

## **CURRICULUM VITAE: D. Alexander Wait**

### **ADDRESS:**

Department of Biology  
901 S. National Ave.  
Missouri State University  
Springfield, MO 65897

Phone: (417) 836-5802  
Fax: (417) 836-4204  
Email: AlexanderWait@MissouriState.edu

Born: March 14, 1965 Saratoga Springs, NY USA

### **EDUCATION:**

Ph.D. 1997. Biology. Syracuse University. Syracuse, NY.

M.S. 1992. Environmental Forest Biology. State University of New York-College of Environmental Science and Forestry. Syracuse, NY.

B.S. 1989. Biology. State University of New York-College at Geneseo. Geneseo, NY.

A.A. 1986. Education. New Mexico Highlands University. Las Vegas, NM.

### **EMPLOYMENT:**

Professor and Biology Department Graduate Coordinator: Missouri State University, Springfield, MO. August 2009 – Present.

Associate Professor: Missouri State University, Springfield, MO. August 2004 – July 2007.

Assistant Professor: Missouri State University, Springfield, MO. January 1999 – August 2004.

Postdoctoral Research Associate/Faculty Teaching Intern: University of Maryland, College Park, MD. March 1997-December 1998.

Graduate Research Assistant: Institute of Ecosystem Studies, Millbrook, NY. May-August, 1992-1995, 1996-1997.

Teaching Associate: Syracuse University, Syracuse, NY. September 1993 -May 1994 and September 1995 - December 1995.

Teaching Assistant: Syracuse University, Syracuse, NY. September 1992-May 1993.

## **SPECIAL APPOINTMENTS:**

Public Affairs Professor. Missouri State University. 8/10-5/13

Provost Fellow for Public Affairs. Missouri State University. 4/08-5/09

President – Ozarks New Energy, Inc. 5/08-1/11

## **PROFESSIONAL ORGANIZATIONAL MEMBERSHIPS:**

Agricultural By-Products Coalition of America, American Institute of Biological Sciences; Ecological Society of America; International Association for Ecology; International Society for Pest Information; Sigma Xi; Society for Conservation Biology

## **PRIMARY PUBLICATIONS: (\*Graduate Student; \*\*Undergraduate Student) (19)**

Mulder C.P.H., Jones, H.P., Kameda, C. Palmborg, S., Schmidt, J.C., Ellis, Orrock, J.L., **Wait, D.A.** Wardle, D., Yang, L., \*Young, H., Croll, D.A., and E. Vidal. 2011. Impacts of Seabirds on Plant and Soil Properties. In: Seabird Islands: Ecology, Invasion, and Restoration. (Mulder, C.P.H., W.B. Anderson, D.R. Towns, and P.J. Bellingham eds). Oxford University Press. Pp 135-176.

Ellis, J.C. Bellingham, P.J., Cameron, E.K., Croll, D.A., \*Kolb, G.S., Kueffer, C., Mittelhauser, G.H., Schmidt, S., Vidal, E., and **D.A. Wait**. 2011. Effects of Seabirds on Plant Communities. In: Seabird Islands: Ecology, Invasion, and Restoration. (Mulder, C.P.H., W.B. Anderson, D.R. Towns, and P.J. Bellingham eds). Oxford University Press. Pp. 177-211.

Anderson, W.B., **D.A. Wait**, and P. Stapp. 2008. Resources from another place and time: community responses to pulses in a spatially subsidized system. *Ecology* (Special Feature). 89:660-670.

Cornell\*, J.E., M.G. Gutiérrez, **D.A. Wait**, and H.O. Rbio-Arias. 2008 Ecological characterization of a riparian corridor along the Rio Conchos, Mexico. *The Southwestern Naturalist*. 53:96-100.

Capser, B.B., I.N. Forseth, and **D.A. Wait**. 2006. A stage-based study of drought response in *Cryptantha flava* (Boraginaceae): Gas exchange, water use efficiency, and whole plant performance. *American Journal of Botany*. 93:978-987.

