# HOLLY K. OBER

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### **EDUCATION**

Ph.D. Oregon State University Forest Science and Wildlife Science (dual degree)

M.S. University of Arizona Wildlife Ecology

B.S. Duke University Biology

## **ACADEMIC POSITIONS (all at University of Florida)**

Associate Program Leader for Natural Resources, Cooperative Extension Service (2019-present)

Professor & Extension Specialist, Department of Wildlife Ecology and Conservation (2020-present)

Assoc. Professor & Extension Specialist, Department of Wildlife Ecology & Conservation (2013-2020)

Asst. Professor & Extension Specialist, Department of Wildlife Ecology and Conservation (2007-2013)

Affiliate Professor, School of Forest Resources and Conservation (2011-present)

Affiliate Professor, School of Natural Resources and Environment (2008-present)

Director, Natural Areas Training Academy (2008-present)

Co-director, CFEOR Cooperative [Conserved Forest Ecosystems: Outreach and Research] (2008-2018)

## **EXTENSION ADMINISTRATION**

As Associate Program Leader for Natural Resources for the University of Florida Cooperative Extension Program (0.40 FTE), I strengthen and enhance statewide educational efforts by providing leadership for ~150 county and state faculty who have responsibilities for programming in natural resources (County Extension Agents, Regional Specialized Agents, State Specialized Agents, and State Extension Specialists). A primary duty is to lead the restructuring of the natural resources portion of a 10-year Extension Roadmap to maximize opportunities for effective collaborations among state and county faculty, enhance precision in reporting Extension impacts, and ensure a smooth transition from the existing 10-year Roadmap to the next. Other responsibilities include assessing Extension Specialist and Agent promotion packets, providing administrative review of Extension publications, furnishing oversight of Extension awards, allocating Extension budgets, serving as Project Director for RREA [Renewable Resources Extension Act] funds, and reviewing new Extension Agent position descriptions.

## **RESEARCH**

I conduct applied, interdisciplinary investigations that increase understanding of the mechanisms that influence wildlife habitat selection and productivity in forests, with the intention of informing conservation and management strategies. I have raised over \$2.2 million in external funding and nearly \$300,000 in internal funding. I have authored 41 peer-reviewed articles in wildlife, forestry, and interdisciplinary journals, and have disseminated findings through 65 conference presentations and posters (28 delivered by me and 37 by my students and postdoctoral researchers).

#### A. Peer-refereed Publications

- Braun de Torrez, E.C., J.A. Gore, and H.K. Ober. *In press*. Evidence of resource-defense polygyny at roost sites by an endangered subtropical bat, *Eumops floridanus*. *Global Ecology and Conservation*.
- Main, M., H.K. Ober, and S.J. Johnson. *In press*. Resilient structure of nature-based Extension programs facilitates transition to online delivery. *Ecology and Evolution* (DOI 10.1002/ece3.6860).
- Jones, G.M., L. Smith, I.G.W. Gottlieb, H.K. Ober, B. Brosi, and R.J. Fletcher. 2020. Herpetofaunal responses to intensification of woody bioenergy production in a global biodiversity hotspot. *Forest Ecology and Management* 477 (https://doi.org/10.1016/j.foreco.2020.118493).
- Ober, H.K., G.M. Jones, I.G.W. Gottlieb, S.A. Johnson, L. Smith, B. Brosi, and R.J. Fletcher. 2020. Bat community response to intensification of biomass production for bioenergy across the southeastern United States. *Ecological Applications* (https://doi.org/10.1002/eap.2155).
- Loy, X., D. Gruenewald, I.G.W. Gotttlieb, E.K. Dobbs, A.S. Miljanic, J. Botsch, Jamieson, B. Lawley, H.K. Ober, L. Smith, R.J. Fletcher Jr, and B.J. Brosi. 2020. The impacts of bioenergy pine plantation management practices on bee communities. *Journal of Applied Ecology* 57: 952-962.
- Sheherazade, H.K. Ober, and S. Tsang. 2019. Contribution of bats to the local economy through durian pollination in Sulawesi, Indonesia. *Biotropica* 51: 913-922.
- Bailey, A.M., B. Reichert, H.K. Ober, and R.A. McCleery. 2019. Canopy cover shapes bat diversity across an urban and agricultural landscape mosaic. *Environmental Conservation* 46: 193-200.
- Swindall, J.E., H.K. Ober, M.L. Lamont, and R.C. Carthy. 2019. Informing sea turtle outreach efforts to maximize effectiveness. *Wildlife Society Bulletin* 43: 436-446.
- Braun de Torrez, E.C., H.K. Ober, and R.A. McCleery. 2018. Restoring historical fire regimes increases activity of endangered bats. *Fire Ecology* 14:9 (https://doi.org/10.1186/s42408-018-0006-8).
- Braun de Torrez, E.C., H.K. Ober, and R.A. McCleery. 2018. Activity of an endangered bat increases immediately following prescribed fire. *Journal of Wildlife Management* 82: 1115-1123.
- Paudyal, R., T.V. Stein, H.K. Ober, M.E. Swisher, E.J. Jokela, and D.C. Adams. 2018. Recreationists' perceptions of scenic beauty and satisfaction at a public forest managed for endangered wildlife. *Forests* 9: 241 (https://doi.org/10.3390/f9050241).
- Kreye, M.M., D.C. Adams, and H.K. Ober. 2018. Protecting imperiled wildlife species on private lands: Forest owner values and response to government interventions. *Ecological Economics* 149: 254-264.
- Braun de Torrez, E.C., H.K. Ober, and R.A. McCleery. 2018. Critically imperiled forest fragment supports bat diversity and activity within a subtropical grassland. *Journal of Mammalogy* 99: 273-282.
- Braun de Torrez, E.C., M.A. Wallrichs, H.K. Ober, and R.A. McCleery. 2017. Mobile acoustic transects miss rare bat species: implications of survey method and spatio-temporal sampling for monitoring bats. *Peer J* (DOI 10.7717/peerj.3940).
- Bailey, A.M., H.K. Ober, A.R. Sovie, and R.A. McCleery. 2017. Impact of land use and climate on the distribution of the Florida bonneted bat (*Eumops floridanus*). *Journal of Mammalogy* 98: 1586-1593.
- Gottlieb, I.G.W, R.J. Fletcher Jr, M.M. Nuñez-Regueiro, H.K. Ober, L. Smith, and B.J. Brosi. 2017. Alternative biomass strategies for bioenergy: implications for bird communities across the southeastern United States. *Global Change Biology: Bioenergy* 9: 1606-1617.

