CURRICULUM VITAE

BRUCE WILLIAM HOAGLAND COORDINATOR, OKLAHOMA NATURAL HERITAGE INVENTORY PROFESSOR OF GEOGRAPHY AND ENVIRONMENTAL SUSTAINABILITY

PROFESSIONAL ADDRESS

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EDUCATION

University of Oklahoma

Degree: Plant Ecology, Ph.D., 1995 Advisor: Scott L. Collins, Ph.D.

Dissertation Title: Gradient structure and heterogeneity in wetland plant communities.

Eastern Kentucky University

Degree: Applied Ecology, M. S., 1990

Advisor: Ron Jones, Ph.D.

Thesis Title: Wetland flora and vegetation of the Upper Green River Basin, South Central

Kentucky.

University of Louisville

Degree: Biology, B. A., 1986

PROFESSIONAL EXPERIENCE

1999 – present: Coordinator, Oklahoma Natural Heritage Inventory University of Oklahoma, Norman

1999 – present: Adjunct associate professor, Department of Botany and Microbiology

1996–present: Heritage Biologist, Oklahoma Natural Heritage Inventory/Oklahoma Biological Survey

1996-present: Professor of Geography, Department of Geography.

- Courses taught: Advanced field methods: Biogeography of the Sonoran Desert; Advanced field methods: Vegetation of the El Cielo Biosphere Reserve, Tamaulipas, Mexico; Biogeography; Forest history & ecology; Human Impacts on Vegetation; Introduction to Physical Geography; Geography of Oklahoma; Vegetation Ecology.
- 1995–1996: Post-doc, Biologist I/ plant community ecologist; Oklahoma Natural Heritage Inventory/Oklahoma Biological Survey
- 1992-1995: Research Associate; Oklahoma Natural Heritage Inventory/Oklahoma Biological Survey
- 1990, '91, '92: Research Assistant; Oklahoma Natural Heritage Inventory/Oklahoma Biological Survey
- 1990 1991: Teaching Assistant; Department of Botany and Microbiology University of Oklahoma, Norman
- 1989: Assistant Botanist; Kentucky Nature Preserves Commission

GRANTS

- Hoagland, BW. Oklahoma Highway Biological Studies Program. Oklahoma Department of Transportation (\$1,051,268).
 Hoagland BW & A Buthod. An Inventory of the Vascular Plants of the J.T. Nickel Family Nature and Wildlife Preserve. The Nature Conservancy (\$5,000).
 Buthod A & BW Hoagland. Status of Silene regia (royal catchfly; Caryophyllaceae) and Ptilimnium nodosum (Harperella; Apiaceae) in Oklahoma. U.S. Fish and Wildlife Service (\$6,000).
- Buthod A & BW Hoagland. Status of Cypripedium kentuckiense (Kentucky lady's slipper; Orchidaceae) in Oklahoma. U.S. Fish and Wildlife Service. (\$6,323).
 Buthod A & BW Hoagland. Floristic Inventory of the Nature Conservancy's Hottonia Bottoms Preserve. The Nature Conservancy (\$5,312).
 Hoagland, BW. Oklahoma Highway Biological Studies Program. Oklahoma Department of Transportation (\$895,000)
- 2016 Buthod, AK & BW Hoagland. A Floristic Inventory of a New Nature Conservancy Property, Johnston County, Oklahoma, The Nature Conservancy (\$1845). Buthod A & BW Hoagland. Status of *Agalinis auriculata, Agalinis skinneriana, Phlox oklahomensis*, and *Ptilimnium nodosum*. *US Fish and Wildlife Service* Hoagland BW, D Hough & TD Fagin. Oklahoma Biodiversity Information System: an integrated, online data system for conservation planning in Oklahoma. *Oklahoma Department of Wildlife Conservation* (\$131,190)

Hoagland, BW. Oklahoma Highway Biological Studies Program. *Oklahoma Department of Transportation* (\$500,000).

2015 Buthod, AK & BW Hoagland. The Federally Endangered *Ptilimnium nodosum* (*Harperella nodosa*; Apiaceae) in the State of Oklahoma: Year 2. *U.S. Department of the Interior, Fish and Wildlife Service* (\$6,997).

Buthod, AK & BW Hoagland. Status of *Agalinis auriculata, Agalinis skinneri* and *Phlox oklahomensis*. U.S. Fish and Wildlife Service (\$15,586).

Buthod, AK & BW Hoagland. A Floristic Inventory of the Nature Conservancy's Oka' Yanahli Preserve: Year 2, *The Nature Conservancy* (\$1,852).

Buthod, AK & BW Hoagland. An Updated Floristic Inventory of the Nature Conservancy's Pontotoc Ridge Preserve: Year 2. *The Nature Conservancy*(\$1,499)

Hoagland, BW & AK Buthod. Floristic Survey of the Boehler Seeps and Sandhills Preserve. *The Nature Conservancy* (\$2,615).

Hoagland, BW. Oklahoma Highway Biological Studies Program. *Oklahoma Department of Transportation* (\$500,000).

Hoagland, BW. Natural Resources Program Support, Tinker Air Force Base, Oklahoma. U.S. Department of Defense(\$68,881).

Hoagland, BW & AK Buthod. Transfer of County Level Specimen Data from the Oklahoma Vascular Plants Database to the USDA Plants Database. U.S. Department of Agriculture, Federal (\$18,264).

2014 Buthod, AK & BW Hoagland. The Federally Endangered *Ptilimnium nodosum* (*Harperella nodosa*; Apiaceae) in the state of Oklahoma. *U.S. Fish and Wildlife Service* (\$12,979). Buthod, AK & BW Hoagland. An Updated Floristic Inventory of The Nature Conservancy's Pontotoc Ridge Preserve. The Nature Conservancy (\$1,731).

Buthod AK & BW Hoagland. A Floristic Inventory of The Nature Conservancy's Oka' Yanahli Preserve (\$2,104).

Hoagland BW. Oklahoma Highway Biological Studies Program. *Oklahoma Department of Transportation* (\$502,766).

Hoagland, BW. Natural resources technician, Tinker Air Force Base, Oklahoma County, Oklahoma. *United States Department of Defense* (\$66,881).

Buthod AK & BW Hoagland. Status of the tracked plants of the Black Mesa region, Cimarron County, Oklahoma. *United States Fish and Wildlife Service* (\$19,674). Hoagland BW. Complete scalable wetland maps for key areas in Arizona. *United States Fish and Wildlife Service* (\$40,000)

Hoagland BW. Oklahoma Highway Biological Studies Program. *Oklahoma Department of Transportation* (\$332,273).

Hoagland, BW. Natural resources technician, Tinker Air Force Base, Oklahoma County, Oklahoma. *United States Department of Defense* (\$71,108).

Hoagland, BW. Floristic Survey of the Deep Fork National Wildlife Refuge. *United States Fish and Wildlife Service* (\$8,700)

- Fagin T & BW Hoagland. National Gap Analysis Program Oklahoma Protected Areas Database. United States Geological Survey (\$20,000).
 Hoagland, BW. Natural resources technician, Tinker Air Force Base, Oklahoma County, Oklahoma. United States Department of Defense (\$70,000).
 Hoagland BW, D. Hough & TD Fagin. A revised land cover map for the state of Oklahoma. Oklahoma Department of Wildlife Conservation (\$147,000).
 Vaughn, CC & BW Hoagland. Highway Biological Studies Program. Oklahoma Department of Transportation (\$400,000).
- Buthod, A. K. and B. W. Hoagland, Status of the Oklahoma Endemics Leavenworthia aurea Torr. var. aurea (golden gladecress, Brassicaceae) and Phlox pilosa L. var. longipilosa (Waterf.) J. & C. Taylor (longhair phlox, Polemoniaceae). United States Fish and Wildlife Service (\$10,565)
 Hoagland, BW. Assessment of Oklahoma wetland vegetation in conjunction with the National Wetland Condition. Oklahoma Conservation Commission (\$30,000).
 Hoagland, BW. Natural resources technician, Tinker Air Force Base, Oklahoma County, Oklahoma. United States Department of Defense (\$70,000).
 Vaughn, CC & BW Hoagland. Highway Biological Studies Program. Oklahoma Department of Transportation (\$402,368).
- Hoagland, BW. Natural resources technician, Tinker Air Force Base, Oklahoma County, Oklahoma. *United States Department of Defense* (\$70,289).
 Hoagland, BW. Updating the National Wetland Inventory maps for the Washita National Wildlife Refuge, Oklahoma. *U.S. Fish & Wildlife Service* (\$4,000).
 Hoagland, BW. Vegetation management for the restoration of an *Eriocaulon koernickianum* van Heurck & Müll. Arg. at Boehler Seeps and Sandhills Preserve, Atoka County, Oklahoma. *U.S. Fish & Wildlife Service* (\$10,999).
 Hoagland, BW. Development of Floristic Quality Index approaches for wetland plant

communities in Oklahoma. *Environmental Protection Agency* (\$109,408). Vaughn, CC & BW Hoagland. Highway Biological Studies Program. *Oklahoma Department of*

Transportation (\$402,368).