Heckman\*\*, K.A., Anderson, W.B. and **D.A. Wait**. 2006. Distribution and activity of hypolithic soil crusts on desert islands in the Gulf of California. *Biology and Fertility of Soils*. 43:263-266.

Andre\*, C.S., **D.A. Wait**, and W.B. Anderson. 2006. Ecology of three populations of the rare woodland perennial *Trillium pusillum* michaux (liliaceae) in southwest Missouri. *Missouriensis*. 26:7-21

- Wait, D.A.**, Aubrey\*\*, D.P., and W.B. Anderson. 2005. Seabird guano influences on desert islands: soil chemistry and herbaceous species richness and productivity. *Journal of Arid Environments*. 60:681-695.
- Casper, B.B, Forseth, I.F., and **D.A. Wait**. 2005 Variation in carbon isotope discrimination and plant performance in a natural population of *Cryptantha flava*. *Oecologia* 145:541-548.
- Barrett\*, K, Anderson, W.B., **Wait, D.A.**, Grismer, L.L., Polis, G.A., and M.D. Rose. 2005 Marine subsidies alter the diet and density of insular and coastal populations of side blotched lizards (*Uta stansburiana*). *Oikos*. 109: 145-153.
- Barrett\*, K., **Wait, D.A.** and W.B. Anderson. 2003. Small island biogeography in the Gulf of California: lizards, the subsidized island biogeography hypothesis, and the small island effect. *Journal of Biogeography*. 30:1575-1581
- Wait, D.A.**, J.S. Coleman and C.G. Jones. 2002. *Chrysomela scripta*, *Plagioderia versicolora* (Coleoptera: Chrysomelidia), and *Trichoplusia ni* (Lepidoptera: Noctuidae) track specific leaf developmental stages. *Environmental Entomology*. 31: 836-843
- Peek\*, M.S., Russek-Cohen, E., **Wait, D.A.** and I.N. Forseth. 2002 . Physiological response curve analysis using nonlinear mixed models. *Oecologia*. 132:175-180.
- Anderson, W.B., and **D.A. Wait**. 2001. Subsidized island biogeography hypothesis: another new twist on an old theory. *Ecology Letters*. 4:289-291.
- Forseth, I.N., **Wait, D.A.**, and B.B. Casper. 2001. Shading by shrubs in a desert system reduces the physiological and demographic performance of an associated herbaceous perennial. *Journal of Ecology*. 89:670-680.
- Wait, D.A.**, C.G. Jones, J. Wynn and F.I. Woodward. 1999. The fraction of expanding to expanded leaves determines the biomass responses of *Populus* to elevated CO<sub>2</sub>. *Oecologia* 121:193-200.
- Wait, D.A.**, C.G. Jones, and J.S. Coleman. 1998. Effects of nitrogen fertilization on leaf chemistry and beetle feeding are mediated by leaf development. *Oikos* 82: 502-514
- Wait, D.A.**, C.G. Jones, and M. Schaedle. 1996. Controlling growth and chemical composition of saplings by iteratively matching nutrient supply to demand: A bootstrap fertilization technique. *Tree Physiology* 16: 359-366.
- Hartvigsen, G., **Wait, D.A.**, and J.S. Coleman. 1995. Tri-trophic interactions influenced by resource availability: Predator effects on plant performance depend on plant resources. *Oikos* 74:463-468.

## **SECONDARY PUBLICATIONS (not including lab manuals):**

- Wait, D.A.** 2012. Forward. In: Decision Making for a Sustainable Environment: A Systemic Approach. C. Maser (author). CRC Press, Boca Raton, FL. Pp. XIII-XVI.
- Wait, D.A.** 2012. From spring ephemerals to light to fungi: plant dynamics in an Ozark oak/hickory forest/woodland community managed for wildlife through prescribed burns. Proceedings of the 4<sup>th</sup> Fire in Eastern Oak Forests Conference. General Technical Report NRS-P-102. Pp. 291.
- Blinkhorn\*, M.A and **D.A. Wait.** 2012. The effects of seasonally prescribed fire on a dolomite glade. Proceedings of the 4<sup>th</sup> Fire in Eastern Oak Forests Conference. General Technical Report NRS-P-102. Pp 269.
- Wait, D.A.** 2009. Sustainability in the Ozarks. *OzarksWatch* (invited guest editorial to special issue on sustainability). 2:18-19.
- Wait, D.A.** 2006. Effects of Deer on Herbaceous Species Richness, Diversity and Cover at the Springfield Conservation Nature Center between 1999 and 2005. Solicited unpublished report to Missouri Department of Conservation. 14 pp.
- Wait, D.A.** 2003. Inventory of Invasive Exotic Flora at George Washington Carver National Monument. Technical report NPS/HTLN/P6370010930. 24 pp.