- Ober, H.K., E.C. Braun de Torrez, J.A. Gore, A.M. Bailey, J.K. Myers, K.N. Smith, and R.A. McCleery. 2017. Social organization of an endangered subtropical species, *Eumops floridanus*, the Florida bonneted bat. *Mammalia* 81: 375-383.
- Braun de Torrez, E.C., S. Samoray, M. Gumbert, M.A. Wallrichs, K. Silas, H.K. Ober, and R.A. McCleery. 2017. Acoustic lure allows for capture of a high-flying, endangered bat. *Wildlife Society Bulletin* 41: 322-328.
- Bailey, A.M., R.A. McCleery, H.K. Ober, and W. Pine. 2017. First demographic estimates for endangered Florida bonneted bats suggest year-round recruitment and low apparent survival. *Journal of Mammalogy* 98: 551-559.
- Ober, H.K., E.C. Braun de Torrez, R.A. McCleery, A.M. Bailey, and J.A. Gore. 2017. Sexual dimorphism in the endangered Florida bonneted bat, *Eumops floridanus* (Chiroptera: Molossidae). *Florida Scientist* 80: 38-48.
- Johnson, S.A., H.K. Ober, and D.C. Adams. 2017. Are keystone species effective umbrellas for habitat management? *Journal of Nature Conservation* 37: 47-55.
- Giuliano, W.M., L.N. Watine, J.M. Olson, M. Blake, and H.K. Ober. 2016. Florida turkey nest site selection and success. *Natural Resources* 7: 644-654.
- Braun de Torrez, E.C., H.K. Ober, and R.A. McCleery. 2016. Use of a multi-tactic approach to locate an endangered Florida bonneted bat roost. *Southeastern Naturalist* 16: 235-242.
- Ober, H.K., S.E. Friedl, and M.P. Tucker. 2015. Data from rapid inventories of bats as insight for forest habitat management. *Journal of the Southeastern Association of Fish and Wildlife Agencies* 2:171–180.
- Friedl, S.E., H.K. Ober, T.V. Stein, and M.G. Andreu. 2015. Modernizing training options for natural areas managers. *Journal of Extension* 53 (5). Available online at http://www.joe.org/joe/2015october/pdf/JOE\_v53\_5a8.
- Ober, H.K., and L.W. DeGroote. 2014. Repeated raking of pine plantations alters soil arthropod communities. *Forests* 5: 689-714.
- Ramirez, E.M., and H.K. Ober. 2014. Nest site selection and reproductive success of red-cockaded woodpeckers in Ocala National Forest. *American Midland Naturalist* 171: 258-270.
- DeGroote, L.W., H.K. Ober, C.M. McDonough, and R.F. Mizell III. 2013. An evaluation of the nine-banded armadillo as predators of gopher tortoise and northern bobwhite quail nests in Florida. *American Midland Naturalist* 169: 74-85.
- Underwood, V.J., H.K. Ober, D.L. Miller, and I.A. Munn. 2012. Contributions of private landowners to the conservation of the gopher tortoise (*Gopherus polyphemus*). *Environmental Management* 49: 846-854.
- Ober, H.K., W.M. Giuliano, W. Sheftall, R.J. Byrne, and J. Dillard. 2012. Leveraging partnerships to achieve high impact: Lessons from wildlife field days. *Journal of Extension* 50 (1). Available online at http://www.joe.org/joe/2012february/a1.php.
- Armitage, D.W., and H.K. Ober. 2012. The effects of prescribed fire on bat communities in the longleaf pine sandhills ecosystem. *Journal of Mammalogy* 93: 102-114.
- Ober, H.K., L.W. DeGroote, C.M. McDonough, and R. Mizell. 2011. Identification of an attractant for the nine-banded armadillo, *Dasypus novemcinctus*. *Wildlife Society Bulletin* 35: 421-429.
- DeGroote, L.W., H.K. Ober, J.H. Aldrich, J.G. Norcini, and G.W. Knox. 2011. Susceptibility of cultivated native wildflowers to deer damage. *Southeastern Naturalist* 10: 761-771.
- Ober, H.K., and L.W. DeGroote. 2011. Effects of litter removal on arthropod biodiversity in pine plantations. *Biodiversity and Conservation* 20: 1273-1286.
- Trusty, J.L., and H.K. Ober. 2011. Determinants of successful groundcover restoration in forests of the southeastern US. *Journal for Nature Conservation* 19: 34-42.
- Armitage, D.W., and H.K. Ober. 2010. A comparison of supervised learning techniques in the classification of bat echolocation calls. *Ecological Informatics* 5: 465-473.

- Ober, H.K., and J.P. Hayes. 2010. Determinants of nocturnal Lepidopteran diversity and community structure in a conifer-dominated forest. *Biodiversity and Conservation* 19: 761-774
- Ober, H.K., and J.P. Hayes. 2008. Influence of forest riparian vegetation on abundance and biomass of nocturnal flying insects. *Forest Ecology and Management* 256: 1124-1132.
- Ober, H.K., and J.P. Hayes. 2008. Prey selection by bats in forests of western Oregon. *Journal of Mammalogy* 89: 1191-1200.
- Ober, H.K., and J.P. Hayes. 2008. Influence of vegetation on use of riparian areas by bats at multiple spatial scales. *Journal of Wildlife Management* 72: 396-404.
- Ober, H.K., R.J. Steidl, and V.M. Dalton. 2005. Resource and spatial-use patterns of an endangered vertebrate pollinator, the lesser long-nosed bat. *Journal of Wildlife Management* 69: 1615-1622.
- Ober, H.K., and R.J. Steidl. 2004. Foraging rates of *Leptonycteris curasoae* vary with characteristics of *Agave palmeri*. *Southwestern Naturalist* 49: 68-74.

## **B.** Conference Presentations and Posters

- Ober, H.K. *Outlook on Florida Chapter of The Wildlife Society after 50 years*. Spring Conference of the Florida Chapter of The Wildlife Society. 10-12 April 2019, Melbourne, FL.
- Ober, H.K. 2018. Fire training for natural resource professionals: Natural Areas Training Academy. Joint Meeting of Southern Region Program Leadership Network, Association of Extension Administrators, and Association of Southern Region Extension Directors. 20-24 August 2018, Orlando, FL.
- Ober, H.K., S.A. Johnson, and S.E. Friedl. *Mobile acoustic survey duration, seasonality, and repetition influence inferences on bat activity and species richness*. North American Joint Bat Working Group Meeting. 26-29 March 2018, Roanoke, VA. (Poster).
- Ober, H.K., R.J. Fletcher, S.A. Johnson, and I.G.W. Gottlieb. *Implications to bat communities of intensified biomass production for biofuels*. Spring Conference of the Florida Chapter of The Wildlife Society. 5-7 April 2017, Orlando, FL.
- Ober, H.K., R.J. Fletcher, S.A. Johnson, and I.G.W. Gottlieb. *Predicting the response of bats to intensified bioenergy production across the southeastern U.S.* 22<sup>nd</sup> Annual Meeting of the Southeastern Bat Diversity Network. 16-17 February 2017, Asheville, NC.
- Ober, H.K., E.C. Braun de Torrez, J.A. Gore, J.K. Myers, A.M. Bailey, and R.A. McCleery. *Conservation implications of some unusual characteristics of the endangered Florida bonneted bat.* 45<sup>th</sup> Annual North American Society for Bat Research. 28-31 October 2015, Monterey, CA.
- Ober, H.K. *Promoting mammals in longleaf pine forests*. 10<sup>th</sup> Biennial Longleaf Conference. 21-23 October 2014, Mobile, AL.
- Ober, H.K., S.E. Friedl, M.P. Tucker. *Data from rapid inventories of bats could provide insight for forest habitat management*. Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies. 19-22 October 2014, Destin, FL.
- Ober, H.K., L.W. DeGroote, C. McDonough, R. Mizell III, and R. Mankin. *The importance of sensory information in the foraging of wild nine-banded armadillos*. 2013 American Society of Mammalogists Annual Meeting. 14-18 April 2013, Philadelphia, PA. (Poster).
- Ober, H.K. *Natural Areas Training Academy: 10 years of training conservation agencies*. Triennial Wildlife Extension Conference. 8-11 April 2013, Haines City, FL. (Conference co-organizer,
- Ober, H.K. *Baiting the nine-banded armadillo*. Spring Conference of the Florida Chapter of The Wildlife Society. 16-19 April 2012, Ocala, FL. (Poster).