2009 Buthod, AK & BW Hoagland. *Calopogon oklahomensis* in the state of *U.S. Fish & Wildlife* (\$10,000).

Hoagland, BW. Life history and conservation of Oklahoma beardtongue (*Penstemon oklahomensis* Pennell) at Tinker Air Force Base, Oklahoma County, Oklahoma. *U.S. Department of Defense* (\$25,740).

Hoagland, BW & AK Buthod. Floristic Inventory of the Red Slough Wildlife Management Area, McCurtain County, Oklahoma. *U.S. Forest Service* (\$8,200).

Rashed, T & BW Hoagland. A landownership management tool in support of wildlife management activities at the Oklahoma Department of Wildlife Conservation. *Oklahoma Department of Wildlife Conservation* (\$45,191).

Vaughn, CC & BW Hoagland. Highway Biological Studies Program. *Oklahoma Department of Tansportation* (\$335,000).

2008 Buthod AK & BW Hoagland. Bogs of Southeastern Oklahoma, Year 2. *U.S. Fish* & *Wildlife Service* (\$11,973).

Fagin T., D Lowther, & B. Hoagland. National Vegetation Classification: Implementation and Outreach for Oklahoma. *Federal Geographic Data Committee, National Spatial Data Infrastructure* (\$25,000).

Hoagland BW & AK. Buthod. 2009. A Survey for Invasive Plant Species at the Wildfire Site near Brantley Cabin, Broken Bow Unit of the Ouachita National Forest. *U.S. Forest Service* (\$20,000).

Hoagland, BW. & AK. Buthod. 2008. A Survey for Proposed, Endangered, Threatened, and Sensitive (PETS) species and rare communities on the Broken Bow Unit of the Ouachita National Forest. *U.S. Forest Service* (\$10,000).

2007 Hoagland BW. Subregional mapping of the Ozark and Arkansas Valley Regions of the Oklahoma Comprehensive Wildlife Conservation Strategy. *Oklahoma Department of Wildlife Conservation* (\$83,950).

Hoagland BW & AK Buthod. Floristic inventory of the Little River National Wildlife Refuge. *U.S. Fish & Wildlife Service* (\$10,063).

Hoagland, BW. Analysis of land cover change and location of remnant forests in the city of Oklahoma City. *The City of Oklahoma City* (\$10,000).

2006 Hoagland, BW. Wildlife habitat mapping the Tallgrass Prairie Comprehensive Wildlife Conservation Strategy region. *Oklahoma Department of Wildlife Conservation* (\$83,950). Hoagland, BW. A digital database of Playa lakes in the Oklahoma Panhandle. *Oklahoma Department of Wildlife Conservation* (\$6,242). Hoagland, BW. Establishment of an epiphytic plant monitoring network in the Cloud Forest of the El Cielo Biosphere Reserve, Tamaulipas, Mexico. *University of Oklahoma Research Council* (\$4,415).

Hoagland, BW. Analysis of cottonwood (*Populus deltoides*) dynamics on the upper Canadian River using repeat aerial photography. *The Nature Conservancy* (\$7,004)

2005 Buthod, AK & BW Hoagland. Monitoring Vascular Plants of Federal Concern: Asclepis uncialis and Trillium pusillum var. ozarkanum. U.S. Fish & Wildlife Service (\$6,000). Buthod, AK & BW Hoagland. Platanthera praeclara and Asclepias uncialis in Oklahoma. US Fish & Wildlife Service. (\$5,868)

Harmon V, BW Hoagland, J Bridgewater, & AK Buthod. Establishment of monitoring protocols for *Stanhopea tigrina*, *Euchile mariae*, & *Laelia speciosa* (Orchidaceae) in the El Cielo Biosphere Reserve, Tamaulipas, Mexico. *Association of Zoological Horticulture* (\$10,046).

Hoagland, BW. Conversion of the Oklahoma Gap Vegetation map for habitat analysis of Species of Greatest Conservation Need. *Oklahoma Department of Wildlife Conservation* (\$9,000).

Hoagland, BW. Floristic inventory of the Four Canyons Nature Preserve. *The Nature Conservancy* (\$5,000).

Hoagland, BW & AK Buthod. Floristic Inventory of the Cucumber Creek Preserve, LeFlore County, Oklahoma. *The Nature Conservancy* (\$4,163).

2004 Buthod, AK & BW Hoagland. Utilizing Standardized Protocols for Monitoring Vascular Plants of Federal Concern: A Continuing Study of *Castanea pumila* var. *ozarkensis*. *U.S. Fish & Wildlife Service* (\$3,384).

Butler, IH, BW Hoagland, L Bergey, & J Kelly. Development of interagency rare species data sharing and exchange for statewide wildlife conservation planning. *Oklahoma Department of Wildlife Conservation* (\$54,901).

Hoagland, BW. Floristic inventory of the J.T. Nickel Family Nature and Wildlife Preserve. *The Nature Conservancy* (\$4,791).

Hoagland, BW. Wildlife habitat in Indian Territory and the Chickasaw Nation, circa 1870. Oklahoma Department of Wildlife Conservation (\$180,679). Kelly, J & BW. Hoagland.

2003 Buthod, AK & BW Hoagland. Utilizing Standardized Protocols for Monitoring Vascular Plants of Federal Concern: A Study of *Castanea pumila* var. *ozarkensis*. *U.S. Fish & Wildlife Service* (\$3,500).

Hoagland, BW. Habitat maps for Beaver River, Sandy Sanders, and Pushmataha Wildlife Management Areas. *Oklahoma Department of Wildlife Conservation* (\$12,545).

Hoagland, BW. Mapping the historic vegetation of the Washita Battlefield National Historic Site. *U.S. National Park Service* (\$10,000).

Hoagland, BW. Wildlife habitats and land cover of Osage County circa 1870. *Oklahoma Department of Wildlife Conservation* (\$24,136).

Hoagland, BW, W Elisens, A. Buthod, I. Butler, & R. Tyrl. Development of the Oklahoma Vascaular Plants Database and website. *National Science Foundation* (\$250,000).

2002 Hoagland, BW. Historical land cover of the Panhandle and northwest Oklahoma. *Oklahoma Department of Wildlife Conservation* (\$14,950).

Hoagland, BW. Review and database development for Oklahoma species of concern and species tracked by the Oklahoma Natural Heritage Inventory. *U.S. Fish & Wildlife Service* (\$11,013).

Hoagland, BW & A Buthod. Floristic inventory of Keystone Wildlife Management Area. *Oklahoma Department of Wildlife Conservation* (\$9,585).

Hoagland, BW, AK Buthod, & W Elisens. Vascular plant inventory of the Washita Battlefield National Historic Site. *U.S. National Park Service* (\$11,000).

Hoagland, BW. Distribution of prairie dog towns and associated land cover in the Oklahoma panhandle. *Oklahoma Department of Wildlife Conservation* (\$26,384).

- 2001 Hoagland, BW & AK Buthod. Floristic Survey of Hugo Wildlife Management Area.

 Oklahoma Department of Wildlife Conservation (\$8,537).

 Hoagland, BW. Vegetation of Optima, Washita, Great Salt Plains, Tishomingo, & Hagerman National Wildlife Refuges: Development of alliance and association lists. U.S. Fish & Wildlife Service (\$9,351).
- 2000 Hoagland, BW. Vegetation map and analysis of land cover change at Pontotoc Ridge Preserve and adjacent areas, Johnston & Pontotoc counties, Oklahoma. *The Nature Conservancy* (\$7,746).

