarez-Borrego, R. Lara, and E. Wehncke.

OTHER PUBLICATIONS (NOT PEER-REVIEWED)

- Frick, W.F.** and P.A. Heady III. 2008. Natural History of Bats. in T. M. Haff, M. T. Brown, and W. B. Tyler, eds. The Natural History of the UC Santa Cruz Campus, 2nd Edition. Bay Tree Bookstore, Santa Cruz.
- Frick, W.F.** 1999. Guide to the lizards of the Granite Mountains. Sweeney Granite Mountains Desert Research Center. Kelso, California.

INVITED TALKS

- Frick, W.F.** 2008. Island biogeography, ecology, and evolution of foraging habits of desert bats. Department of Zoology & Physiology, University of Wyoming, Laramie, Wyoming.
- Frick, W.F.** and J.F. Pollock. 2008. Quantifying our ignorance: Estimating effects of fatalities from wind turbines on bat populations. Bats and Wind Energy Cooperative, Austin, Texas.
- Frick, W.F.**, Hayes, J.P. and P.A. Heady III. 2006. Bats in Baja California: Factors structuring insular bat communities in a desert island archipelago. Department of Wildlife Ecology and Conservation, University of Florida, Gainesville.
- Frick, W.F.**, Hayes, J.P., and P.A. Heady III. 2006. Patrones de la riqueza de especies y composición de la comunidad de los murciélagos de las islas del Golfo de California. Universidad Autónoma de Baja California, Ensenada. (in Spanish)

CONFERENCE PRESENTATIONS

- Frick, W.F.**, P.A. Heady III, and J.P. Hayes. 2008. Flower-visiting behavior of pallid bats (*Antrozous pallidus*) in northwestern Mexico. 38th North American Symposium Bat Research, Scranton, Pennsylvania
- Frick, W.F.** 2007. The coevolutionary dynamics of facultative vs. obligate nectar-feeding bats and columnar cacti. 5th Annual Species Interaction Workshop, Stanford, California
- Frick, W.F.**, P.A. Heady III, G.E. Flores-Rojas, and J.P. Hayes. 2007. Flower-feeding behavior in the pallid bat (*Antrozous pallidus*) in Baja California Sur, Mexico. XIV International Bat Conference & 37th North American Symposium on Bat Research, Mérida, Mexico. (Abstract accepted; unable to attend due to Hurricane Dean)
- Frick, W.F.**, Hayes, J.P., and P.A. Heady III. 2007. Island occupancy by bats: Influences of area and isolation on insular incidence of volant mammals. The Ecological Society of America, San Jose, California
- Frick, W.F.**, Hayes, J.P., and P.A. Heady III. 2007. Influences on insular bat distribution patterns in Baja California, Mexico. The Wildlife Society, Western Section, Monterey, California
- Frick, W.F.**, Hayes, J.P., and P.A. Heady III. 2006. Island biogeography and community ecology of bats in Baja California, Mexico. 36th North American Symposium of Bat Research, Wilmington, North Carolina
- Frick, W.F.**, Hayes, J.P., and P.A. Heady III. 2006. Patterns of bat species richness and community composition in a desert island archipelago. The Ecological Society of America, Memphis, Tennessee
- Frick, W.F.**, Hayes, J.P., and P.A. Heady III. 2005. Effects of fire on forest bat activity in the Southern Sierra Nevada. The Wildlife Society, Oregon Chapter, Corvallis, Oregon
- Frick, W.F.** 2004. Bats in Baja: Island biogeography of bat species on islands in the Gulf of California. The 2nd Annual Research Advances in Fisheries, Wildlife, and Ecology Symposium, Oregon State University, Corvallis, Oregon
- Frick, W.F.**, Rainey, W.E., and E.D. Pierson. 2004. Estimation of survival for a bat species, *Myotis yumanensis*, in northern California. The Wildlife Society, Oregon Chapter, Bend, Oregon
- Heady III, P.A. and **W.F. Frick**. 2002. California bats in riparian ecosystems. Salmonid Restoration Foundation Annual Conference, Ukiah, California.

Kauffman, M.J. and **W.F. Frick**. 2001. Peregrine falcon demography: Modeling habitat specific differences in survival in California. Ecological Society of America, Madison, Wisconsin.

PROFESSIONAL DEVELOPMENT

- 2008 **Attended Workshop:** Modeling individual histories with state uncertainty, 4 day workshop, Nov 2008, Montpellier, France.
- 2006 **Attended Workshop:** Modeling patterns and dynamics of species occurrence with Program Presence, 3 day workshop, Nov 2006, Portland, OR.
- 2006 **Attended Workshop:** Program R for Statistical Computing, 1 day workshop at ESA, Memphis, TN

SERVICE

- 2009 **Invited Scientist:** Strategy meeting for modeling of impacts global climate change on conservation of native Hawaiian hoary bats, Hilo, Hawaii
- 2008 **Invited Scientist:** Science strategy meeting on the White Nose Syndrome crisis affecting northeastern US bats, Albany, NY
- 2007-2007 **Contributing author:** California Bat Conservation Plan, Cal. Bat Working Group
Trip leader: Bat ecology field trip to Pinnacles National Monument, ESA/SER meeting in San Jose, California
- 2006 **Participant:** Ad hoc graduate student committee on academic freedom and core values, OSU College of Forestry
- 2005-06 **Graduate student representative:** Committee for the CSREES and Graduate School Research Program Review, Forest Science, OSU
- 2003 **Participant:** Western Bat Working Group Bat Survey Protocol, Durango, CO
- 2002- **Reviewer:** *Acta Chiropterologica*, *Wildlife Research*, *Journal of Applied Ecology*, and *Ecological Monographs*
- 2000- **Presenter:** Numerous talks on bat ecology and conservation to elementary schools, regional councils, land agency boards, and bird clubs.

MENTORING

- 2008- **Committee member:** Michael Buchalski, Ph.D. Student, Western Michigan State
- 2005- **Student mentoring:** G. Emma Flores Rojas (UABC Mexico); Nick Fisher, Joe Kermish-Wells, Marcus Richardson (UC Santa Cruz)

MEMBERSHIP IN SCIENTIFIC SOCIETIES

Ecological Society of America
North American Society of Bat Research