- Ober, H.K. *Restoration of groundcover in longleaf systems*. 38<sup>th</sup> Annual Natural Areas Conference. 1-4 November 2011, Tallahassee, FL. (Symposium organizer and moderator; field trip planner).
- Ober, H.K.., T. Stein, K. Bohn, L. Kobziar, D. Carter, N. Peterson, M. Kreye. *Collaborative solutions for sponsoring research and communication on important land management issues in Florida*. 38<sup>th</sup> Annual Natural Areas Conference. 1-4 November 2011, Tallahassee, FL.
- Ober, H.K. *Facilitating groundcover restoration*. Annual Meeting of the Southeastern Chapter of the Society for Ecological Restoration. 17-21 October 2011, Quincy, FL.
- Ober, H.K., and L.W. DeGroote. *Effects of pine straw raking on arthropod assemblages*. Spring Conference of the Florida Chapter of The Wildlife Society. 21-23 April 2010, Tallahassee, FL. (Poster).
- Jose, S., T. Stein, H.K. Ober, M. Bullock, and P. Colverson. *Conserving forest ecosystems: New questions and directions*. Public Land Acquisition and Management Partnership Conference. 3-5 December 2008, Jacksonville, FL. (Panelist).
- Ober, H.K. and J.P. Hayes. *Contributions of conifers and hardwoods to wildlife in riparian areas*. Recent Trends Linking Research to Management. Cooperative Forest Ecosystems Research Program Workshop. 6-7 November 2007, Corvallis, OR.
- Ober, H.K. and J.P. Hayes. *Linkages between bat diets, insect abundance, and riparian vegetation*. 41<sup>st</sup> Meeting of the Oregon Chapter of The Wildlife Society. February 2007, Newport, OR. (voted *Best Student Poster*).
- Ober, H.K. and J.P. Hayes. *Influence of riparian vegetation on the distribution of bats and their insect prey*. 13<sup>th</sup> Annual Conference of The Wildlife Society. 22-26 September 2006, Anchorage, AK. (Poster).
- Ober, H.K. and J.P. Hayes. *Linkages between bat diets, insect abundance, and riparian vegetation*. Science and Management of Headwater Streams in the Pacific Northwest Conference. 2006, Corvallis, OR. (Poster).
- Ober, H.K. and J.P. Hayes. *Linkages between bat diets, insect abundance, and riparian vegetation*. 3<sup>rd</sup> Annual Research and Advances in Fisheries, Wildlife, and Ecology Symposium. 2006, Corvallis, OR. (Poster).
- Ober, H.K. and J.P. Hayes. *Relationships between riparian vegetation, insects, and bats in the Oregon Coast Range*. 39<sup>th</sup> Meeting of the Oregon Chapter of The Wildlife Society. February 2004. Bend, OR.
- Ober, H.K. and J.P. Hayes. *Relationships between riparian vegetation composition, insects, and bats in the Oregon Coast Range*. 2<sup>nd</sup> Annual Research and Advances in Fisheries, Wildlife, and Ecology Symposium. 2004, Corvallis, OR.
- Ober, H.K. and J.P. Hayes. *Foraging behavior of bats in riparian areas of western OR*. 2<sup>nd</sup> International Bats and Forests Symposium and Workshop. 9-12 March 2004, Hot Springs, AR.
- Ober, H.K. and J.P. Hayes. *Relationships between riparian vegetation composition insects, and bats in the Oregon Coast Range*. 2<sup>nd</sup> International Bats and Forests Symposium and Workshop. 9-12 March 2004, Hot Springs, AR. (Poster).
- Ober, H.K., R.J. Steidl, and V.M. Dalton. *Relationships between resource abundance and habitat use by lesser long-nosed bats*. 7<sup>th</sup> Annual Conference of The Wildlife Society. September 2000, Nashville, TN.
- Ober, H.K. and R.J. Steidl. *Foraging behavior of lesser long-nosed bats at agaves*. 3<sup>rd</sup> Conference on Research and Resource Management in the Southwestern Deserts. 5-7 May 2000, Tucson, AZ.

### C. International Seminars

- 2016. *Racing the clock to conserve the rarest bat species in the U.S.* Wildlife Institute of India. October 2016, Dehradun, India.
- 2015. Forest management and conservation of bats in North America. Instituto de Filosofía y Ciencias de la Complejidad, Universidad de Chile (Institute of Philosophy and Complexity, University of Chile). December 2015, Santiago, Chile.
- 2015. *Management of forests to conserve bats in the US*. Depto de Silvicultura y Conservación de la Naturaleza, Universidad de Chile (Department of Forestry and Nature Conservation, University of Chile). December 2015, Santiago, Chile.
- 2011. *Developing a better understanding of the use of forests by bats*. Universidade Federal de Vicosa, June 2011. Vicosa, Brazil.

## D. Grants and Contract in Support of Research

- Ober, H.K. 2020. *Influence of Picayune Strand restoration efforts on Florida bonneted bats*. Florida Fish and Wildlife Conservation Commission (\$36,514)
- Ober, H.K. 2019. *Influence of Picayune Strand restoration efforts on Florida bonneted bats.* Florida Fish and Wildlife Conservation Commission (\$36,475)
- Pienaar, E., R. Fletcher, H. Ober, and J. Evans. 2017. Engaging private landowners in bioenergy production: Finding solutions that promote sustainable agroecosystems while enhancing biodiversity and ecosystem services. USDA National Institute of Food and Agriculture (\$500,000)
- Ober, H.K. 2016. Foraging and diet of the Florida bonneted bat. Bat Conservation International (\$34,500)
- Ober, H.K. 2016. *Foraging and diet of the Florida bonneted bat*. Florida Fish and Wildlife Conservation Commission (\$40,000)
- Ober, H.K. 2015. Using species distribution modeling to promote recovery of an endangered tree endemic to the Florida Panhandle, Magnolia ashei. Conserved Forest Ecosystems: Outreach and Research (\$2,000)
- McCleery, R.A., and H.K. Ober. 2014. *Monitoring protocols for bats in Everglades National Park*. National Park Service (\$29,844)
- Ober, H.K., and R.A. McCleery. 2014. *Managing with fire to promote the recently listed Florida* bonneted bat. Joint Fire Science Program (\$286,537)
- Ober, H.K., and R.A. McCleery. 2013. *Closing data gaps for the Florida bonneted bat*. Florida Fish and Wildlife Conservation Commission State Wildlife Grant program (\$91,955)
- Johnson, S. and H.K. Ober. *Fellowship grant for graduate students*. USDA National Institute of Food and Agriculture (\$39,500)
- Fletcher, R., H. Ober, B. Brosi, and L. Smith. 2012. Evaluating the sustainability of bioenergy production in the Southeast on the basis of wildlife and pollinator responses across spatial scales. USDA National Institute of Food and Agriculture (\$496,996)
- Ober, H.K. 2011. *Developing a statewide monitoring protocol for bats*. Lubee Bat Conservancy (\$5,000)
- Ober, H.K. 2010. Assessment of the efficacy of BrowseBan in deterring white-tailed deer from peanut plantings. Repellex (\$5,000)
- Staudhammer, C.L., L.N. Kobziar, K.K. Bohn, H.K. Ober, T.V. Stein, and D.R. Carter. 2009. Developing adaptive management strategies for ecosystems in transition. USDA/CSREES National Needs Graduate Fellowship Grant Program (\$236,000)
- Ober, H.K., and D.L. Miller. 2009. *Status of gopher tortoises on private lands in Mississippi*. The Nature Conservancy (\$37,500)