- Hoagland, BW & FL Johnson. Floristic survey of Oolagah Wildlife Management Area, Oklahoma. Oklahoma Department of Wildlife Conservation (\$8,370).
- Hoagland, BW, NA McCarty, & IH Butler. An inventory of riparian & wetland areas in southwestern Oklahoma. Environmental Protection Agency (\$53,333).
 Hoagland, BW & FL Johnson. Red River Botanical Survey; Cotton, Jefferson & Tillman counties. Bureau of Land Management (\$20,000).
 Hoagland, BW. Vegetation mapping in an Ozark landscape: a study of the J-5 Ranch, Cherokee County, Oklahoma. The Nature Conservancy (\$8,250).
 Hoagland, BW & FL Johnson. Floristic survey of Red Slough and Grassy Slough, McCurtain County, Oklahoma. Oklahoma Department of Wildlife Conservation (\$9,071).
- Hoagland, BW. Development of an aquatic and wetland plant manual and Worldwide Web site for Oklahoma. Environmental Protection Agency (\$164,635).
 Hoagland, BW. Analysis of remotely sensed data for extant populations of Platanthera praeclara in northeastern Oklahoma phase 2. U.S. Fish and Wildlife Service (\$10,332).
 Hoagland, BW. Mapping the Vegetation of Black Mesa, Cimarron County, Oklahoma. The Nature Conservancy (\$2,000).
 Hoagland, BW & FL Johnson. Floristic inventory of the Deep Fork Wildlife Management Area. Oklahoma Department of Wildlife Conservation (\$5,656).
- Hoagland, BW & IH Butler. Identification and assessment of ecologically significant wetland communities in north central, northwestern, & the panhandle of Oklahoma. Environmental Protection Agency (\$166,707).
 Hoagland, BW. Analysis of remotely sensed data for extant populations of Platanthera praeclara in northeastern Oklahoma phase 1. U.S. Fish & Wildlife Service (\$10,332). Hoagland, BW. & FL Johnson. Floristic survey of wetland plant communities at Love Valley Wildlife Management Area. Oklahoma Department of Wildlife Conservation (\$5,299).

Humes, K, M Jakubauskus, M Yuan, M Morrissey, S Cook, B Hoagland, K Nixon, C Hateleid, I Butler, K Crawford, V Wong, & K Droegmeier. Center of excellence in applications of remote sensing to regional and global integrated environmental assessments. *National Atmospheric & Space Administration* (\$208,950).

1996 Hoagland, BW. Evaluation of remotely sensed data for location of extant populations of *Platanthera praeclara* & high quality tallgrass prairie remnants: preliminary study. *U.S. Fish & Wildlife Service* (\$3,419).

Hoagland, BW. Survey of extant and potential populations of *Asclepias uncialis*, *Ptilimnium nodosum*, *Thalictrum arkansanum*, & *Tomanthera skinneriana*. *U.S. Fish* & *Wildlife Service* (\$9,576).

Hoagland, BW. Floristic assessment of wetland plant communities at Chouteau, Eufaula, & Hackberry Flat Wildlife Management Areas. *Oklahoma Department of Wildlife Conservation* (\$10,275).

Hoagland, BW & FL Johnson. Upper Guy Sandy prairie restoration plan, Chickasaw National Recreation Area. *U.S. National Park Service* (\$24,506).

- Hoagland, BW, IH Butler, & R Suttles. Identification, assessment, and prioritization of ecologically significant wetland communities in northeastern Oklahoma. Environmental Protection Agency (\$160,000).
- Hoagland, BW. Digital database establishment for the Black Mesa region of Oklahoma, Colorado, and New Mexico. The Nature Conservancy (\$2,400.00).
 Hoagland, BW & FL Johnson. The effects of disturbance on the recovery of Eriocaulo (\$2,500).
 Hoagland, BW & IH Butler. Identification, assessment & prioritization of ecologically significant wetland communities. Environmental Protection Agency (\$82,572).
- 1994 Hoagland, BW & FL Johnson. Terrestrial vegetation survey of the Chickasaw National Recreation Area. *U.S. National Park Service* (\$27,500).
- 1993 Hoagland, BW. Emergent wetland vegetation of western Oklahoma. *Fish & Wildlife Foundation* (\$14,000).
- 1992 Hoagland, BW. Testing models of plant community structure along environmental gradients in wetlands. *University of Oklahoma Graduate College Research Grant* (\$500).
- 1990 Hoagland, BW. A survey of the playa lakes in southeastern Colorado. *The Nature Conservancy* (\$1,200).
- 1988 Hoagland, BW. Wetland flora and vegetation of the upper Green River Basin, southcentral Kentucky. *Athey Botany Fund, Kentucky Academy of Sciences* (\$400).

PUBLICATIONS

- Hinten, M. & BW Hoagland. In prep. An analysis of land use in the Cherokee Prairie, using Public Land Survey Records, Circa 1896. *Geographical Review*.
- Hoagland, BW. In review. An assessment of invasive status of alien vascular plant species in Oklahoma. *Phytoneuron*.
- Watkins B & BW Hoagland. In prep. The fenced landscape of the Choctaw Nation. *Southeastern Geographer*.
- Hardwick, D & BW Hoagland. In review. Environmental predictors best explain variance in bottomland forest tree community composition across an aridity gradient. *Plant Ecology*.
- Messick, JW & BW Hoagland. In review. Inter-annual Variation in Spring Budburst and Leaf-out in *Quercus marilandica* and Q. *stellata*. *Ecology and Evolution*.
- Messick, JW & BW Hoagland. In review. Does Tree Crown Position Affect Branch Growth Phenology for *Quercus marilandica* or *Quercus stellata*. Trees.
- Messick, JW & BW Hoagland. In review. An herbarium based analysis of temporal changes in flowering of the Brassicaceae and Lamiaceae. *Ecosphere*.

- Messick, JW & BW Hoagland. 2018. Seed Production and Germination of *Penstemon oklahomensis* Pennell (Plantaginaceae), a Southern Great Plains Endemic. *Castanea* 83:9 1-103.
- Hoagland, BW & AK Buthod. 2017. Vascular flora of the Deep Fork National Wildlife Refuge, Okmulgee County, Oklahoma. *Castanea* 82: 32-45.
- Buthod, AK & BW Hoagland. 2017. New to Oklahoma: *Eleocharis equisetoides* (Cyperaceae). *Phytoneuron* 78: 1–4.
- Buthod, AK & BW Hoagland. 2016. A floristic inventory of the University of Oklahoma's Kessler Atmospheric and Ecological Field Station, McClain County, Oklahoma. *Oklahoma Native Plant Record* 16:45-63.
- Faber-Langendoen, D, T Keeler, D Meidinger, C Josse, A Weakley, D Tart, G Navarro, B Hoagland, S Ponomarenko, G Fults, & E Helmer, & E. 2016. Classification and description of world formation types. Gen. Tech. Rep. RMRS-GTR-346. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 222 p.
- Qin Y, X Xiao, J Wang, J Dong, K Ewing, B Hoagland, D Hough, T Fagin, Z Zou, G Geissler, G Xian, T Loveland. 2016. Annual forest cover dynamics in sub-humid and semi-arid regions in Oklahoma during 2007-2010. *Remote Sensing* 8: 1-19.
- Buthod, AK & BW Hoagland. 2015. Contributions to the flora of Cimarron County and the Black mesa region. *Oklahoma Native Plant Record* 15:49-76.
- Hoagland, BW, AK Buthod, & D Arbour. 2015. Additions to the vascular flora of the Red Slough Wildlife Management Area, McCurtain County, Oklahoma. *Castanea*: 80: 253-261
- Hoagland, BW. 2015. Yatskievych, George. 2015. Steyermark's Flora of Missouri, Volume 3.

 Revised Ed. Dicots, Fabaceae (Subfamily Faboideae) through Zygophyllaceae. Missouri
 Botanical Garden Press (1st ed., vol. 80, pp. 66). Castanea.
- Smith-Patten, BD & BW Hoagland 2015. First Record of the Thornbush Dasher (*Micrathyria hagenii*) for Oklahoma. *Argia*, *27*: 25-28.
- Faber-Langendoen D, T Keeler-Wolf, D Meidinger, D Tart, B Hoagland, C Josse, G Navarro, S Ponomarenko, J Saucier, A Weakley, P Comer. 2014. Guidelines for a Vegetation-Ecologic Approach to Vegetation Description and Classification. *Ecological Monographs* 84: 533-561.
- Faber-Langendoen D., T Keeler-Wolf, D Meidinger, D Tart, B Hoagland, C Josse, G Navarro, S Ponomarenko, J Saucier, A Weakley, & P Comer 2014. Scientific Basis for EcoVeg. Bulletin of the Ecological Society of America 95: 444–445.
- Fagin T & BW Hoagland. 2014. A Landscape in Transition: The Historic Vegetation of the Arbuckle Mountains, Oklahoma USA, 1870 to 1898. *The Professional Geographer* 66: 456-467.
- Buthod AK & BW Hoagland. 2013. Noteworthy Collections: *Harperella nodosa* Rose (APIACEAE). *Castanea* 78:213-215.
- Buthod AK & BW Hoagland. 2013. New to Oklahoma: *Carex glaucescens* (Cyperaceae) and *Desmazeria rigida* (Poaceae). Phytoneuron 8: 1-5.
- Buthod AK & BW Hoagland. 2013. New to Oklahoma: *Murdannia keisak* (Commelinaceae) Phytoneuron 93: 1-3.
- Hoagland, BW & AK Buthod. 2013. Vascular Flora of the Little River National Wildlife Refuge, McCurtain County, Oklahoma. *Castanea* 78:103-118.
- Hoagland, BW, J Messick, M. Rahman, & T. Fagin. 2013. Vegetation patterns in Wichita Mountains National Wildlife Refuge, Oklahoma; an analysis of General Land Office