## **LABORATORY MANUALS:**

- Wait, D.A.** and T. T. Hopper. 2004 (1<sup>st</sup> Ed); 2007 (2<sup>nd</sup> Ed); **2011 (3<sup>rd</sup> Ed.)**. Laboratory Manual for General Biology. Fountainhead Press, Southlake, TX. ISBN 1-59871-050-8. 234 pp.

## **PUBLICATIONS (In Prep):**

- Cornell\*, J.E. and **D.A. Wait.** Short-term intensive management of sericea lespedeza to promote wildlife habitat and native plant diversity. For *American Midland Naturalist*

## **CONFERENCE PRESENTATIONS: (\*Graduate Student; \*\* Undergraduate Student) (52)**

- Wait, D.A.** 2013. Burn, burn, burn: a plant ecological and ecosystem perspective on prescribed fire for wildlife management. Missouri Botanical Symposium, Rolla, MO
- Wait, D.A.** 2012. Canopy production and light penetration in burned and unburned oak-hickory forests and associated community and ecosystem responses. Ecological Society of America. Portland, OR.
- Vess. L and **D.A. Wait.** 2012. Development of a sustainability minor at Missouri State University: The model, lessons learned, and community engagement. Smart and Sustainable Campuses Conference. College Park, MD.
- Wait, D.A.** 2011. From spring ephemerals to light to fungi: plant dynamics in an Ozark oak/hickory forest/woodland community managed for wildlife through prescribed burns. Fire in Eastern Oak Forests Conference. Springfield, MO.
- Blinkhorn\*, M.A and **D.A. Wait.** **2011.** The effects of seasonally prescribed fire on a dolomite glade. Fire in Eastern Oak Forests Conference. Springfield, MO.
- Wait, D.A.** and L. Vess. 2010. Gusts and Breezes of Change: Outcomes of a Faculty Curriculum Workshop. Association for the Advancement of Sustainability in Higher Education. Annual Meeting. Denver, CO.
- Schmidt, S., Mulder, C.P.H., Ellis, J., Bellingham, P.J., Cameron, E.K., Croll, D.A., Jones, H., Kameda, K., Kolb\*, K.G., Kueffer, C., Vidal, E., **Wait, D.A.**, Wardle, D.A., Yang, L.H.,