- Ober, H.K., and G.W. Tanner. 2008. *Understory vegetation restoration in Florida forests*. Conserved Forest Ecosystems: Outreach and Research (\$15,000)
- Giuliano, W.M., and H.K. Ober. 2008-2011. *Improving wild turkey habitat in Florida through restoration of upland ecosystems*. Florida Fish and Wildlife Conservation Commission (\$82,083)
- Mizell, R.F., and H.K. Ober. 2008-2009. *Identification of semiochemicals mediating attraction and aversion in the nine-banded armadillo, Dasypus novemcinctus*. Southern Regional IPM Center. IPM Enhancement Grants Program (\$23,125)
- Ober, H.K., and D.L. Miller. 2008. *Status of gopher tortoises on private lands in Mississippi*. The Nature Conservancy (\$37,500)
- Ober, H.K., and J.P. Hayes. 2005-2006. *Bat activity in riparian areas of western Oregon*. U.S.D.A. Forest Service (\$2,000)
- Ober, H.K., and J.P. Hayes. 2004-2005. *Bat activity in riparian areas of western Oregon*. Weyerhaeuser Company (\$5,000)
- Ober, H.K., and J.P. Hayes. 2003-2004. *Bat activity in riparian areas of western Oregon*. Simpson Timber Company (\$5,000)
- Ober, H.K., and J.P. Hayes. 2003-2004. *Bat activity in riparian areas of western Oregon*. Weyerhaeuser Company (\$5,000)
- Ober, H.K., and J.P. Hayes. 2002-2003. *Bat activity in riparian areas of western Oregon*. U.S.D.A. Forest Service (\$2,000)

## **EXTENSION PROGRAMMING**

As an Extension Specialist, I teach diverse audiences which include county, state, and federal agency employees as well as private landowners, to sustainably manage natural areas and improve stewardship of forests to provide habitat for wildlife. The overarching intent of my Extension program is to provide science-based information and promote capacity to manage natural areas sustainably.

My flagship Extension program is the *Natural Areas Training Academy* (NATA). The Nature Conservancy conceptualized this outreach program in 2000; I assumed leadership in 2008, developing a logic model to guide educational efforts. I convene land management experts from numerous agencies and organizations with Extension Specialists to provide training, introduce tools, and share experiences with professional land managers. Each of our core workshops, offered annually, provides guidance on critical aspects of sustainable land management such as site assessments, management plans, maintaining and restoring biodiversity, working effectively with stakeholders, and managing visitors to natural areas. Given the ecological importance of fire to many ecosystems in Florida, a portion of our trainings use curriculum defined by the National Wildfire Coordinating Group. Educational opportunities are publicized through a website (<a href="https://programs.ifas.ufl.edu/nata/">https://programs.ifas.ufl.edu/nata/</a>), Facebook (<a href="https://www.facebook.com/NaturalAreasUF">https://www.facebook.com/NaturalAreasUF</a>), and Twitter (<a href="https://twitter.com/nata\_uf">https://twitter.com/nata\_uf</a>).

Since 2008, we have hosted 60 multi-day workshops through NATA, providing instruction to >1,400 individuals. Our trainings were presented in a 100% in-person format 2008-2011, in a hybrid (flipped-classroom) format 2012-2019, and fully online (with a mix of asynchronous and synchronous instruction) in 2020. The hybrid and fully online formats mandate completion of an asynchronous online component prior to an in-person or synchronous online session to ensure that participants acquire understanding of foundational concepts prior to live events. I conduct evaluations immediately following each event and conduct follow-up surveys 3-5 years later to quantify impacts such as acreages impacted through adoption of new management practices.

In addition to leading NATA for the past 12 years, I also served as one of four co-directors of a forestry cooperative 2008-2018. This cooperative, *Conserved Forest Ecosystems: Outreach and Research*, was a collaborative effort that convened faculty from University of Florida with representatives from a dozen agencies and organizations responsible for managing forested land in Florida, to coordinate research and outreach efforts to address prioritized needs.

I have also participated in and/or organized >180 other Extension events. These include workshops for private forest landowners; seminars for Master Gardeners, Master Naturalists, and civic groups; information booths at festivals and fairs; and field days and career mentoring sessions for youth. In support of all these efforts I have I have obtained ~ \$230,000, developed 49 peer-reviewed Extension documents that have collectively been downloaded >410,000 times, and produced a variety of creative works such as instructional videos, booklets, and displays. I have also published several journal articles on the scholarship of Extension.

## **A. Summary of Extension Events**

Multi-day Extension workshops offered through Natural Areas Training Academy

60 events (12-40 hours of instruction per event)

Number of participants = 1,484

Other Extension events for land manager audiences

14 events

Number of participants = 585

Extension events for private forest landowner audiences

29 events

Number of participants = 1,373

Extension events for youth audiences

47 events

Number of participants =  $\sim 22,000$ 

Extension events for the general public

86 events

Number of participants = 3,892

## **B.** Peer-reviewed Extension Publications

Ober, H.K. and S.M. Wisely. 2020. *Facts about wildlife diseases: Bats and coronaviruses*. WEC428. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw473.

- Swindall, J.E., H.K. Ober, M.M. Lamont, and R.R. Carthy. 2020. *Sea turtle conservation: 10 ways you can help*. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw466.
- Swindall, J.E., H.K. Ober, M.M. Lamont, and R.R. Carthy. 2020. *Sea turtle conservation: Priorities for environmental education efforts*. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw465.
- Lauer, M. and H.K. Ober. 2019. *Bats of Florida* (poster). WEC412. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw457.
- Ober, H.K. 2019. *How to promote bluebirds in North Florida*. WEC406. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw406.
- Ober, H.K. 2019. *How to promote purple martins in North Florida*. WEC405. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw405.

- Blount, A.R., M. Wallau, H.K. Ober, E. Rios, J.M.B. Vendramini, J.C.B. Dubeux, Md. A. Babar, C.L. Mackowiak, and K.H. Quesenberry. 2018. *A walk on the wild side: 2018 cool-season forage recommendations for wildlife food plots in North Florida*. SS-AGR-28. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/ag139.
- Ober, H.K., T. Doonan, and E. Evans. 2016. *Florida's bats: Evening bat.WEC390*. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw435.
- Ober, H.K., T. Doonan, and E. Evans. 2016. *Florida's bats: Tricolored bat*. WEC389. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw434.
- Ober, H.K., T. Doonan, and E. Evans. 2016. *Florida's bats: Southeastern myotis*. WEC388. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw432.
- Ober, H.K., T. Doonan, and E. Evans. 2016. *Florida's bats: Florida bonneted bat*. WEC381. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw426.
- Ober, H.K., T. Doonan, and E. Evans. 2016. *Florida's bats: Velvety free-tailed bat*. WEC380. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw425.
- Ober, H.K., T. Doonan, and E. Evans. 2016. *Florida's bats: Brazilian free-tailed bat*. WEC379. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw424.
- Ober, H.K., C. Mackowiak, and A. Blount. 2016. *Temporary food plot deterrents for deer: do they work?* WEC365. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw410.
- Wisely, S. and H.K. Ober. 2015. *Protecting your family and pets from rabies*. WEC239. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw282.
- Giuliano W.M., H.K. Ober, L. Watine, R. Boughton, and D. Coyner. 2015. *Managing conflicts with wildlife: Living with wild hogs*. WEC355. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw400.
- Giuliano W.M., H.K. Ober, L. Watine, R. Boughton, E. Hellgren, D. Land, and M. Lotz. 2015. *Managing conflicts with wildlife: Living with panthers*. WEC354. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw399.
- Giuliano W.M., H.K. Ober, L. Watine, R. Boughton. 2015. *Managing conflicts with wildlife: Living with deer*. WEC353. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw398.
- Watine, L., W.M. Giuliano, H.K. Ober, R. Boughton, A. Guilde, and A. Scotten. 2014. *Managing conflicts with wildlife: Living with coyotes*. WEC352. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw397.
- Giuliano W.M., H.K. Ober, L. Watine, E. Hellgren, R. Boughton, and D. Telesco. 2014. *Managing conflicts with wildlife: Living with bears*. WEC351. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw396.
- Ober, H.K., S. A. Johnson, and W.M. Giuliano. 2014. *Managing conflicts with wildlife: Living with snakes*. WEC350. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw395.

