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Education:

- Ph.D., 2010 University of Florida, Agronomy Department, Center for Aquatic and Invasive Plants (Weed Science)
Dissertation title: Physiological characteristics of herbicides and management of Old World climbing fern (*Lygodium microphyllum*).
- M.S., 1998 University of Kentucky, Forestry Department (Wildlife Ecology) *Thesis title:* Summer roost site selection of red bats in mixed mesophytic forests.
- B.S., 1994 University of Florida, Forest Resources and Conservation (Wildlife Ecology; Minor - Forestry).
- A.S., 1992 Central Florida Community College (Biology)

Experience:

- 2016-present University of Texas at San Antonio, Assistant Professor, Department of Environmental Science and Ecology, San Antonio, TX.
- 2012-2016 United States Fish and Wildlife Service, Aquatic Botanist (GS-12), San Marcos Aquatic Resources Center, San Marcos, TX.
- 2010-2012 University of Florida, Post-Doctoral Research Associate, Center for Aquatic Invasive Plants, Gainesville, FL.
- 2004-2010 University of Florida, Ph.D. Graduate Research Assistant, Center for Aquatic and Invasive Plants, Gainesville, FL.
- 2002-2004 Archbold Biological Station, Lake Placid, FL., Land Manager
- 1999-2002 Florida Park Service, Hobe Sound, FL. District Biologist
- 1998 Applied Science Corporation, Lexington, KY. Consultant
- 1996-1998 University of Kentucky, Department of Forestry, M.S. Graduate Research Assistant Lexington, KY.
- 1992-1996 Florida Fish and Wildlife Conservation Commission, OPS Technician (seasonal), Ocala, FL.

- 1991 Florida Fish and Wildlife Conservation Commission, Student Intern,
Ocala, FL. 1984-1990
- 1984-1990 United States Marine Corps, Electrical Technician, Kaneohe Bay, HI.

Publications:

- Hutchinson, J.T. *In press*. Interactions between *Hygrophila polysperma* and *Ludwigia repens* grown in saturated soils and shallow water under *ex situ* conditions. *Fundamental and Applied Limnology*.
- Bohn, K., G. Brundu, D. Chapman, I. Dancza, D. Frohlich, J. Hutchinson, S. Miller, J. Van Valkenburg, and R. Tanner. 2019. *Lygodium japonicum* (Thunb.) Sw. *Bulletin OEPP/EPPO* 49:261-266.
- Guillaume, F., K. Bohn, G. Brundu, I. Dancza, D. Chapman, J. Hutchinson, S. Miller, J. Van Valkenburg, and R. Tanner. 2019. *Humulus scandens* (Lour.) Merr. *Bulletin OEPP/EPPO* 49:267-272.
- Hutchinson, J.T. 2019. *Ex situ* phenology of *Zizania texana*, an endangered aquatic macrophyte, under different water velocities. *Aquatic Botany* 153:88-94.
- Gorton, S., and J. Hutchinson. 2019. Summer acoustic monitoring of bat activity in Cibolo Preserve. *Texas Journal of Science* 71: https://doi.org/10.32011/txjsoci_71_1_Note1.
- Hutchinson, J.T. 2017. Propagation protocol for the endangered aquatic plant – Texas wildrice (*Zizania texana* Hitchc.). *Native Plant Journal* 18:77-85.
- Hutchinson, J.T. and K.G. Ostrand. 2017. Evaluation of copper on Texas wild rice, creeping primrose-willow and water star-grass. *Journal of Aquatic Plant Management* 55:113-115.
- Hutchinson, J.T. 2017. Germination of fresh and stored Texas wild rice seeds, an endangered aquatic macrophyte. *Journal of Aquatic Plant Management* 55:108-112.
- Wilson, W., J.T. Hutchinson, and K.G. Ostrand. 2017. Genetic diversity assessment of wild and refugia Texas wild rice (*Zizania texana*) populations, an endangered plant. *Aquatic Botany* 136:212-219.
- Hutchinson, J.T. and K.G. Ostrand. 2015. Texas wildrice (*Zizania texana* Hitchc.) propagule production and survival in outdoor ponds as influenced by water depth and velocity. *Native Plants Journal* 16:234-241.
- Hutchinson, J.T., D.C. Huston, and J.R. Gibson. 2015. Defoliation of cultured creeping primrose willow (*Ludwigia repens*) and other aquatic plants by *Paraponyxa obscuralis* (Lepidoptera: Crambidae). *Southwestern Entomologist* 40:227-232.
- Hutchinson, J.T. and K.A. Langeland. 2015. Response of Old World climbing fern and native vegetation to repeated ground herbicide treatments. *Journal of Aquatic Plant Management* 53:14-21.
- Huston, D.C., D. Araujo, J.R. Gibson and J.T. Hutchinson. 2014. *Epicauta polingi* (Coleoptera: Meloidae) feeding on mountain laurel (*Sophora secundiflora*) and guajillo (*Acacia berlandieri*) in West Texas. *Southwestern Entomologist* 39:887-890.