- Survey records from 1874 and 1905. *Publications of the Oklahoma Biological Survey* 12:1-14
- Messick, JA & BW Hoagland. 2013. Potential Distribution Modeling of *Penstemon oklahomensis*Pennell (Plantaginaceae). *Journal of the Botanical Research Institute of Texas* 7(2): 891-899.
- Yoo E, BW Hoagland, G. Fao & TD Fagin. 2013. Spatial distribution of trees and landscapes of the past: a multinomial logistic mixed model approach for the analysis of the Public Land Survey data. *Geographical Analysis* 45: 419-440.
- Batterson C & BW Hoagland. 2012. Species composition and classification of forest vegetation at the John T. Nickel Family Nature and Wildlife Preserve, Cherokee County, Oklahoma. *Proceedings of the Oklahoma Academy of Science* 92:1-8.
- Hoagland BW & AK Buthod. 2012. New to Oklahoma: *Carex comosa* (Cyperaceae). Phytoneuron 13:1–3.
- Messick J & BW Hoagland. 2012. *Penstemon oklahomensis* (Plantaginaceae) Habitat in Oklahoma. *Proceedings of the Oklahoma Academy of Science* 92: 37-46.
- Buthod AK & BW Hoagland. 2011. New to Oklahoma: *Anthoxanthum odoratum* L. (Poaceae). *Phytoneuron* 51:1–2.
- Buthod AK & BW Hoagland. 2011. New to Oklahoma: *Leptochloa panicoides* (Poaceae). Phytoneuron 55:1–2.
- Julian J, RE Thomas, S Moursi, BW Hoagland & A Tarhule. 2011. Historical variability and feedbacks among land cover, stream power, and channel geometry long the lower Canadian River floodplain in Oklahoma. Earth Surface Processes and Landforms 37:449-458.
- Thomas RE & BW Hoagland. 2011. The changing forests of Central Oklahoma: a look at the composition of the Cross Timbers prior to Euro-American Settlement, in the 1950s, and today. Oklahoma Native Plant Record 11:61-74.
- Crawford PH & BW Hoagland. 2010. Using species distribution models to guide conservation at the state level: the endangered American burying beetle (*Nicrophorus americanus*) in Oklahoma. *Journal of Insect Conservation* 14:511-521.
- Fagin T & BW Hoagland. 2010. Patterns from the past: modeling Public Land Survey witness tree distributions with weights-of-evidence. *Plant Ecology* 212:207-217.
- Hoagland BW & AK Buthod 2010. The vascular flora of Hale Scout Reservation, Le Flore County, Oklahoma. *Oklahoma Native Plant Record*.
- Micozzi, M & BW Hoagland. 2010. Vegetation dynamics in a semi-arid mesa environment: the effects of spatial heterogeneity and environmental gradients at Black Mesa, Cimarron County, Oklahoma. Black Mesa, Cimarron County, Oklahoma. VDM Verlag-Muller. 120 pp.
- Crawford, PH & BW Hoagland. 2009. Can herbarium records be used to map plant invasion over the past 100 years? *Journal of Biogeography* 36:651-661.
- Hoagland, BW & AK Buthod. 2009. The vascular flora of the Cucumber Creek Nature Preserve, LeFlore County, Oklahoma. *Castanea* 74:78-87.
- Hoagland, BW & AK Buthod. 2008. Vascular flora of the J.T. Nickel Family Nature and Wildlife Preserve. *Castanea* 73: 16-28.
- Hoagland, BW & AK Buthod. 2008. Vascular flora of an Ozark Plateau site, Ottawa County, Oklahoma. *Southeastern Naturalist* 7:581-594.

- Hoagland, BW. 2007. An updated checklist of the Flora of the Oklahoma Ozarks. *Oklahoma Native Plant Record* 7:21-53.
- Hoagland, BW. & AK Buthod. 2007. Vascular flora of the Four Canyon Preserve, Ellis County, Oklahoma. *Journal of the Botanical Research Institute of Texas* 1:655-664.
- Hoagland, BW. & AK Buthod. 2007. The vascular flora of the Oklahoma Centennial Botanical Garden Site. *Oklahoma Native Plant Record* 7:54-66.
- Burgess LJ & BW Hoagland. 2006. Vascular flora of riparian site on the Canadian River, Cleveland County, Oklahoma. *Oklahoma Native Plant Record* 6:69-79.
- Buthod AK & BW. Hoagland. 2006. *Galium tricornutum* (Rubiaceae) and *Parentucellia viscosa* (Scrophulariaceae): new to Oklahoma. *Sida* 22:235.
- Goble D. & Hoagland BW. 2006. Inter-urban Rail Lines, 1903-1950, in CR Goins & D. Goble, Historical Atlas of Oklahoma. University of Oklahoma Press, Norman.
- Hoagland BW. 2006. Arkansas and Red River Basins; Soils; Vegetation; Threatened and Endangered Species; The Louisiana Purchase; American Explorers 1806-1821; American Explorers 1832-1853; Buffalo Country; Township and Range Survey System; Wheat Farming 1907-2000; Cotton Farming 1907-2000; Corn and Other Grain Farming 1907-2000 (individual entries), in CR Goins & D. Goble, *Historical Atlas of Oklahoma*. University of Oklahoma Press, Norman.
- Hoagland BW. 2006. Woody Plant Species Composition of a *Fagus grandifolia* Ehrh. (American Beech) Forest along Beech Creek, LeFlore County, Oklahoma. *Publications of the Oklahoma Biological Survey* 7:34-39.
- Hoagland BW & AK Buthod. 2006. Vascular Flora of a Red Sandstone Hills site, Canadian County, Oklahoma. Oklahoma Native Plant Record 6:53-68.
- Hoagland BW & AK Buthod. 2006. Vascular Flora of a site in the Slick Hills, Caddo County, Oklahoma. *Proceedings of the Oklahoma Academy of Science*
- Hoagland BW & D. Goble. 2006. Railroads 1870-1907; Railroads 1907-2002; Livestock Production; Civilian Conservation Corp Camps (individual entries), in CR Goins & D. Goble, Historical Atlas of Oklahoma. University of Oklahoma Press, Norman.
- Hoagland BW & AK Buthod. 2005. Vascular Flora of a Gypsum Dominated Site in Major County, Oklahoma. *Proceedings of the Oklahoma Academy of Science* 85:1-8.
- Hoagland BW & AK Buthod. 2005. Vascular flora of a site along the Arkansas River, Pawnee County, Oklahoma. *Oklahoma Native Plant Record* 5:61-72
- Hoagland BW & Johnson FL. 2005. Vascular flora of the Deep Fork River in Okmulgee, Creek, and Okfuskee Counties. *Publications of the Oklahoma Biological Survey* 6:15-29.
- Hoagland BW, AK Buthod, & G Caddell. 2005. The occurrence of *Cerastium pumilum* (Caryophyllaceae) in Oklahoma. *Sida* 21:2439-2440.
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- Buthod AK & BW Hoagland. 2004. Status and habitat characteristics of *Cypripedium kentuckiense* (Kentucky lady's slipper) in southeastern Oklahoma. *Oklahoma Native Plant Record* 4:40-47.
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- Hoagland BW. 2004. *Cotinus obovatus* Raf. (Smoke-tree) in Oklahoma. *Oklahoma Native Plant Record* 4:24-25.