- Johnson, S.A., H.K. Ober, and W.M. Giuliano. 2014. *Managing conflicts with wildlife: Living with frogs*. WEC349. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw394.
- Ober, H.K., H.J. Dutton, A.R. Woodward, L.J. Hord, and W.M. Giuliano. 2014. *Managing conflicts with wildlife: Living with alligators*. WEC348. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw393.
- Ober, H.K., and G. Knox. *Native plants that benefit wildlife in the Florida Panhandle*. WEC329. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw384.
- Ober, H.K., M.B. Main, and J. Schaefer. Major Revision in 2013. *Coping with deer damage in Florida*. WEC135. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw128.
- Ober, H.K., and A. Kane. 2012. Overview of how to stop damage caused by nuisance wildlife in your yard. WEC323. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw368.
- Ober, H.K., and A. Kane. 2012. *How to identify the wildlife species responsible for damage in your yard*. WEC324. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw369.
- Ober, H.K., and A. Kane. 2012. *How to modify habitat to discourage nuisance wildlife in your yard*. WEC325. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw370.
- Ober, H.K., and A. Kane. 2012. *How to use deterrents to stop damage caused by nuisance wildlife in your yard*. WEC326. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw371.
- Ober, H.K., and A. Kane. 2012. *How to use traps to catch nuisance wildlife in your yard*. WEC327. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw372.
- Ober, H.K., L.W. DeGroote, R.F. Mizell, III. 2011. *Baiting the nine-banded armadillo*. WEC317. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw362.
- Ober, H.K., L.W. DeGroote, J.H. Aldrich, J.G. Norcini, and G.W. Knox. 2011. *Wildflowers susceptible to deer damage in North Florida*. WEC315. Gainesville: University of Florida Institute of Food and Agricultural Sciences. http://edis.ifas.ufl.edu/uw360.
- Ober, H.K., G.R. Edmondson, W.M. Giuliano, D.L. Wright, J. Atkins, A. Andreasen, S. Eubanks, L. Johnson, C. Brasher, and G. Hicks. 2011. *Farmer perceptions of wildlife damage to row crops in North Florida*. Florida Cooperative Extension Publication WEC311. http://edis.ifas.ufl.edu/uw356.
- Marion, W.R., G.W. Tanner, H.K. Ober, and M. Werner. 2011. *Management of pine forests for selected wildlife in Florida*. Florida Cooperative Extension Publication CIR706. http://edis.ifas.ufl.edu/uw098.
- Ober, H.K., M.L. Main, and G. Allen. 2010. *Bats of Florida*. Florida Cooperative Extension Publication UW186. https://edis.ifas.ufl.edu/uw203.
- Blount, A.R., S.M. Olson, D.L. Francis, K. H. Quesenberry, C.L. Mackowiak, R.D. Barnett, and H.K. Ober. 2010. 2010 wildlife forages for North Florida Part I: Cool season food plots. Florida Cooperative Extension Publication SS-AGR-30.
- Ober, H.K. 2010. *Effects of oil spills on marine and coastal wildlife*. Florida Cooperative Extension Service Publication UW330. https://edis.ifas.ufl.edu/uw330.

- Ober, H.K., W. Sheftall, and S. Rosenthal. 2009. *Ten tips for increasing wildlife biodiversity in your pine plantations*. Florida Cooperative Extension Service Publication UW319. https://edis.ifas.ufl.edu/uw319.
- Ober, H.K., S. Rosenthal, and W. Sheftall. 2009. *Ten tips for encouraging the use of your pine plantations by game species*. Florida Cooperative Extension Service Publication UW318. https://edis.ifas.ufl.edu/uw318.
- Ober, H.K. 2009. *The importance of bottomland hardwood forests for wildlife*. Florida Cooperative Extension Service Publication UW316. https://edis.ifas.ufl.edu/uw316.
- Ober, H.K., and J.L. Trusty. 2009. *Forest groundcover restoration*. Florida Cooperative Extension Service Publication UW314. https://edis.ifas.ufl.edu/uw314.
- Ober, H.K., and P.J. Minogue. 2008. *Managing oaks to produce food for wildlife*. Florida Cooperative Extension Service Publication UW293. https://edis.ifas.ufl.edu/uw293.
- Ober, H.K. 2008. *The value of oaks to wildlife*. Florida Cooperative Extension Service Publication UW292. https://edis.ifas.ufl.edu/UW292.
- Ober, H.K., and F.J. Mazzotti. 2008. *Conservation of bats in Florida*. Florida Cooperative Extension Service Publication UW291. https://edis.ifas.ufl.edu/uw291.
- Ober, H.K. 2008. *Effective bat houses for Florida*. Florida Cooperative Extension Service Publication UW290. https://edis.ifas.ufl.edu/uw290
- Ober, H.K. 2008. *Insect pest management services provided by bats*. Florida Cooperative Extension Service Publication UW289. https://edis.ifas.ufl.edu/uw289.
- Minogue, P.J., H.K. Ober, and S. Rosenthal. 2007. *Overview of pine straw production in forests of North Florida: potential revenues, fertilization practices, and vegetation management recommendations.* Florida Cooperative Extension Service Publication FOR180.
- Ober, H.K. 2007. *Facts about wildlife diseases: Rabies*. Florida Cooperative Extension Service Publication UW282. https://edis.ifas.ufl.edu/uw282.
- Ober, H.K., and P.J. Minogue. 2007. *Dead wood: key to enhancing wildlife biodiversity in forests*. Florida Cooperative Extension Service Publication UW282. https://edis.ifas.ufl.edu/uw277.

## **C.** Other Extension Products and Creative Works

## **Booklets and Pamphlets**

- What you need to know if you have bats in a building in South or Central Florida. This bilingual pamphlet was created to educate homeowners, nuisance wildlife control operators, and roofers about an endangered species that can roost beneath roofs of buildings, to increase awareness that these bats are protected by law. More than 2,000 printed copies have been distributed since September 2016, and electronic copies are available for download.
- Managing longleaf pine habitat: A North Florida landowner's guide. An 80-page guide I created in collaboration with The Nature Conservancy to increase awareness and understanding of the value of longleaf pine forests. More than 900 printed copies have been distributed to private landowners since September 2015.
- Groundcover restoration in forests of the southeastern United States. A 115-page booklet I developed with postdoctoral researcher Jennifer Trusty to increase understanding of the current state of knowledge of how to restore native groundcover in forests. More than 1,200 printed copies have been distributed since 2009.