- Hutchinson, J.T. and K.A. Langeland. 2014. Tolerance of *Lygodium microphyllum* and *L. japonicum* spores and gametophytes to freezing temperatures. *Invasive Plant Science and Management* 7:328-335.
- Hutchinson, J.T. and R.B. Shaw. 2013. Range expansion of *Panicum repens* (Poaceae) into central Texas may threaten endangered species. *Journal of the Botanical Research Institute of Texas* 7:901-904.
- Hutchinson, J.T. and K.A. Langeland. 2013. Susceptibility of Old World climbing fern (*Lygodium microphyllum*) gametophytes to metsulfuron. *Invasive Plant Science and Management* 6:304-309.
- Hutchinson, J.T. and K.A. Langeland. 2012. Repeated herbicide application for control of Old World climbing fern and the effects on non-target vegetation on Everglade tree islands. *Invasive Plant Science and Management* 5:477-486.
- Hutchinson, J.T., A. Puri, M. Royuela, and K.A. Langeland. 2012. Biochemical assay on acetolactate synthase activity in *Lygodium microphyllum* exposed to metsulfuron. *Florida Scientist* 75:105-112.
- Hutchinson, J.T. and K.A. Langeland. 2011. Tolerance of Old World climbing fern (*Lygodium microphyllum*) spores to herbicides. *Invasive Plant Science and Management* 4:411-418.
- Hutchinson, J.T., E.A. Gandy, and K.A. Langeland. 2011. Herbicide management of umbrella dracaena [*Dianella ensifolia* (L.) DC.] in a Florida State Park. *Invasive Plant Science and Management* 4:349-355.
- Hutchinson, J.T., K.A. Langeland and M. Meisenburg. 2011. Field trials for herbicide control of *Ardisia crenata* in natural areas of north-central Florida. *Invasive Plant Science and Management* 4:234-238.
- Hutchinson, J.T. and K.A. Langeland. 2010. Monitoring of applied management techniques to control Old World climbing fern (*Lygodium microphyllum*) in disturbed habitat. *Florida Scientist* 73:262-273.
- Hutchinson, J.T. and K.A. Langeland. 2010. Review of two non-native, invasive climbing ferns (*Lygodium japonicum* and *L. microphyllum*), sympatric records and additional distribution records from Florida. *American Fern Journal* 100:57-66.
- Hutchinson, J.T. and K.A. Langeland. 2010. Evaluation of aerial herbicide application for reduction of woody vegetation in a floodplain marsh. *Journal of Aquatic Plant Management* 48:40-46.
- Hutchinson, J.T., K.A. Langeland, G.E. MacDonald, and R. Querns. 2010. Absorption and translocation of glyphosate, metsulfuron methyl, and triclopyr in Old World climbing fern (*Lygodium microphyllum*). *Weed Science* 58:118-125.
- Hutchinson, J.T. and R.E. Roberts. 2009. Plow line disturbance from wildfire suppression in two Florida state parks. *Fire Management Today* 69:32-37.
- Hutchinson, J.T. and K.A. Langeland. 2008. Response of selected nontarget native Florida wetland plant species to metsulfuron methyl. *Journal of Aquatic Plant Management* 46:72-76.

- Hutchinson, J.T., G.E. MacDonald, and K.A. Langeland. 2007. The potential for herbicide resistance in non-native plants in Florida's natural areas. *Natural Areas Journal* 27:258-263.
- Hutchinson, J.T. and K.A. Langeland. 2006. Survey of control measures on Old World climbing fern (*Lygodium microphyllum*) in southern Florida. *Florida Scientist* 69: 217-223.
- Hutchinson, J.T. 2006. Bats of Archbold Biological Station and notes on some roost sites. *Florida Field Naturalist* 34:48-51.
- Hutchinson, J.T. and E.S. Menges. 2006. Evaluation of the invasiveness of non-native plants at Archbold Biological Station, Florida. *Florida Scientist* 69:62-69.
- Hutchinson, J., A. Ferriter, K. Serbesoff-King, and K. Langeland (eds.). 2005. Old World Climbing Fern (*Lygodium microphyllum*) Management Plan for Florida, 2nd Edition. Florida Exotic Pest Plant Council, Lygodium Task Force. 176 pp.
- Hutchinson, J.T. 2004. Bats of the sub-tropical climate of Martin and St. Lucie Counties, southeast Florida. *Florida Scientist* 67:205-215.
- Hutchinson, J.T., and M. Meisenburg. 2004. Two winter roost sites of Lasiurines in north-central Florida. *Bat Research News* 45:90-91.
- Hutchinson, J.T. and P. Pazara. 2004. Field observations on the endangered fragrant prickly-apple cactus (*Harrisia fragrans*). *Haseltonia* 10:12-15.
- Hutchinson, J.T. 2003. cursory assessment of bat activity in state parks of coastal southeast Florida. *Bat Research News* 44:50-53.
- Hutchinson, J.T. and R.E. Roberts. 2001. Notes on the eastern pipistrelle in southeast Florida. *Florida Field Naturalist* 29:54-55.
- Hutchinson, J.T. and M.J. Lacki. 2001. Possible microclimate benefits of roost site selection in the red bat, *Lasiurus borealis*, in mixed mesophytic forests of Kentucky. *Canadian Field-Naturalist* 115:9-13.
- Hutchinson, J.T. 2001. Observations on the use of coastal scrub habitat use by evening bats (*Nycticeius humeralis*) in Martin County, Florida. *Bat Research News* 42: 44-46.
- Hutchinson, J.T. and T. Hutchinson. 2000. Observation of a melanistic bobcat in the Ocala National Forest. *Florida Field Naturalist* 28:25-26.
- Hutchinson, J.T. and M.J. Lacki. 2000. Selection of day roosts by red bats in mixed mesophytic forests in eastern Kentucky. *Journal of Wildlife Management* 64:87-94.
- Hutchinson, J.T., and M.J. Lacki. 2000. Roosting behavior and foraging activity of a female red bat with nonvolant young. *Bat Research News* 41:36-38.
- Hutchinson, J.T. and M.J. Lacki. 1999. Foraging behavior and habitat use of red bats in mixed mesophytic forest of the Cumberland Plateau, Kentucky. Pages 171-177 in J.W. Stringer and D. L. Loftis, editors. 12th Central Hardwood Forest Conference, U. S. Forest Service, Southern Experiment Station, Asheville, N.C.
- Lacki, M.J. and J.T. Hutchinson. 1999. Communities of bats (Chiroptera) in the Grayson Lake region, northeastern Kentucky. *Journal of the Kentucky Academy of Science* 60:9-14.