- Hoagland BW & AK Buthod. 2004. Vascular flora of Hugo Lake Wildlife Management Area, Choctaw County, Oklahoma. *Southeastern Naturalist* 3:701-714.
- Hoagland BW & AK Buthod. 2004. *Alternanthera paronichyoides* St.-Hil. (Amaranthaceae) and *Rumex maritimus* L. (Polygonaceae) new to Oklahoma. *Sida* 21:1199-1200.
- Hoagland BW, AK Buthod & W Elisens. 2004. Vascular flora of Washita Battlefield National Historic Site, Roger Mills County, Oklahoma. *Sida* 21:1187-1197.
- Hoagland BW & FL Johnson. 2004. Vascular Flora of Chouteau Wildlife Management Area, Wagoner County, Oklahoma. *Oklahoma Native Plant Record* 4:30-39.
- Hoagland BW, P Crawford-Callahan, P Crawford, & FL Johnson. 2004. Vascular flora of Hackberry Flat, Fredrick Lake, & Suttle Creek, Tillman County, Oklahoma. *Sida* 21:429-445.
- Hoagland BW & FL Johnson. 2004. Vascular flora of Love Valley Wildlife Management Area, Love County, Oklahoma. *Proceedings of the Oklahoma Academy of Science* 84:9-18.
- Hoagland BW & FL Johnson. 2004. Vascular flora of Red Slough and Grassy Slough Wildlife Management Areas, Gulf Coastal Plain, McCurtain County, Oklahoma. *Castanea* 69:284-296.
- Shutler A. & BW Hoagland. 2004. Vegetation in the cross timbers, Carter County, Oklahoma, 1871. *Proceedings of the Oklahoma Academy of Science* 84:19-26.
- Hoagland BW & AK Buthod. 2003. Vascular flora of the Keystone Wildlife Management Area, Creek, Pawnee, and Osage Counties, Oklahoma. *Oklahoma Native Plant Record* 3:23-37.
- Hoagland BW & K Wallick. 2003. Vascular flora of Oologah Wildlife Management Area in Nowata County, Oklahoma. *Proceedings of the Oklahoma Academy of Sciences* 83:47-62.
- Hoagland BW. 2002. A classification and analysis of western Oklahoma wetlands. *Proceedings* of the Oklahoma Academy of Sciences 82:5-14.
- Fagin T & BW Hoagland. 2002. In search of the forest primeval: The use of land survey records in reconstructing past landscapes and evaluating human impact. *North American Geographer* 4:1-20.
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- Vaughn CC, DE Spooner, & BW Hoagland. 2002. River weed growing epiphytically on freshwater mussels. *Southwestern Naturalist* 47: 604-605.
- Hoagland BW & FL Johnson. 2001. Vascular flora of the Chickasaw National Recreation Area, Murray County, Oklahoma. *Castanea* 66:383-400.
- Hoagland, BW. 2000. The vegetation of Oklahoma: a classification of landscape mapping & conservation planning. *Southwestern Naturalist* 45: 385-420.
- Hoagland, BW, I. Butler, F. L. Johnson & S. M. Glenn. 1999. Ecology & vegetation of the Cross timbers in Kansas, Oklahoma and Texas. In: Anderson, R. C., Fralish, J & J.Baskins. *The savanna, barren & rock outcrop communities of North America*. Cambridge University Press.
- Hoagland, BW. 1999. Entries for the *Encyclopedia of the Desert* (Amenochory; Annual Plants; Cryptogams; Riparian Vegetation; Zoochory). Mares, M. ed. University of Oklahoma Press, Norman.

- Hoagland, BW. 1998. Riparian vegetation. In: Fallon, A. & M. Smollen. *Riparian area management handbook*. Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater.
- Hoagland, BW. & NA McCarty. 1998. *Alternanthera philoxeroides* (Mart.) Griseb. (AMARANTHACEAE) new to Oklahoma. *Castanea* 63: 194.
- Hoagland, BW & S Stoodley. 1998. Ecoregions. In: Fallon, A. & M. Smollen, eds. *Riparian area management handbook*. Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater.
- Hoagland, BW & SL Collins. 1997. Gradient models, gradient analysis, & hierarchical structure in plant communities. *Oikos* 78:23-30.
- Hoagland, BW & SL Collins. 1997. Heterogeneity in shortgrass prairie vegetation: the role of playa lakes. *Journal of Vegetation Science* 8:277-286.
- Hoagland, BW, LR Sorrels & SM Glenn. 1996. Woody species composition of floodplain forests of the Little River, McCurtain and LeFlore Counties, Oklahoma. *Proceedings of the Oklahoma Academy of Science* 76:23-26
- Hoagland, BW. 1995. Gradient structure and heterogeneity in wetland plant communities. Ph.D. Dissertation, University of Oklahoma. 101 pp.
- Hoagland, BW. & R Jones. 1992. Wetland and Riparian Flora of the Upper Green River Basin, South-Central Kentucky. *Transactions of the Kentucky Academy of Science* 53:141-153.
- Hoagland, BW. 1990. Wetland flora and vegetation of the Upper Green River Basin, South Central Kentucky. Masters Thesis, Eastern Kentucky University. 164 pp.
- Hoagland, BW. 1989. Wetland flora and vegetation of the Upper Green River Basin, Southcentral Kentucky. *Association of Southeastern Biologists Bulletin* 36: 71.
- Hoagland, BW. 1989. Cooperative experiences with the Kentucky Nature Preserves Commission. *Kentucky Native Plant Society Newsletter* 4: 9-11.

Unrefereed reports

- 2015 Buthod, A.K. and B.W. Hoagland. 2015. The Federally Endangered *Ptilimnium nodosum* (*Harperella nodosa*; Apicaceae) in the state of Oklahoma, U.S. Fish and Wildlife Service, 118 pages
- 2015 Buthod, A.K. and B.W. Hoagland. 2015. Status of the Tracked Vascular Plants of the Black Mesa Area, Cimarron County, Oklahoma, U.S. Fish and Wildlife Service, 35 pages
- 2013 Fagin, TD & BW Hoagland. National GAP Analysis Program: Oklahoma Protected Areas Database. U.S. Department of the Interior—U.S. Geological Survey.
- 2003 Hoagland, BW. Effect of Disturbance on recovery of *Eriocaulon koernickianum*. Final report in fulfillment of a contract with the United States Fish & Wildlife Service.
- 1995 Johnson, FL, MD Proctor, NA McCarty, BW Hoagland, MI Holmes, GE Brown, TL Browning, DL Benesh, & GD Schnell. Floral inventory of fort A. P. Hill, Virginia. Final report in fulfillment of a contract with the Department of Defense. Johnson, FL, MD Proctor, NA McCarty, BW Hoagland, MI Holmes, GE Brown, TL Browning, DL Benesh, & GD Schnell. Floral inventory of Aberdeen Proving Grounds -

Edgewood Arsenal, Maryland. Final report in fulfillment of a contract with the Department of Defense.

Johnson, FL, MD Proctor, NA McCarty, BW Hoagland, MI Holmes, GE Brown, TL Browning, DL Benesh, & GD Schnell. Floral inventory of Quantico Marine Base, Virginia. Final report in fulfillment of a contract with the Department of Defense.

1994 Hoagland, BW & FL Johnson. Emergent wetland vegetation of western Oklahoma: final report. Final report in fulfillment of a grant contract with the Fish and Wildlife Foundation.

McCarty, NA & BW Hoagland. Ecological assessment of the Tiak Research Natural Area, Tiak District, Ouachita National Forest. Final report in fulfillment of a contract with the Department of Agriculture.

Roedell, M., B. W. Hoagland and G. D. Schnell. Vegetation, fish and wildlife survey of KMFMine Site #1, LeFlore County, Oklahoma. Final report in fulfillment of a contract with Bentley Environmental Engineering Consultants, Oklahoma City.

- 1993 Glenn, SM, Watson, LE & BW Hoagland. Vegetation of Tinker Air Force Base, Oklahoma. Final Report in fulfillment of a grant contract with the Department of Defense in fulfillment of a contract with the University of Oklahoma.
- 1990 Hoagland, BW. A survey of playa lakes in southeast Colorado. Final report to the Colorado Field Office of The Nature Conservancy.

PRESENTATIONS

2017 Hoagland BW, T Fagin, D Hough. The Oklahoma Biodiversity Information Species: A resource for conservation data. Tulsa, 24 February.

Hoagland BW, T Fagin, D Hough, J Messick, D Hardwick. Application of the Ecological Systems Map of Oklahoma for habitat evaluation and rare species mapping. Oklahoma Natural Resources Conference. Tulsa, 23 February.

Diamond D, L Elliot, A Janus, D German, A Treuer-Kuehn, B Hoagland. Ecological systems of Oklahoma and Texas: Current vegetation and future updates. Oklahoma Natural Resources Conference. Tulsa, 23 February.

Griffin, A, DW Hoagland, K Kulkinski. A spatial database for the ecoregional scale analysis of Oklahoma sportfish species. Oklahoma Natural Resources Conference. Tulsa, 24 February.