## **Instructional Videos**

How to exclude a colony of bats from a building. A joint Project with Florida Fish and Wildlife Conservation Commission and Florida Bat Conservancy. Viewed >185,000 times since posted online November 2014. (https://www.youtube.com/watch?v=rtgepdKu05A)

Benefits of incorporating vertebrates into farmscaping plans. A component of the Suwanee Valley Agricultural Extension Station IPM modules. Viewed >1,600 times since posted online May 2014. (https://www.youtube.com/watch?v=v8LTZU-6cu0)

#### **Exhibits**

- *Promoting purple martins*. A static display that communicates insight we've gained through a 10-year field demonstration investigating nest site selection and productivity of these cavity-dependent birds.
- *Enhancing bluebirds*. A static display that describes findings we've obtained through a 12-year field demonstration investigating nest site selection and productivity of these cavity-dependent birds.
- Wildlife habitat identification. A hands-on display that prompts individuals to test their knowledge of the shelters various species of wildlife seek or actively create.
- Wildlife track identification. A hands-on display that encourages individuals to test their ability to identify wildlife tracks.

## D. Grants and Contracts in Support of Extension

- Ober, H.K. 2014. Longleaf Stewardship Fund CFEOR Outreach for Apalachicola Longleaf Initiative. National Fish and Wildlife Federation; sub-contract from The Nature Conservancy (\$11,500)
- Powell, E., H. Ober, M. Goodchild, S. Jackson, M. Orwat, T. Friday, and A. Bolques. 2011. *Managing nuisance wildlife in Northwest Florida residential landscapes*. University of Florida Institute of Food and Agricultural Extension Program Enhancement Grant (\$1,730)
- Ober, H.K., and L. Demetropoulos. 2011. *Cooperative professional development and training program the Natural Areas Training Academy*. Northwest Florida Water Management District and Suwannee River Water Management Districts (\$7,500)
- Ober, H.K., and L. Demetropoulos. 2010. *Cooperative professional development and training program the Natural Areas Training Academy*. The Nature Conservancy (\$5,000)
- Ober, H.K., and L. Demetropoulos. 2010. *Cooperative professional development and training program the Natural Areas Training Academy*. Northwest FL, South FL, St. John's River, and Suwannee River Water Management Districts (\$27,500)
- Ober, H.K., and L. Demetropoulos. 2010. *Cooperative professional development and training program the Natural Areas Training Academy*. Florida Fish and Wildlife Conservation Commission (\$10,000)
- Ober, H.K. 2009. *Prescribed fire training workshops: Natural Areas Training Academy*. Elizabeth Ordway Dunn Foundation (\$10,000)
- Ober, H.K., and L. Demetropoulos. 2009. *Cooperative professional development and training program the Natural Areas Training Academy*. Northwest FL, South FL, St. John's River, and Suwannee River Water Management Districts (\$21,250)
- Ober, H.K., and L. Demetropoulos. 2009. *Cooperative professional development and training program the Natural Areas Training Academy*. The Nature Conservancy (\$5,000)
- Ober, H.K., and L. Demetropoulos. 2008. *Cooperative professional development and training program the Natural Areas Training Academy*. The Nature Conservancy (\$5,000)
- Stevenson, C., H. Ober, K. Brown, K. Hiemstra, B. Bolles, R. Elliott, G. Rogers, S. Dunning, P. Davis. 2008-2009. *Project BATS (Bats, applied technology, and science)*. Florida 4-H Foundation (\$5,000)

## ADVISING, MENTORING, AND TEACHING

I have advised 11 graduate students, directed 3 undergraduate interns, and mentored 2 post-doctoral researchers and 2 assistant professors. Most students have independently obtained competitive funding to support their field research and received awards in recognition of their leadership and scientific aptitude.

## A. Advising of Graduate and Undergraduate Students

M.S. student Laura Nicholson (started 2019)

Effects of wetland restoration on bat communities

Ph.D. student Celso Poot (started 2018)

Habitat selection and movement patterns of the Central American tapir in Belize

M.S. student Morgan Hughes (graduated 2019)

Bat diets: niche partitioning and pest consumption

B.S. student Erika Brownson (Summer 2018)

Diets and habitat use of bats in the Southeastern US

M.S. student Elysia Webb (graduated 2018)

Foraging ecology of the Florida bonneted bat

M.S. student Sheherazade (graduated 2018)

Pollination services provided by flying foxes in Sulawesi

B.S. student Emily Brown (Summer 2015)

Determinants of the distribution of a rare magnolia in the Florida Panhandle

M.S. student Amanda Bailey (graduated 2016)

Ecology and habitat use of bats in south Florida, with emphasis on Florida Bonneted Bats

M.S. student Jessica McKenzie Swindall (graduated 2015)

Maximizing effectiveness of outreach efforts to influence conservation of sea turtles

B.S. student Alexandra Reyes (Summer 2012)

Investigating diets of bats in forests of the Florida Panhandle

Ph.D. student Shelly Johnson (graduated 2015)

The role of wildlife biodiversity in providing ecosystem services in longleaf pine forests

M.S. student Elizabeth Ramirez (graduated 2012)

Effects of forest restoration efforts on red-cockaded woodpeckers

M.S. student Vicki Underwood (graduated 2010)

Factors influencing the occurrence of gopher tortoises on private lands

M.S. student David Armitage (graduated 2010)

Effects of prescribed burning on bat and insect communities

#### **B.** Mentoring of Post-doctoral Researchers

Post-doctoral researcher Elizabeth Braun de Torrez (2014-2017)

Managing with fire to promote the endangered Florida bonneted bat

Post-doctoral researcher Jennifer Trusty (2009)

Forest groundcover restoration in the Southeastern US

#### C. Participation on Graduate Committees

Member - 4 MS students (earning degrees in the departments of Wildlife Ecology and Conservation, School of Forest Resources and Conservation, and School of Natural Resources and Environment)

Member - 6 PhD students (earning degrees in the departments of Wildlife Ecology and Conservation, School of Forest Resources and Conservation, School of Natural Resources and Environment, and Agronomy)

### D. Teaching

Co-instructor – University of Florida

Vegetation Monitoring in a Management Context (WIS 6934), Spring 2011

Guest lecturer - University of Florida

Introduction to Forest Resources and Conservation (FOR 4934), Summer 2007, 2008, 2009 Mammalogy (ZOO 5486), Fall 2008

Foundations of Wildlife Ecology: Theory and Application (WIS 6934), Fall 2008 and 2009 Guest lecturer - Oregon State University

Forest Biology (FOR 240), Spring 2005

Forest Management and Wildlife Conservation (FW/FS 453), Spring 2005 and 2006 Introduction to Forestry (FOR 111), Fall 2006