- Hutchinson, J.T., and M.J. Lacki. 1998. Possible gleaning behavior in *Lasiurus borealis*. *Bat Research News* 39:144.
- Ash-Steen, S.J., T.G. Barnes, J.T. Hutchinson, J.L. Larkin, B.E. Washburn, J.L. Weese, and H.F. Yacek, Jr. 1997. Characteristics of gray squirrel release sites selected by Kentucky nuisance control operators. *Proceedings of the 8th Eastern Wildlife Damage Control Conference* 8:120-125.

Manuscript in Review:

- Poole, J., J.T. Hutchinson, and C.R. Hathcock. *Accepted - major revisions*. A thirty-year assessment of the endangered aquatic macrophyte, *Zizania texana*, endemic to the upper reach of a single river in Central Texas, USA. Submitted: *Aquatic Botany*.

Non-Peer-Reviewed Publications:

- Kapoor, V., Hutchinson, J., and Dessouky, S. 2019. Evaluation and enhancement of carbon sequestration potential of existing vegetation along roadsides. *Tran-SET Final Report No. 18HSTSA01*. Available at: https://digital commons.lsu.edu/transet_pubs/41.
- Rangel, L., V. Kapoor, J.T. Hutchinson, and S. Dessouky. 2019. Carbon sequestration of soil and plants along IH-35 in Bexar County, Texas. *Proceedings 2019 Transportation Consortium of South-Central States Conference*. San Antonio, Texas.
- Gorton, S. and J.T. Hutchinson. 2018. Summer acoustic monitoring of bats at the Cibolo Preserve. *UTSA Journal of Undergraduate and Scholarly Works*. http://research.utsa.edu/UG_Journal/files/vol3/JURSW.Gorton2.pdf.
- Bohn, K., G. Brundu, D. Chapman, I. Dancza, D. Frohlich, J. Hutchinson, S. Miller, J. Van Valkenburg, and R. Tanner. 2018. Pest risk analysis for *Lygodium japonicum* (Thunb.) Sw. *European and Mediterranean Plant Protection Organization*, Paris, FR. Available at: http://www.iap-risk.eu/media/files/pr_a_exp_LYFJA.pdf.
- Guillaume, F., K. Bohn, G. Brundu, I. Dancza, D. Chapman, J. Hutchinson, S. Miller, J. Van Valkenburg, and R. Tanner. 2018. Pest risk analysis for *Humulus scandens* (Lour.) Merr. *European and Mediterranean Plant Protection Organization*. Paris, FR. Available at: <https://pra.eppo.int/organism/>
- Zerrenner, A., J. Hutchinson, and T. Brandt. 2016. Texas wild rice firmly rooted on path to recovery. *Endangered Species Bulletin Spring 2016*. Available at: <https://www.fws.gov/endangered/news/episodes/bu-spring2016/story5/index.html>
- Langeland, K.A., S.F. Enloe, and J. Hutchinson. 2016. Natural Area Weeds: Old World Climbing Fern (*Lygodium microphyllum*). *IFAS Extension Publication SS-AGR-21* (revised). University of Florida, Gainesville.
- Hutchinson J.T. and C. Williams. 2013. *Hygrophila corymbosa*, a “rare” invasive plant from San Felipe Springs, Del Rio, Texas. *Aquatics* (Summer 2013):14-18.
- Rawlins, K.A., K. Langeland, and J. Hutchinson. 2012. *Lygodium Species Comparison*