Hoagland BW, T Fagin, D Hough, J Messick, D Hardwick, A Buthod. Application of the Ecological Systems Map of Oklahoma for habitat evaluation and rare species mapping. Biodiversity Without Boundaries. Ottawa, 10 April.

Hoagland BW. Gardening with Natives: Ecoregional Considerations. Stillwater, Ok. 31 May.

Griffin A, BW Hoagland, K Kulklinski. Standard Sampling Protocol: Development of a Comprehensive Database. Arcadia, Oklahoma. 3 October 2017

Hoagland BW, T Fagin, D Hough, J Messick, D Hardwick, A Buthod. A Comparison of Land Cover Datasets for Efficacy in the Analysis of Rare Species Distributions. Natural Areas Conference. Fort Collins, CO. 11 October 2017.

- 2016 Hoagland BW, TD Fagin, BD Smith-Patten.
- 2015 Hoagland B.W., D. Hough. T.D. Fagin. Oklahoma Biological Information System. South Central Arc Users Group. Oklahoma City, OK. Sept. 22, 2015.
- 2014 Buthod, AW & BW Hoagland. How a species' distribution influences conservation ranking and prioritization. Smithsonian Botanical Symposium, Washington, DC. April 2014.

Messick, J & BW Hoagland. *Penstemon oklahomensis* (Plantaginaceae) seed production and germination. Southwestern Association of Naturalists Annual Conference. Stillwater, Oklahoma. April 2014.

Westrop, DR & BW Hoagland. Changes in abundance and distribution of one seed juniper and pinyon pine woodlands, northwest Cimarron Co., Oklahoma. Southwestern Association of Naturalists Annual Conference. Stillwater, Oklahoma. April 2014.

Hoagland, BW, K. Offen &H. Jimenez-Saa. Zonas de Vida: mapping nature in Costa Rica. Conference of Latin American Geographers. Panama City, Panama. January 2014. Hoagland, BW. Biodiversity conservation: the role of the Oklahoma Natural Heritage Inventory. Northeastern State University, Tahlequah. February 2014.

Hoagland, BW. Ecology and Biogeography of Coneflowers. STEM Outreach presentation(OU Dept. of Biochemistry and Biochemistry) Norman, OK. June 2014.

2013 Buthod AK & BW Hoagland. The Endangered *Harperella nodosa* (*Ptilimnium nodosum*; Apiaceae) in Oklahoma. Smithsonian Botanical Symposium, Washington DC. April 2013 Fagin TD, BW Hoagland & A Ryan. A New Protected Areas Database for the State of Oklahoma. NatureServe Biodiversity without Boundaries meeting. Baltimore, MD. April 2013.

Fagin, TD & BW Hoagland. A New Protected Areas Database for the State of Oklahoma. South Central Arc Users Group. Oklahoma City, OK. Sept. 2013.

Hoagland BW, D Hough, TD Fagin & K Ewing. A Revised Land Cover Map for the State of Oklahoma. Southwestern Association of Naturalists Annual Conference. April 2013. Hoagland BW, D Hough & TD Fagin. Progress Report on a Revised Land Cover Map for the State of Oklahoma. South Central Arc Users Group. Oklahoma City, OK. Sept. 2013. Hoagland, BW. Significance of the Wichita Mountains to the Flora of Oklahoma. Oklahoma Academy of Science Annual meeting. Nov. 2013

2012 Fagin T, E Yoo, B Hoagland & G. Cao. Modeling spatial distribution of PLS witness tree data using a multinomial logistic mixed model. Association of American Geographers, Feb. 2012.

Hinten M & BW Hoagland. Assessing The Change In Tallgrass Prairie Vegetation Within The Cherokee Prairie From 1896 To 2008. Association of American Geographers, Feb. 2012.

Hoagland BW, D Faber-Langedoen, C Josse, D Meidinger, E Helmer, G Fults, G Navarro, JP Saucier, O Huber, S Ponomarenko, & T Keeler-Wolf. The International Vegetation Classification: an integrated physiognomic-floristic approach for mapping and conservation applications. Association of American Geographers, Feb. 2012. Lawson, M & BW Hoagland. Pollinators and pollinations of *Fuchsia paniculata*. Southwest Association of Naturalists, April 2012.

2011

Hinten, M & BW Hoagland. The change in tallgrass prairie vegetation within the Cherokee Prairie from 1898 to 2008. Southwest Association of Naturalists 23 April 2011. Hoagland, BW & T Fagin. Use of Historical Data Sources for the Analysis of Vegetation-Environment Relationship. Association of American Geographers. 4 April 2011.

2010 Fagin, T & BW Hoagland. (Re)Mapping the Vegetation of Oklahoma: An implementation of the National Vegetation Classification. Ecological Society of America. 3 August 2010. Hoagland, BW. With my head in the clouds: the biogeography of neotropical oak forests. OU Department of Geography, Sustainability Seminar series. 17 February 2010. Hoagland, BW. Ranking Invasive Plants in Oklahoma. Oklahoma Invasive Plants Council Annual meeting. 14 July 2010.

Hoagland, BW. Land cover and vegetation of the Ozark Plateau, Oklahoma, circa 1897. Ozark Summit. 20 October 2010.

Hoagland, BW and AK Buthod. Characteristics of a persistent Ozark chinkapin (*Castanea pumila* var *ozarkensis*) populations on the Ozark Plateau of Oklahoma. Ozark Summit. 20 October 2010.

2009 Crawford, P. H. C. and Hoagland, B. W. Predicting the distribution of invasive species using native range information: can local conservation benefit from global models? Southwest Association of Naturalists. Monterrey, Neuvo Leon, Mexico. Fagin,TD & BW. Hoagland. Composition and Change in Cross Timbers in the Arbuckle Mountains, 1870s to 1890s. Annual Meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science. Tulsa, OK. March 28-31.

Fagin, TD, DL Lowther & BW. Hoagland. The National Vegetation Classification Standard: Implementation and outreach for the state of Oklahoma. Annual Meeting of the Ecological Society of America. Albuquerque, NM. August 3-8.

Hoagland, BW. Wildflowers of Cimarron County. Oklahoma Wildlfower Workshop. Boise City, OK. June 6.

Hoagland, BW. A land cover map, circa 1871, for the study of cross timbers vegetation. Annual Meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science. Tulsa, OK. March 28-31.

Thomas, R & BW Hoagland. Structure and composition of the Cross Timbers in central Oklahoma: Pre-settlement, turn of the 20th century, and today. Midwest Oak Savanna and Woodland Conference. Toledo, OH. July 30.

Thomas, R & BW Hoagland. Urbanization in the Cross Timbers: The Oklahoma City area, pre-settlement and today. Annual Meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science. Tulsa, OK. March 28-31.

Thomas, R & BW Hoagland. Urbanization in the Cross Timbers: Land cover change in Oklahoma City. Southwest Association of Naturalists. Monterrey, Neuvo Leon, Mexico.

2008 Hoagland, BW. The Oklahoma Natural Heritage Inventory and the Conservation of Oklahoma's Biodiversity. Guest Lecture, Sustainability Dream Course, OU. January. Hoagland, BW. Conservation of Oklahoma Rare Plants. Cactus & Succulent Society. July 2008.

Hoagland, BW. Conserving Oklahoma's Grassland Biodiversity. Sierra Club. July 2008.

Hoagland, BW. Wildflowers of McCurtain County. September 2009.

Hoagland, BW. The Oklahoma Natural Heritage Inventory and the Conservation of Oklahoma's Biodiversity.

University of Texas at Commerce. September 2009.

Fagin, T & BW Hoagland. Vegetation and Land Cover Change in the Arbuckle Mountains, 1871-1897. *Association of American Geographers*, San Francisco.

Hoagland, BW. A Baseline for the Study of Land Cover Change and Settlement in Oklahoma. *Association of American Geographers*, San Francisco.

Hoagland, BW. From Mountains to Plains, gradients in Oklahoma vegetation.

Oklahoma Alliance for Geographic Education. Norman.

Hoagland, BW. "Vexations of flesh and spirit ..." defining the cross timbers. Oklahoma Centennial Botanical Garden. 9 Sept. 07

Hoagland, BW. Oklahoma Plant Diversity (keynote address). *Association of Zoo Horticulture*. Tulsa. 14 Oct. 07.

Hoagland, BW. The Oklahoma Natural Heritage Inventory and the Conservation of Oklahoma's Biodiversity. *Oklahoma Teachers Association*. Oklahoma City. 18 Oct. 07. Hoagland, BW. & P. Crawford. Modeling the potential geographic distribution of species in Oklahoma. *Oklahoma Climate Survey*. Norman. 6 Dec. 07.