Teaching assistant - Oregon State University

Natural Resource Data Analysis (FS 523), Winter 2004

Forest Management and Wildlife Conservation (FW/FS 453), Spring 2003 and 2005

Teaching assistant - University of Arizona

Ecology (RNR 316), Spring 2000

#### HONORS AND AWARDS

- 2018. *University Term Professorship*. UF/IFAS three-year professorship recognizing superior faculty achievements (2018-2020; \$15,000 bonus spread across 3 years).
- 2018. Christine Taylor Waddill Extension Professional Enhancement Award. UF/IFAS term professorship (\$1,500) and program support (\$1,000) awarded to one state or county Extension faculty member who promotes outstanding educational programs and demonstrates scholarship in Extension.
- 2017. Educational Materials Award (brief publication) gold. Florida Association of Natural Resource Extension Professionals (FANREP) in recognition of "Have You Got Bats?", a pamphlet designed to increase awareness of an endangered species of bat that lives in buildings, and could be considered a nuisance, (with colleagues from 5 state and federal agencies).
- 2016. Educational Materials Award (long publication) gold. Florida Association of Natural Resource Extension Professionals (FANREP). In recognition of "Managing Conflicts with Wildlife", a series of 8 Extension documents on wildlife perceived as dangerous or damaging (with W. Giuliano).
- 2015. Educational Materials Award (video) silver. Florida Association of Natural Resource Extension Professionals (FANREP). In recognition of "How to get bats out of a building", a video demonstrating how to safely, legally, and humanely deal with unwanted bats residing in a man-made structure (with my Biological Scientist).
- 2015. Excellence in Teamwork award. Florida Association of 4-H in recognition of "Ag Adventure Days" (with 8 County Agents and 4 State Specialists).
- 2014. *Education Materials Award (video) silver*. Florida Association of Natural Resource Extension Professionals (FANREP). In recognition of "Rapid Site Assessment: A Case Study", a component of a workshop titled "Conservation Site Assessment and Planning", offered through the Natural Areas Training Academy (with 2 colleagues).
- 2010. *Extension Publication award gold*. Southern Regional Natural Resources Extension. For handbook on "Groundcover restoration in forests of the Southeastern US" (with postdoctoral researcher J. Trusty).

- 2010. *Innovative Program Award silver*. Florida Association of Natural Resource Extension Professionals (FANREP). In recognition of "FL-GA Game Management Series" (with 10 other colleagues).
- 2010. *Innovative Program Award bronze*. Association of Natural Resource Extension Professionals (ANREP). In recognition of "FL-GA Game Management Series" (with 10 other colleagues).
- 2009. *Search for Program Excellence Award* Florida Association of 4-H Extension Agents. In recognition of "Project B.A.T.S." (with 10 other colleagues).
- 2009. *Excellence in Teamwork Award* Florida Association of 4-H Extension Agents. In recognition of "Ag Adventure Days" (with 9 other colleagues).
- 2009. *U.S. Forest Service Regional Forester Award for Technology Transfer*. In recognition of Conserved Forest Ecosystems Outreach and Research (CFEOR) (with 6 other colleagues).
- 2006. *Tarrant Graduate Student Fellowship* Department of Forest Science, Oregon State University.
- 2006. Best Graduate Student Poster Oregon Chapter of the Wildlife Society Annual Conference.
- 2005. *Tarrant Graduate Student Fellowship* Department of Forest Science, Oregon State University.
- 2004. Faculty Award for Outstanding Achievement by a Ph.D. Student Department of Forest Science, Oregon State University.
- 2004. Forestry Graduate Student Fellowship College of Forestry, Oregon State University.
- 2004. *Arnold and Vera Meier Education Fund Fellowship* College of Forestry, Oregon State University.
- 2004. Jack and Bobbie Saubert Scholarship College of Forestry, Oregon State University.
- 2004. Advanced Graduate Student Scholarship Oregon Chapter of the Wildlife Society.
- 2000. Outstanding Thesis Award School of Renewable Natural Resources, University of Arizona.
- 1994. Excellence in Undergraduate Research Award North Carolina Collegiate Academy of Science.

## **MEDIA ATTENTION** (select examples)

- Unlikely allies: A fruit that carries a soft spot for bats. New York Times.

  (https://www.nytimes.com/2019/12/04/science/bats-durians-indonesia.html. December 2019.

  From venomous moles to snakes with legs. Independent.

  https://www.independent.co.uk/news/science/snakes-moles-titan-saturn-moon-asteroids-durian-fruit-bats-a9240361.html. December 2019.
- Bats play key pollinating role for durians. Montreal Times. <a href="https://montrealtimes.news/bats-play-key-pollinating-role-for-durians">https://montrealtimes.news/bats-play-key-pollinating-role-for-durians</a>. December 2019.
- Bats pollinate world's smelliest fruit. WCS 3 Sentence Science, written by Wildlife Conservation Society. <a href="https://newsroom.wcs.org/WCS-3-Sentence-Science.aspx">https://newsroom.wcs.org/WCS-3-Sentence-Science.aspx</a>. November 2019.
- Research links bats to growth of durian, the "world's stinkiest fruit". Bat Chat Newsletter, written by Bat Conservation International. <a href="http://www.batcon.org/resources/media-education/news-room/press-releases/1223-research-links-batsto-growth-of-durian-the-world-s-stinkiest-fruit">http://www.batcon.org/resources/media-education/news-room/press-releases/1223-research-links-batsto-growth-of-durian-the-world-s-stinkiest-fruit</a>. November 2019.
- As pollinators, bats play key role in large-scale durian production in Indonesia. Forest News. <a href="https://forestsnews.cifor.org/62538/as-pollinators-bats-play-key-role-in-large-scale-durian-production-in-indonesia?fnl=en">https://forestsnews.cifor.org/62538/as-pollinators-bats-play-key-role-in-large-scale-durian-production-in-indonesia?fnl=en</a>. October 2019.
- How research can shine a light on the economic and cultural value of bats. Bats: Bat Conservation International Magazine. <a href="http://www.batcon.org/resources/media-education/bats-magazine/bat\_article/1595">http://www.batcon.org/resources/media-education/bats-magazine/bat\_article/1595</a>. Issue 1, 2017.

- WSB study: Acoustic lures help net elusive bats. The Wildlife Society News. <a href="http://wildlife.org/wsb-study-acoustic-lures-help-net-elusive-bats/">http://wildlife.org/wsb-study-acoustic-lures-help-net-elusive-bats/</a>. June 2017.
- *UF/IFAS professor unveils research on rare, endangered mammal during national bat appreciation month.* Growing Florida. <a href="http://growingfl.com/news/2016/10/uf-ifas-professor-unveils-research-on-rare-endangered-mammal-during-national-bat-appreciation-month-2016-10-19/">http://growingfl.com/news/2016/10/uf-ifas-professor-unveils-research-on-rare-endangered-mammal-during-national-bat-appreciation-month-2016-10-19/</a>. October 2016.
- Rare bonneted bat subject of U of Florida research study. Miami Herald. http://www.miamiherald.com/news/article41656764.html. November 2015.
- 5 reasons to love bats (#1 is tequila). Futurity: Research News-Oct 30, 2015. http://www.futurity.org/5-reasons-bats-1038772/. October 2015.
- On the right track. Bats: Bat Conservation International Magazine.
  - http://www.batcon.org/component/batmag/bat article/1533. Summer 2015.