- Flyer. The University of Georgia, Center for Invasive Species and Ecosystem Health. Available online: <http://plants.ifas.ufl.edu/misc/pdfs/Lygodium-comparison.pdf>.
- Jacono, C.C., K.A. Langeland, and J.T. Hutchinson. 2011. Wright's nutrush: an invader of seasonal wetlands in Florida. IFAS Extension Publication SS-AGR-342. University of Florida, Gainesville.
- Hutchinson, J.T. 2009. The 12th European Weed Research Society International Symposium on Aquatic Weeds - an American perspective. *Aquaphyte* 29:14.
- Gandy, E.A., J.T. Hutchinson, and K.A. Langeland. 2009. Cerulean flaxlily - an invasive plant in Highlands Hammock State Park. *Wildland Weeds* 12:10-15.
- Hutchinson, J.T. 2008. 5th International Weed Science Congress – Vancouver, BC, Canada: its relevance to natural areas. *Wildland Weeds* 11:9.
- Hutchinson, J.T. 2007. Book review - *Bats of Florida*, by Cynthia Marks and George Marks. *The Quarterly Review of Biology* 82:161-162.
- Hutchinson, J.T. 2006. Additional report of *Lygodium microphyllum* mats as a potential problem for wildlife. *Wildland Weeds* 10: 7.
- Hutchinson, J.T. and K.A. Langeland. 2006. Potential spread of *Lygodium microphyllum* spores by herbicide applicators. *Wildland Weeds* 9:13-15.
- Hutchinson, J.T. 2005. Flame vine (*Pyrostegia venusta*): An invasive plant of mature scrub habitat and potentially other habitats in Florida. *Wildland Weeds* 8:7-11.
- Langeland, K.A. and J.T. Hutchinson. 2005. Natural Area Weeds: Old World Climbing Fern (*Lygodium microphyllum*). IFAS Extension Publication SS-AGR-21. University of Florida, Gainesville.
- Hutchinson, J., K. Langeland, and A. Ferriter. 2004. Notes from the *Lygodium* Research Review Meeting. *Wildland Weeds* 7(4):6-9.
- Hutchinson, J.T. 2004. Invasive plant education at Archbold Biological Station. *Wildland Weeds* 7(2):18-19.
- Hutchinson, J.T., E.S. Menges, R.L. Pickert, and H.M. Swain. 2003. Fire management at Archbold Biological Station: burning to promote heterogeneity, conservation, research, and education. Proceedings from the Second International Wildland Fire Ecology and Fire Management Congress. Orlando, FL.
- Hutchinson, J.T. 2003. Invasive Plants of Archbold Biological Station and Highlands County. Land Management Program, Archbold Biological Station.
- Hutchinson, J.T., and R.E. Roberts. 2001. Effects of Hurricane Irene on mature sand pine scrub in Southeast Florida. Pages 44-45 in D. P. Zatta, editor. Proceedings of the Florida Scrub Symposium 2001. U.S. Fish and Wildlife Service, Jacksonville, FL. July 2001.
- Hutchinson, J.T. 2001. Natural resource management using ArcView 3.2 by the Florida Division of Recreation and Parks in southeast Florida. *ArcNews* 23:28-29.
- Hutchinson, J.T. 2001. Scrub restoration and fuel reduction at Seabranck Preserve State Park, Martin County, Florida. *Saving Our Scrub* 2:3-5.
- Hutchinson, J.T. 2001. Savannas Preserve State Park timber salvage project. *Savannas Echoes Summer*: 2001.

Teaching Experience:

- Water Pollution Control (ES 5493 - 3 hours), University of Texas at San Antonio
- Spring 2018 and 2020
- Aquatic Ecology (ES 4023 - 3 hour), University of Texas at San Antonio
- Fall 2017, 2018, 2019, 2020, and 2021
- Natural Resource Policy and Administration (ES 4133 - 3 hours), University of Texas at San Antonio - Spring 2017, 2018, 2019, 2020, and 2021
- Graduate Student Seminar (ES 5981 - 1 hour), University of Texas at San Antonio
- Spring 2017, 2018, 2019, and 2020
- Graduate Student Colloquium (ES 6941 - 1 hour), University of Texas at San Antonio
- Fall 2016, 2017, 2018, 2019, and 2020
- Invited Lecturer, Technical Writing (ES 5143), University of Texas at San Antonio
- Fall 2016, 2017, 2018, and 2019
- Invited Lecturer, Conservation Biology (ES 4213), University of Texas at San Antonio
- Fall 2018 and 2019
- Invited Lecturer, Global Change (CE 6383), University of Texas at San Antonio
- Spring 2020
- Invited Lecturer, Aquatic Biology, Texas State University - 2015
- Instructor, Aquatic Weed Management Certification, University of Florida Extension Program - 2010-2012
- Invited Lecturer, Biological Invaders, University of Florida - 2010
- Instructor, Natural Areas Weed Management Certification, University of Florida's Extension Program - 2005-2012
- Lab Instructor and Teaching Assistant, Forest Wildlife Management, University of Kentucky - 1997