2006 Batterson, C. & BW Hoagland. Upland forest vegetation of the Ozark Plateau, Cherokee County, Oklahoma, ca. 1897. *Southwest Association of American Geographers*.

Norman, OK

Burgess, LJ and BW Hoagland. Invasive species dynamics along a stretch of the Canadian River, Cleveland County, Oklahoma. *Southwest Association of American Geographers*. Norman, OK

Norman, OK
Callahan-Crawford & BW Hoagland. Can herbarium records be used to map plant invasion? *Southwest Association of American Geographers*. Norman, OK

Fagan, T & BW Hoagland. Vegetation and land-cover change in the Arbuckle Mountains 1871-1897. *Southwest Association of American Geographers*. Norman, OK

Hoagland BW. From Mountains to Plains, gradients in Oklahoma vegetation. *Oklahoma Academy of Science Technical Meeting*. Claremore, Okla. 3 Nov. (Invited).

Hoagland, BW. Oklahoma Vascular Plants Database. *Texas-Oklahoma Regional Consortium of Herbaria meeting* (invited). 6 May. (Invited).

Hoagland, BW. Vegetation and Floristic Research in the Ouachita Mountains.

Ouachita National Forest Rare Species Workshop. 26 May. (Invited).

Hoagland, BW & AK Buthod. Characteristics of a persistent *Castanea pumila* var.

ozarkensis population on the Ozark Plateau of Oklahoma. *Southwest Association of Naturalist*. Colima, Mexico. 15 April.

Isom, L. & BW Hoagland. Spatial heterogeneity and species richness in the mixedgrass prairie, Ellis County, Oklahoma. *Southwest Association of American Geographers*. Norman, OK

2005 Batterson, C & BW Vegetation of an Ozark Plateau Forest in Cherokee County, Oklahoma, ca. 1897. Association of American Geographers, Denver, CO. Burgess, LJ & BW Hoagland. Riparian Vegetation Dynamics Along the Canadian River, Cleveland County, Oklahoma Association of American Geographers, Denver, CO. Crawford, PHC & BW Hoagland. Mapping plant species in space and time using data obtained from herbarium specimens. Association of American Geographers, Denver, CO.

BW Hoagland, AK Buthod, IH Butler, P Crawford, A Udasi, W Elisens, & R Tyrl. The Oklahoma Vascular Plant Database: A Tool for Biogeographic Analysis. *Association of American Geographers*, Denver, CO.

BW Hoagland, AK Buthod, IH Butler, P Crawford, A Udasi, W Elisens, & R Tyrl.
 Development of a Web-accessible database for herbarium specimens in Oklahoma.
 Botanical Society of America, 3 August 2004.
 Crawford, P. & BW. Hoagland, The Oklahoma Vascular Plants
 Database as a Research Tool. Oklahoma Academy of Sciences. 10/04.
 Hoagland, B.W. History and natural history of the Panhandle. Kenton, Oklahoma.
 Oklahoma Academy of Sciences. 9/04

2003 Hoagland, BW. Conservation of Oklahoma's rare species. Oklahoma chapter of the *Sierra Club* state meeting. 1/03

Hoagland, BW. Protecting Oklahoma's Natural Heritage. Window on the World Program, *Broken Arrow Public Schools*. 1/03

Hoagland, BW. Wildflowers of the Arbuckle Mountains (oral presentation and fieldtrip leader). Oklahoma Native Plant Society. 5/03

Hoagland, BW. Red River symposium co-convener. *Southwestern Association of Naturalists*. 4/03

Hoagland, BW. Distribution of vegetation in the Red River Basin. Southwest Association of Naturalists. 4/03

Hoagland, BW. The role of floristic inventory in plant conservation. *Texas Women's University*. 10/03

Hoagland, BW. Biogeographical applications for plant conservation. *Oklahoma Panhandle State University*. 11/03.

Hoagland, BW. &AK Buthod. The effects of fire on fitness and life history of *Castanea ozarkensis*. Oklahoma Academy of Sciences.

- 2002 Hoagland, BW, B Watkins, & T Fagin. Analysis of landscape change between the years 1871 and 1897, Arbuckle Mountains, Oklahoma. *Association of American Geographers*, Los Angeles.
 - Hoagland, BW & AK Buthod. The efficacy of floristic inventories: results from recent surveys. *Oklahoma Academy of Sciences*, Oklahoma City.
- 2001 Micozzi, M & BW Hoagland. Vegetation pattern and species diversity at Black Mesa, Cimarron County, Oklahoma. Association of American Geographers, New York Shutler, A & BW Hoagland. Change in landscape structure and composition between the years 1871 and 1897 in South-Central Oklahoma, USA. Association of American Geographers, New York

Hoagland, BW. Wildflowers of south-central Oklahoma. *Oklahoma Wildflower Workshop*. (Invited).

Hoagland, BW. Rare plant conservation and the Oklahoma Biological Survey. *International Plant Conservation Day, Oklahoma City Zoo.* (Invited).

- Hoagland, BW & B Watkins. An Analysis of Change in Landscape Structure and Vegetation Between the Years 1871 and 1897 in the Arbuckle Mountains, Murray County, Oklahoma. Ecological Society of America. Snow Bird, Utah. Hoagland, BW & B Watkins. Change in vegetation and landscape composition between the years 1871 and 1897, Murray County, Oklahoma. Oklahoma Academy of Science. Micozzi, M & BW Hoagland. Vegetation composition and pattern at Black Mesa, Cimarron County, Oklahoma. Oklahoma Academy of Science. Hoagland, BW. Vegetation of Oklahoma. Docent training program, Sam Noble Oklahoma Museum of Natural History. (Invited).
 Hoagland, BW. Grassland ecology. Norman North High School. (Invited).
- 1999 Hoagland, BW. State-level conservation planning: the Natural Heritage Methodology and the United States vegetation classification. *Botanical Institute of the Hungarian Academy of Science.* (Invited).
- Hoagland, BW, S Gray, & FL Johnson. Vegetation mapping in a grassland forest mosaic in the Arbuckle Mountains, south-central Oklahoma. *Ecological Society of America*. Hoagland, BW. Vegetation mapping in a spatial complex environment. *Southwestern Association of American Geographers*. Pittsburgh, PA. Hoagland, BW. The vegetation of Oklahoma: a new classification. *Oklahoma Academy of Science*.
 - Hoagland, BW. Vegetation mapping in a spatial complex environment. *Southwestern Association of American Geographers*. Baton Rouge, LA.
- Hoagland, BW, S Gray, &FL Johnson. Vegetation mapping in a grassland woodland mosaic. International Association of Vegetation Scientists. Czech Republic.
 Hoagland, BW & FL Johnson. Vegetation patterns at the Chickasaw National Recreation Area, Murray County. Oklahoma Academy of Science.

Hoagland, BW. Vegetation and physical geography of Oklahoma. *Botanical Institute of the Hungarian Academy of Sciences*. (Invited).

Hoagland, BW. Ecologically significant wetlands of Oklahoma. *EPA region 6 wetlands workshop.* (Invited).