#### **SERVICE**

## A. Professional Service

- 2019-present. President-elect of Southeastern Bat Diversity Network
- 2019-2020. Past-president of Florida Chapter of The Wildlife Society
- 2017-2019. President of Florida Chapter of The Wildlife Society
- 2015-2017. President-elect of Florida Chapter of The Wildlife Society
- 2017. Proposal reviewer for National Geographic Society grant program
- 2017. Tenure packet review for assistant professor at University of Tennessee
- 2016. Tenure packet review for assistant professor at Indiana State University
- 2015. Evaluator of Graduate Research Innovation (GRIN) Award for Joint Fire Science program
- 2014–present. Associate editor for the Wildlife Society Bulletin
- 2014, 2015. Evaluator of proposals submitted to Ford Foundation Fellowship program
- 2014. Evaluator of proposal submitted to USDA AFRI Agricultural Systems Technology program
- 2012 2015. Board Member of Florida Chapter of The Wildlife Society
- 2012. Coordinator of annual Southeastern Bat Diversity Network's Bat Blitz
- 2012. Proposal evaluator of research grants for Bat Conservation International
- 2011. Proposal evaluator for U.S. Environmental Protection Agency STAR graduate fellowship
- 2010-2014. Chair of Student Scholarship Committee for Florida chapter of The Wildlife Society
- 2010. Biological status review assessor for Florida Fish and Wildlife Conservation Commission
- 2010. Grant reviewer for Natural Environment Research Council
- 2009-2018. Co-chair of the Florida Bat Working Group
- 2008. Moderator at The Wildlife Society Annual National Conference
- 2008. Judge of student presentations at The Wildlife Society Annual National Conference
- 2008, 2014, 2017. Technical reviewer of proposals submitted to Bat Conservation International student scholarship program
- 2007. Technical reviewer of grant proposals submitted to National Fish and Wildlife Foundation
- 2007-2008. Member of IACUC advisory committee for Lubee Bat Conservancy
- 2005, 2006. Presentation judge at Annual Meeting of the Oregon Chapter of The Wildlife Society
- 2003. Moderator at Annual Meeting of the Oregon Chapter of The Wildlife Society
- 2002-present. Technical reviewer of manuscripts for 41 journals ( $\bar{x}=6$ /yr since 2007; 83 total) Acta Chiropterologica, Agricultural and Forest Entomology, Bioacoustics, Biodiversity and Conservation, Biological Conservation, Biotropica, Conservation Biology, Ecological Applications, Ecological Informatics, Ecosphere, Endangered Species Research, Environmental Management, Environmental Monitoring and Assessment, European Journal Forest Research, European Journal Wildlife Research, Florida Entomologist, Florida Field

Naturalist, Forest Ecology and Management, Forests, Global Change Biology: Bioenergy, Global Ecology and Conservation, Insect Conservation and Diversity, Journal for Nature Conservation, Journal of Applied Ecology, Journal of Field Ornithology, Journal of Mammalogy, Journal of Wildlife Management, Mammalian Biology, Mammalian Species, Northeastern Naturalist, Northwestern Naturalist, PLOS One, Restoration Ecology, Scandinavian Journal of Forest Research, Southeastern Naturalist, Southwestern Naturalist, Western North American Naturalist, Wildlife Biology in Practice, Wildlife Monographs, Wildlife Society Bulletin, Zoological Studies

#### **B.** University Service

- 2019. Member, selection committee for UF/IFAS Award of Excellence for Graduate Research for Best Ph.D. Dissertation
- 2018. Member, Search and Screen Committee for new faculty hire, department of Wildlife Ecology and Conservation, UF (wildlife management position)
- 2016-2018. Chair, committee to establish and implement the North Florida Extension Academy
- 2017. Member, Search and Screen Committee for new Director of North Florida Research and Education Center
- 2016. Member, Search and Screen Committee for new faculty hire, School of Forest Resources and Conservation, UF (Fire science position)
- 2015-2017. Member, Extension Faculty Advisory Committee, UF
- 2014-2019. Member, mentoring committee for assistant professor in department of Wildlife Ecology and Conservation, UF
- 2014-2016. Member, College of Agricultural and Life Sciences Graduate Student Awards, Scholarships, and Fellowships Committee, UF
- 2013. Member, Search and Screen Committees for new faculty hire, Department of Wildlife Ecology and Conservation, UF (range management position)
- 2011-2016. Chair, Extension Committee, Department of Wildlife Ecology and Conservation, UF
- 2011. Member, Search and Screen Committee for new faculty hire, Department of Wildlife Ecology and Conservation, UF (human dimensions position)
- 2011. Chair, Awards Committee, North Florida Research and Education Center, UF
- 2009-2010. Liaison between Department of Wildlife Ecology and Conservation at UF and Florida Fish and Wildlife Conservation Commission
- 2009-2011. Member, Extension Committee, Department of Wildlife Ecology and Conservation, UF
- 2009. Member, Faculty Advisory Committee, North Florida Research and Education Center, UF
- 2007, 2008. Marshal, graduate and undergraduate commencement ceremonies, UF
- 2007. Member, selection committee, Dallas Townsend Extension Professional Enhancement Award, UF
- 2005. Moderator, AV support, and registration at 3<sup>rd</sup> Annual Research Advances in Fisheries, Wildlife, and Ecology Symposium, OSU
- 2004. Student representative, Forest Science Website Improvement Committee, OSU
- 2004. Student representative, Search and Screen Committee for new faculty hire, Department of Forest Science, OSU
- 2003-2004. Graduate Student Representative, Department of Forest Science, OSU
- 2003-2004. Graduate Assessment Committee member, Department of Fisheries and Wildlife, OSU
- 2003. Moderator at 1<sup>st</sup> Annual Research Advances in Fisheries, Wildlife, and Ecology Symposium, OSU

#### PREVIOUS PROFESSIONAL EXPERIENCE

Oregon State University (2001-2006) - Graduate research assistant

Functional relationships among vegetation, nocturnal insects, and bats in riparian areas of the Oregon Coast Range

Oregon State University (summer 2001) - Research technician

Roost site selection of bats in the Oregon Cascades

New Jersey Division of Fish and Wildlife (winter 2000) - Data analyst

Movement patterns of resident Canada geese in New Jersey

University of Arizona (1998-2000) - Graduate research assistant

Foraging ecology of lesser long-nosed bats

University of Arizona (1999-2000) - Research technician

Persistence of Hanta virus in small mammal populations

University of Arizona (fall 1999, spring 2000) - Research technician

Effects of fire on small mammals in grasslands

D<sup>2</sup> Chiropterology Consultants (winter, summer 1999) - Research technician *Habitat use of California leaf-nosed bats* 

USFWS - Tern Island Wildlife Refuge, HI (winter 1997) - Research technician

Seabird nesting behavior and demographics

Oregon State University (fall 1997) - Data analyst

Burrowing owl demography

Institute for Bird Populations - Carrizo Plain Natural Area, CA (spring-summer 1997) - Field site supervisor - *Burrowing owl demography* 

University of Maryland - Beaury State Reserve, Australia (fall 1996) - Research technician *Mating behavior of satin bower birds* 

USGS - Katchemak Bay, AK (summer 1996) - Research technician

Effects of Exxon Valdez oil spill on seabird productivity

USNPS – Hawaii Volcanoes National Park, HI (winter-spring 1996) - Research technician Productivity and survival of nene

Smithsonian Conservation and Research Center, VA (spring 1995) - Research technician Effects of habitat fragmentation on white-footed mice

## **CONTINUING EDUCATION**

2020 – Three-month leadership training program, *LEAD IFAS*, University of Florida, FL 2010-2011 – Nine-month leadership training program, *Natural Resources Leadership Institute*, FL 2007, 2012 – Grant Writing Seminar, University of Florida, FL

## PROFESSIONAL MEMBERSHIPS

Association of Natural Resources Extension Professionals (2007 – present)

Florida Association of Natural Resources Extension Professionals (2007 – present)

American Society of Mammalogists (2007 – present)

Southeastern Bat Diversity Network (2007 – present)

Gopher Tortoise Council (2007-2010)

The Wildlife Society (1997 – present)

The Wildlife Society, Florida chapter (2010 – present)

The Wildlife Society, Oregon chapter (2002 – 2006)

The Wildlife Society, Arizona chapter (1998 – 2000)