Grants:

- Assessing the fishery and economic value of a restored Guadalupe bass population - CoPI with Gordon Linam, Randy Myers, and Shaun Donovan (2021). Source: Texas Parks and Wildlife Department, Inland Fisheries. Amount Received: \$33,236.
- Evaluation and Characterization of Microplastics along an Ephemeral Stream - CoPI with Andre Felton (Ph.D. student) (2021). Source: Texas Water Resource Institute. Amount Received: \$4,111.
- Evaluating the suppression of *Hydrilla verticillata* by manual removal and planting native aquatic plants - CoPI with Kristy Kollaus, Kristina Tolman, Melani Howard, and Chris Hathcock (2019). Source: Texas Parks and Wildlife Department, Aquatic Invasive Species Research Grants. Amount Received: \$64,397
- Evaluation of the vegetation along roadways in Edwards Aquifer recharge and contributing zones for storm water management and water quality improvement - CoPI with Vikram Kapoor (2019). Source: City of San Antonio's Proposition 1 Funding. Amount Received: \$789,636.

- Evaluation of the vegetation and soils to improve carbon sequestration and ecosystem services at the University of Texas at San Antonio main campus - CoPI with Vikram Kapoor (2019). Source: UTSA Office of Sustainability. Amount Received: \$82,619.
- Project ASSIST: Advancing and Strengthening Science Identity through Systematic Training - CoPI with Janis Bush, Sue Hum, Amaury Nora, Juliet Ray, Kenneth Walker, and Gwen Young (2018). Source: United States Department of Agriculture. Amount Received: \$274,991.
- Advancing and Strengthening Science Identity through Systematic Training (ASSIST) - CoPI with Janis Bush, Sue Hum, Amaury Nora, Juliet Ray, Kenneth Walker, and Gwen Young (2018). Source: National Science Foundation. 2018. Amount Received: \$499,997.
- Evaluation and enhancement of carbon sequestration potential, bioenergy production and ecosystem services of existing vegetation along roadsides - CoPI with Vikram Kapoor (2017). Source: Transportation Consortium of South Central States (Tran-SET). Amount Received: \$50,000.
- Summer acoustic monitoring of bats at Cibolo Preserve - Co-PI with Sarah Gorton (2016). Cibolo Preserve Student Research Grant. Amount Received: \$3,800.
- Statistical analysis of the San Marcos and Comal Springs Aquatic Ecosystems Biomonitoring datasets - CoPI with Julie Foote (2016). Edwards Aquifer Authority. Amount Received: \$56,934
- Propagation of Texas wild rice and other native aquatic plants for habitat restoration in the San Marcos River (2016). City of San Marcos, Hays County, Texas. Amount Received: \$65,477
- Control of Chinese tallow in a seasonal wetland (2015). Texas Invasive Plant and Pest Council Mini Grant. Amount Received: \$500
- Development of propagation and outplanting techniques for native milkweeds, wild flowers, and grasses in Blackland prairie habitat (2015). U.S. Fish and Wildlife Service's Monarch Initiative Funding. Amount Received: \$7,000.
- Propagation of Texas wild rice and other native aquatic plants for habitat restoration in the San Marcos River (2015). City of San Marcos, Hays County, Texas. Amount Received: \$65,477
- Propagation of Texas wild rice and other native aquatic plants for habitat restoration in the San Marcos River (2014). City of San Marcos, Hays County, Texas. Amount Received: \$65,477
- Propagation of Texas wild rice and other native aquatic plants for habitat restoration in the San Marcos River (2013). City of San Marcos, Hays County, Texas. Amount Received: \$65,477
- Field trials evaluations of the effectiveness of untested herbicides for control of *Lygodium Microphyllum* - CoPI with Kenneth Langeland (2010). Florida Fish and Wildlife Conservation Commission, Bureau of Upland Invasive Plants. Amount Received: \$33,027
- Invasive plant mini-grant for continuation of on-going research - Co-PI with