- Hoagland, BW. "Beauty versus commerce: the case of *Echinacea*." Oklahoma Wildflower Workshop. (Invited).
- 1996 Hoagland, BW &NA McCarty. Wetland vegetation of northeastern Oklahoma. Oklahoma Academy of Science
 - Hoagland, BW & FL Johnson. Flora and vegetation of the Chickasaw national Recreation Area. *Oklahoma Academy of Science*
- Hoagland, BW. Wetlands and wetland conservation in Oklahoma. Society of Wetland Scientists. (Invited).
 - Hoagland, BW. The cross timbers of Oklahoma. *Oklahoma Native Plant Society*. (Invited).
 - Hoagland, BW. The ecology of Oklahoma prairie. *Oklahoma Alliance for Geographic Education*. (Invited).
 - Hoagland, BW. Natural history of the cross timbers (field trip). *Department of History of Science, Nature of Natural History in the 20th century seminar, University of Oklahoma.* (Invited).
 - Hoagland, BW. The vegetation of Oklahoma: gradient influences and landscape interactions. *University of Oklahoma Botanical Society*. (Invited).
- 1995 Hoagland, BW, V Moorthy, & SL Collins. Successional trajectories in shortgrass prairie vegetation, western Kansas, U.S.A. *Ecological Society of America*. Knoxville, TN Hoagland, BW & SL Collins. Heterogeneity in shortgrass prairie vegetation on the southern high plains, U.S.A.: the role of playa lakes. *International Association of Vegetation Scientists*. Houston, TX.
 - Hoagland, BW. Patterns of species distribution in playa lake basins. *Oklahoma Academy of Science*.
 - Hoagland, BW. Wetland ecology of the Cimarron River. *Oklahoma State University Sierra Club.* (Invited).
 - Hoagland, BW. Multivariate methods for vegetation classification. *Department of Botany and Microbiology seminar, University of Oklahoma.* (Invited).
- Hoagland, BW & SL Collins. Vegetation heterogeneity within and among playa lakes, southern High Plains, U.S.A. *Ecological Society of America*.
 Hoagland, BW. Wetland Plant Communities of Oklahoma. *Oklahoma Native Plant Society*. (Invited).
- 1993 Hoagland, BW & SL Collins. Analysis of plant community structure along wetland gradients. *Ecological Society of America*.
 - Hoagland, BW. Emergent wetland plant communities of western Oklahoma. *Oklahoma Academy of Science*.
 - Hoagland, BW. Panelist. Oklahoma. Envrionmental Issues, Catholic Student Convention. (Invited).
 - Hoagland, BW. Vegetation of playa lake basins. Society of Wetland Scientists.
- Hoagland, BW. Classification and ordination of western Oklahoma emergent wetlands. INTECOL'S IV International Wetlands Conference. Edmonton, Alberta.
 Hoagland, BW, L. Sorrels, & S Glenn. Classification and ordination of bottomland forests in McCurtain County, Oklahoma. Society of Wetland Scientists. New Orleans, LA.
 1991 Hoagland, BW, L Sorrels, & S Glenn. Floodplain vegetation of the upper Green River Basin, south central Kentucky. Ecological Society of America.

Sorrels, L, W. Hoagland, & SL Glenn. Southeastern Oklahoma bottomland hardwood forests. *Oklahoma Academy of Science*.

1989 Hoagland, BW. Wetland flora and vegetation of the upper Green River Basin, south central Kentucky. *Association of Southeastern Biologists*. Charlotte, NC.

GRADUATE STUDENTS

Current graduate students:

Messick, Jenna; Ph.D.

Former graduate students:

Batterson, Christy; M.A.

Thesis title: Forest vegetation of the Ozark Plateau, northeast Oklahoma, past and present. Defense date: May 2009.

Brookshire, Lacy; M.A.

Thesis title: Mixedgrass prairie vegetation of the Four Canyons Preserve, Ellis County, Oklahoma. Defense date: March 2008.

Callahan-Crawford, Priscilla; M.A. & Ph.D.

Thesis title: Progress from grassland to shrubland: woody plant encroachment in North American Grasslands. Defense date: May 2002.

Dissertation title: Exploring ecological and biogeographic questions using biological databases derived from natural history collections and surveys.

Defense date: April 2009.

Dickson, Kathy; M.L.S.

Thesis title: 1907-A year in the life of a Noble County, Oklahoma, Farm. Defense date: August 2004.

Ewing, Kayti; M.A.

Thesis title: Development of a Floristic Quality Index for wetland plant communities in Oklahoma. Defense date: May 2012.

Fagin, Todd; Ph.D.

Dissertation title: In search of the forest primeval; data driven approaches to the mapping of historical vegetation. Defense Date: April 2009.

Griffin, Austin; M.A.

Thesis title: Databases freshwater fisheries management and their application for the analysis of Standard Sampling Protocol data.

Defense Data: August 2018.

Hall, Shannon; Ph.D.

Dissertation Title: Vegetation and land cover in the mixedgrass prairie: an analysis of contemporary and historic data. Defense date: November 2015

Hardwick, Daryn; Ph.D.

Dissertation Title: Environment and interspecific interactions at the margin of species ranges: a spatial analysis of forest communities. Defense date: April 2017.

Hinten, Melissa; Ph.D.

Dissertation title: Combining historical records and geospatial techniques to analyze land use modification in a tallgrass prairie region of Oklahoma. Defense date: June 2012.

Messick, Jenna; M.A.

Thesis title: The life history and biogeography of *Penstemon oklahomensis*, a southern plains endemic. Defense date: June 2012.

Dissertation title: Buds, leaves, shoots and flowers: an analysis of plant phenology across an environmental gradient. Defense Date: March 2017.

Micozzi, Marco; Ph.D.

Dissertation title: The affect of spatial heterogeneity and environmental gradients on vegetation in a semi-arid environment. Defense date: June 2001.

Powell, Hannah; M.A.

Thesis title: Mapping the occurrence of prairie dog towns in western Oklahoma from the General Land Office Surveys of 1871. Defense date: October 2014.

Shutler, Alyssa; M.A.

Dissertation title: Analysis of change in landscape structure and vegetation composition in Carter County, Oklahoma. Defense date: April 2001.

Thomas, Rick; M.A.

Dissertation title: Pre-settlement cross timbers in central Oklahoma. Defense date: April 2010.

Watkins, Brad; Ph.D.

Dissertation title: Reconstructing the Choctaw Nation of Oklahoma, 1894-1898: landscape and settlement on the eve of allotment. Defense date: July 2007.

Westrop, David; M.A.

Thesis title: Analysis of the distribution, expansions, and range margin impacts in the pinyon-juniper woodlands of Northwester Cimarron County, Oklahoma. Defense date: September 2015.

SERVICE

PROFESSIONAL

Affiliations:

Association of American Geographers Ecological Society of America Southern Appalachian Botanical Society Southwestern Association of Naturalists International Association of Vegetation Scientists

Awards:

2007: Anne Long Conservation Award, Oklahoma Native plant Society

Committee Service:

2018- Editorial Board, Southwestern Naturalist

2011- Associate Editor, National Vegetation Classification

2010-present Steering Committee, Quetzal Education and Research Center, San Gerardo de Dota, Costa Rica

2010-2014t 2010 - 2012 2006-present 2002 - 2008 2001	Executive Committee, Oklahoma Academy of Science, Geography co-chair Invasive Species Technical Group. Convened by the Oklahoma Department of Agriculture.
2000	Nuisance Aquatic Plant Working Group. Convened by the Oklahoma Department
of Wildlife Conservation.	
2000-2003	Environmental Concerns Committee
2000-2003	Gamma Theta Upsilon (Geography Honors Society) departmental liaison)
1999	Crosstimbers and Southern Tallgrass Prairie Ecoregional Planning Team.
	Convened by The Nature Conservancy; ecology committee
4007 2000	member.
1997-2000	Geography Undergraduate Club faculty liaison
1997-1999	Flint Hills/Osage Plains Ecoregional Planning Team. Convened by The
	Nature Conservancy; ecology committee member.
1997	Student poster judge; International Association of Vegetation
	Scientists meeting; Ceske Budejovice.
1996-1997	Central Shortgrass Prairie Ecoregional Planning Team. Convened by The Nature Conservancy; ecology committee member.
1996-1998	•
	Oklahoma liaison for the Society of Wetland Scientists
1995-1998	Environmental Protection Agency wetland technical contact for Oklahoma Native American Tribes.
1994	Technical Advisory Committee for the Wetlands Reserve Program, U. S.
	Department of Agriculture.
1994-1997	Riparian buffer technical committee; convened by the Oklahoma Conservation
	Commission and the Oklahoma State University Cooperative Extension Service;
	Chairman of vegetation sub-committee.

MANUSCRIPT REVIEW:

American Journal of Botany

American Midland Naturalist

Bioscience (American Institute of Biological Sciences)

Castanea (Journal of the Southern Appalachian Botanical Society)

Cole and Brooks Publishers

Conservation Ecology

Ecosphere

Global Ecology and Biogeography Letters

Gordon and Breach Publishers

Grolier Encyclopedia

Journal of the Torrey Botanical Society

Journal of Vegetation Science (International Association of Vegetation Scientists)

Restoration Ecology (organ of the Society of Restoration Ecology)

Southwest Association of Naturalist

Tall Timbers Research Station

U.S. Forest Service

Wetlands (journal of the Society of Wetland Scientists

Proposal reviews:

National Science Foundation Great Plains Research Program (University of Nebraska) Oklahoma Office of the Secretary of the Environment

Tenure review:

Southern Illinois University University of Kansas

DEPARTMENTAL SERVICE

Committee A member (Geography, Oklahoma Biological Survey)
Departmental Liaison for Advanced Programs-International Relations
Environmental Sustainability Curriculum Committee
Faculty search committees (Chair, Oklahoma Biological Survey; Dept. Geography)
Graduate Student Admissions Committee

UNIVERSITY SERVICE

Continuing Education Council (2016-) Environmental Concerns Committee Faculty Senate (2018-)

References

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