- Kenneth Langeland (2010). Florida Fish and Wildlife Conservation Commission, Bureau of Upland Invasive Plants. Amount Received: \$6,000
- Effects of herbicide and prescribed fire on *Lygodium microphyllum* at A.R.M. Loxahatchee NWR - CoPI with Kenneth Langeland (2008). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$17,765
- Effects of selected herbicides on *Lygodium microphyllum* spore germination and survival - CoPI with Kenneth Langeland (2008). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$7,205
- Comparison of cut and spray versus band spraying for ground treatment of *Lygodium microphyllum* - Co-PI with Kenneth Langeland (2008). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$7,013
- Biochemical assay on acetolactate synthase enzyme in *Lygodium microphyllum* - CoPI with Atul Puri and Kenneth Langeland (2007). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$20,299
- Comparison of *Lygodium microphyllum* spore germination and sporophyte development between herbicide treated and untreated sites in natural areas - CoPI with Kenneth Langeland (2007). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$5,170
- Evaluation of repeated herbicide application on the effects of non-target vegetation and control of *Lygodium microphyllum* - CoPI with Kenneth Langeland (2007). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$8,140
- Evaluation of the potential of *Lygodium microphyllum* to develop resistance to the acetolactate synthase herbicide, metsulfuron methyl (Escort XP) - CoPI with Kenneth Langeland (2006). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$22,252
- Evaluation of current and potential new herbicides to control *Lygodium microphyllum* - CoPI with Kenneth Langeland (2006). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$13,751
- Evaluation of the potential of *Lygodium microphyllum* spores to develop resistance to the acetolactate synthase herbicides (2005). Florida Exotic Pest Plant Council, Invasive Plant Research Grants. Amount Received: \$2,500
- Improving Herbicide Effectiveness for *Lygodium microphyllum* Control - CoPI with Kenneth Langeland and Greg Macdonald (2005). Florida Department of Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$24,352
- Treatment effectiveness for *Lygodium* at A.R.M. Loxahatchee NWR - CoPI with Kenneth Langeland (2004). United States Fish and Wildlife Service. Amount Received: \$100,000
- Improving herbicide effectiveness for *Lygodium microphyllum* control - CoPI with Kenneth Langeland and Greg Macdonald (2004) Source: Florida Department of

- Environmental Protection, Bureau of Upland Invasive Plants. Amount Received: \$24,352
- Treatment and monitoring of Old World climbing fern at Archbold Biological Station and the Reserve (2003). Source: USFWS Partners for Fish and Wildlife Private Lands Project. Amount Received: \$3,572
- Archbold Biological Station's Red Hill Restoration Project (2002). Source: U.S.F.W.S. Partners for Fish and Wildlife Private Lands Project. Amount Received: \$7,720
- Exotic plant education program at Archbold Biological Station (2002). Source: Florida Exotic Pest Plant Council, Education Grants. Amount Received: \$750
- Treatment and control of Old World Climbing Fern at Lake Annie (Archbold Biological Station) (2002). Source: Highlands County Natural Resource Department. Amount Received: \$750
- Restoration of an isolated spoil site at St. Lucie Inlet Preserve State Park - CoPI with Phillip Myers (2001). Source: Indian River License Plate Fund. Amount Received: \$2,670
- Restoration and enhancement of ruderal lands dominated by Australian pines at Hugh Taylor Birch State Park - CoPI with Phillip Myers (2001). Source: Florida State Park Trust Fund. Amount Received: \$40,000
- Jonathan Dickinson State Park and Seabrook State Preserve scrub restoration project - Co-PI with Dick Roberts (2000). Source: USFWS Partners for Fish and Wildlife Private Lands Project. Amount Received: \$8,500

Selected Presentations:

- A thirty-year assessment of the endangered aquatic macrophyte, *Zizania texana*, endemic to the upper reach of a single river in Central Texas. Texas Aquatic Plant Management Society Annual Conference - Bryan, Texas (2019)
- Lygodium microphyllum* spore viability collected from soil samples in hydric habitats. 21st International Conference on Aquatic Invasive Species - Montreal, Canada (2019).
- Growth and interactions of *Hygrophila polysperma* and *Ludwigia repens* grown in saturated soil and shallow water in no flow conditions. Aquatic Plant Management Society - 52nd Annual Meeting, San Diego, CA. (2019).
- Establishment of aquatic macrophytes in different water velocities and sediment types within the Mission District of the San Antonio River. Native Plant Society of Texas Annual Symposium - San Antonio, TX (2018).
- Phenology of *Zizania texana*, an endangered aquatic macrophyte in the United States, under different water velocities. 15th International Symposium on Aquatic Plants. Queenstown - New Zealand (2018).
- Heterophylly and phenotypic plasticity in aquatic macrophytes found in the San Marcos River (Invited Speaker). Texas Aquatic Plant Management Society Annual Conference - San Antonio, TX (2017).
- Ecology of Texas Wild Rice, an Endemic Plant of the San Marcos River. UTSA Geology Graduate Student Seminar - San Antonio, TX (2017).

- Tolerance of *Lygodium microphyllum* and *L. japonicum* spores and gametophytes to freezing temperature (Invited Speaker). European Pest Plant Organization's *Lygodium japonicum* and *Humulus scanden* Workshop - Paris, France (2017).
- Phenology of the endangered aquatic grass *Zizania texana* under different water velocities. 14th International Symposium on Aquatic Plants - Edinburgh, Scotland (2015).
- Effects of water flow on Texas wild rice growth rates. Texas Plant Conservation Conference. Lady Bird Johnson Wildflower Center - Austin, TX (2014).
- Texas wild rice and aquatic plant propagation for restoration efforts in spring-fed rivers. Texas A&M, Department of Ecosystem Science and Management, Graduate Student Seminar - College Station, TX (2013).
- Tolerance of *Lygodium microphyllum* and *L. japonicum* spores and gametophytes to freezing temperature. Southeast Exotic Pest Plant Council Annual Meeting - Auburn, AL (2012).
- Response of Old World climbing fern (*Lygodium microphyllum*) and native vegetation to repeated ground applied herbicide treatments. Southern Weed Science Society Annual Meeting - San Juan, Puerto Rico (2011).
- Annual herbicide application for control of Old World climbing fern on Everglades tree islands. Greater Everglades Ecosystem Restoration Conference - Naples, FL (2010).
- Monitoring the effects of repeated herbicide application on *Lygodium microphyllum* and native vegetation at A.R.M. Loxahatchee National Wildlife Refuge. 12th European Weed Research Society's International Symposium on Aquatic Weeds - Jyvaskyla, Finland (2009).
- Absorption and translocation of glyphosate, metsulfuron, and triclopyr in Old World climbing fern (*Lygodium microphyllum*). Florida Exotic Pest Plant Council's 23rd Annual Symposium - Jacksonville, FL. (2008).
- Evaluation of aerial herbicide application for reduction of woody vegetation in a herbaceous marsh. Florida Fish and Wildlife Conservation Commission's Applied Management of Conservation Lands in Florida - Orlando, FL. (2007).
- The potential for spread of *Lygodium microphyllum* spores by herbicide applicators. 14th International Conference on Aquatic Invasive Species - Key Biscayne, FL. (2006).

Directed Student Learning (e.g., theses, dissertations):

Completed

Ph.D.

2018 - Srikanto Paul (Department of Civil and Environmental Engineering) - Impact of Natural Disasters on Nuclear Power Plant Facilities. Committee Member.

M.S.

2021 - Dulcie Gomez (Department of Environmental Science and Ecology) - Soil organic carbon quantification by habitat type in south central Texas. Chair.

2021 - Jeebika Sharma (Department of Civil and Environmental Engineering) - Effects of pavement and traffic characteristics on long-term stormwater quantity and its quality. Committee Member.

2020 - Madeliene Buchanan (Department of Environmental Science and Ecology) - Surveys of northern Leon Creek Greenway users and fish populations to enhance urban fishing. In collaboration with the Texas Parks and Wildlife Department Inland Fisheries Program. Chair.

2020 - Alex Todler (Department of Environmental Science and Ecology) - Comparison of benthic invertebrates between ephemeral and permanent pools in upper Leon Creek, San Antonio, Texas. Chair.

2020 - Arash Jafarzadeh (Department of Civil and Environmental Engineering) - Physiological and genetic responses of *Microcystis aeruginosa* under different environmental conditions. Committee Member.

2020 - Karen Mendiondo (Department of Geology) - Acoustic Doppler current profiler observations of ocean current velocities a SeaExplorer Glider. Committee Member.

2019 - Jessica Hinojosa (Department of Civil and Environmental Engineering) - Microbial source tracking using general and host-associated *Bacteroidales* 16S rRNA based quantitative PCR assays and correlation with environmental parameters at an urban and rural watershed within The Edwards Aquifer. Committee Member.

2018 - Tanvir Pasha (Department of Civil and Environmental Engineering) - Measuring human sewage contamination in surface waters using human and bacterial DNA markers. Committee Member.

2017 - Austin Davis (Department of Environmental Science and Ecology) - Characteristics and distribution of *Arbutus xalapensis* (Texas madrone) in the Edwards Plateau region of Central Texas. Co-chair with Dr. Oscar Van Auken.

B.S. (Honors College)

2017 - Sarah Gorton (Undergraduate Honors College) - Acoustic bat activity at Cibolo Preserve. Chair.

In-Progress

Ph.D.

Andrew Felton (Department of Environmental Science and Ecology) - Microplastics in ephemeral pools and the effects on amphibians. Chair.

Sherry Lim (Department of Environmental Science and Ecology) - Native plant drought tolerance, nutrient uptake, and soil bacterial diversity along roadways to control sediment and pollutants. Chair.

Sina Vedadi Moghadam (Department of Civil and Environmental Engineering) - Evaluation of water quality from roadway runoff in the Edwards Aquifer recharge zone. Committee Member.

Arash Jafarzadel (Department of Civil and Environmental Engineering) - Evaluation of the effectiveness of the roadside vegetation located in Edwards Aquifer in the removal of heavy metals. Committee Member.

M.S.

Sarah Gorton (Department of Environmental Science and Ecology) - *Ex situ* uptake of selected heavy metals by native grasses. Chair.

Angela Maroti (Department of Environmental Science and Ecology) - Evaluating the suppression of *Hydrilla verticillata* by manual removal and planting native aquatic plants in the San Marcos River. Chair.

Angel Chappell (Department of Environmental Science and Ecology) - Plant tissue culture to evaluate propagation techniques of a rare milkweed in west Texas. Chair.

Anna Ramos-Polanco (Department of Environmental Science and Ecology) - Analysis of metals in influent and effluent from San Antonio's Wastewater treatment plants. Chair.

Fischer Ridge (Department of Environmental Science and Ecology) - Plant composition, carbon, and metal uptake of herbaceous plants in stormwater retention basins. Chair.

Robert Turner (Department of Environmental Science and Ecology) - Angler survey to assess the fishery and economic value of a restored Guadalupe bass population. Chair.

Jason Kent (Department of Environmental Science and Ecology - Non-thesis) - Examination of oil and grease runoff into swales and basins from roadways in the Edwards Aquifer recharge zone. Advisor.

B.S. (Honors College)

2021 - Kalista Mitchell (Undergraduate Honors College). Interactions of macrophytes in varying concentrations of nitrogen and phosphorous. Chair.

2021 - Lauren Gray (Undergraduate Honors College). Characterization of tree species, density, and carbon sequestration along Leon Creek Greenway in central Texas.

2021 - Alexandria Ashley - Evaluation of phosphorous and nitrogen uptake in Texas native plants.

Non-Thesis Committees

Chair: Alyssa Cook, Harold Campbell, Danielle Frelich, Meagan Nelson, Pearla Romero, Carly Rotzler, Emily Smith, Phillip Valladolid, and Tom Willmott

Member: Greg Mateo and Stephen Ferguson

Undergraduates Mentored:

Kalista Mitchell (2021), Lauren Gray (2021), Monroe Person (2021), Alexandria Ashley (2021), Lindsey Walker (2021), Donjae Galbert (2021), Sanya Marin (2021), Jeremy Adkins (2020), Tabatha Counts (2020), Marcus Powell (2019), Maria Flores (2019), David Roberts (2019), Landon Camp (2018-2019), Liam Lin (2019), Emily Pavlik (2019), Cody Segner (2019), Annie Vu (2019), Analisa Saenz (2018), Tiffany Fogel (2018), Natalia Esquivel (2018), Corbin Reyes (2018), Emily Knodell (2018), Jerry Sharpe (2018), Susanna Harrison (2017-2018), and Ryan Hirsch (2017).

Service Contributions

Committee Assignments - UTSA

Department:

Fixed-Term-Track Faculty Evaluation and Promotion Committee (chair) - Department of Environmental Science and Ecology Promotion Review Committee (2021)

Environmental Science and Ecology Faculty Search Committee – Environmental Microbiologist position (2018)

Environmental Science and Ecology Faculty Search Committee – Wildlife Ecologist position (2017)

Committee member, Graduate Studies Committee, Environmental Science and Ecology, University of Texas at San Antonio, (2016-present)

Committee member, Undergraduate Studies Committee, Environmental Science and Ecology, University of Texas at San Antonio, (2016-2019)

Environmental Science and Ecology Faculty Search Committee (chair) – Watershed Ecologist position (2016)

UTSA Pollinator Garden Committee (2016-2018)

College:

UTSA College of Science Faculty Development Leave Committee (2018-2019)

Committee member, Doctoral Studies Committee, Environmental Engineering and Environmental Science, University of Texas at San Antonio, (2016-present)

University:

UTSA Faculty Senate Member, University of Texas at San Antonio, (2017-2020)

Professional Service Activities

Journal Editor Assignments:

Associate Editor - Southwestern Naturalist (2015-present)

Journal Reviewer:

African Journal of Agricultural Research, African Journal of Plant Science, Flora, Florida Scientist, Invasive Plant Science and Management, Journal of Aquatic Plant Management, Journal of Asia-Pacific Biodiversity, Journal of Environmental Management, Journal of Fish and Wildlife Management, Management of Biological Invasions, Native Plants Journal, Southwestern Naturalist, The Quarterly Review of Biology, Transportation Journal, and Weed Research

Professional Memberships:

Aquatic Plant Management Society, Southwestern Association of Naturalists, Texas Aquatic Plant Management Society, Texas Academy of Sciences, and American Association for the Advancement of Science

Other Professional Services:

Board of Directors - Texas Chapter of the Aquatic Plant Management Society. (2019-present).

Chair - Texas Academy of Sciences - Freshwater Science committee (2021-2022)

Co-chair - Texas Academy of Sciences - Freshwater Science committee (2020)

Expert Working Group Member - Pest Risk Assessments of *Lygodium japonicum* and *Humulus scandens* in the European and Mediterranean Region, European Pest Plant Organization, Paris, France. (March 27-31, 2017).

Collateral Duty Safety Officer. United States Fish and Wildlife Service, San Marcos Aquatic Resource Center (2012-2016).

Organizer - Second Lygodium Research Review Meeting, Florida Exotic Pest Plant Council, West Palm Beach, Florida. (June 1-2, 2004).

Bio-sketch:

Jeffrey Hutchinson specializes in aquatic ecology with an emphasis on riparian and aquatic vegetation. His professional experience in environmental science and ecology

outside of academia spans 17 years with state, federal, and non-governmental organizations. Dr. Hutchinson has extensive experience working with diverse stakeholders and volunteer groups.