- and H. Young\*. 2010. Global analysis of biogeochemistry and plant communities on seabird islands. World Seabird Congress (symposium talk). Victoria, Canada.
- Gehringer\*, B. and **D.A. Wait**. 2009. Fire effects on canopy cover and light in Ozarks forests: management implications. Missouri Natural Resource Conference. Osage Beach, MO.
- Wait, D.A.**, and L. Berger\*\*. 2008. Sustainability at Missouri State University: the toddler years. Association for the Advancement of Sustainability in Higher Education. Raleigh, NC.
- Wait, D.A.**, Cornell\*, J.E. and W.B. Anderson. 2008. Short-term intensive management of *Lespedeza cuneata* in old-fields and prairies: sustainable management through organic fertilization (and a bit of herbicide). Ecological Society of America. Milwaukee, WI.
- Dalrymple\*, B.R. and **D.A. Wait**. 2008. Loss of southern wild rice populations throughout the Illinois river valley: narrow physiological tolerances or loss of suitable hydrological regimes? Mississippi River Research Consortium (44<sup>th</sup> annual meeting). Dubuque, IA.
- Cornell\*, J.E. and **D.A. Wait**. 2007. Short-term intensive management of *Lespedeza* using sustainable practices. Missouri Natural Resource Conference. Osage Beach, MO.
- Wait, D.A.** and W.B. Anderson. 2006. Do biennial prescribed fires in closed oak/hickory forests initiate savannah restoration? Ecological Society of America. Memphis, TN.
- Wait, D.A.** and W.B. Anderson. 2005. Responding to temporal resource pulses in a spatially subsidized community: surprising strategies of desert annuals. International Congress of Ecology and ESA. Montreal, Canada.
- Anderson, W.B. and **D.A. Wait**. 2005. Pulsed vs. subsidized communities: Similar, different, or inseparable in a hyperarid system? International Congress of Ecology and ESA. Montreal, Canada (Invited Symposium Talk)
- Pulley\*, D., and **D.A. Wait**. 2005. Effects of fire frequency on soil respiration, temperature, moisture, and nutrient availability in an Ozark forest. Missouri Natural Resource Conference. Osage Beach, MO.
- Wait, D.A.**, Jones, C.G., Hartman, T. and S. Hartley. 2004. Alkaloid and phenolic biosynthesis in *Senecio vulgaris* grown in elevated CO<sub>2</sub>: coordinated or independent allocation. Ecological Society of America, Portland, OR.
- Anderson, W.B., **Wait, D.A.**, and S. Dayton\*\*. 2004. Fungal infection alters community interactions and ecosystem functions of a spring ephemeral plant. Ecological Society of America, Portland, OR.
- Pulley\*\*, D., and **D.A. Wait**. 2004. Does fire stimulate soil respiration and nutrient cycling in Ozark forests? Missouri Natural Resource Conference. Osage Beach, MO.
- Brown\*, P., and **D.A. Wait**. 2004. Is arthropod herbivory in Ozark forests affected by prescribed burns? Missouri Natural Resource Conference. Osage Beach, MO.
- Aubrey\*, D.P., and **D.A. Wait**. 2004. Effects of prescribed fire on canopy coverage and seedling and sapling response to a changing light environment in an Ozark forest. Missouri Natural Resource Conference. Osage Beach, MO.
- Anderson, W.B., Bethmann\*\*, C., **D.A. Wait**, and L. Allfree\*\*. 2003. Boundary Permeability to marine subsidies affects arthropod community structure on Gulf of California islands. Ecological Society of America, Savannah, GA.
- Barrett\*, K., **D.A. Wait**, and W.B. Anderson. 2003. Small island biogeography in the Gulf of California: lizards, the subsidized island biogeography hypothesis, and the small island effect. Ecological Society of America, Savannah, GA.
- Heckman\*\*, K. W.B. Anderson, and **D.A. Wait**. 2003. Ecological contributions of hypolithic cryptobiotic soil crusts in hyperarid ecosystems. Ecological Society of America, Savannah, GA.

- Wait, D.A.** 2002 Nitrogen fertilization, growth rate trajectories and leaf developmental age tracking by folivores: predicting food availability for folivores and their impacts on *Populus* growth. International Poplar Symposium III. Uppsala, Sweden.
- Wait, D.A.** and W.B. Anderson. 2002. The effects of guano and salinity on the physiological ecology of desert island plant species. Ecological Society of America, Tucson, AZ.
- Aubrey\*\*, D.P., **D.A. Wait**, and W.B. Anderson. 2002. Soil chemistry and plant species richness on marine desert islands: seabird influence and spatial heterogeneity. Ecological Society of America, Tucson, AZ.
- Barrett\*, K., W.B. Anderson, and **D.A. Wait**. 2002. Multiple stable isotopes reveal differential influence of marine subsidies on insular and coastal populations of *Uta stansburiana* (side-blotched lizard). Ecological Society of America, Tucson, AZ.
- Barrett\*, K., W.B. Anderson, and **D.A. Wait**. 2002. Multiple stable isotopes reveal differential influence of marine subsidies on insular and coastal populations of *Uta stansburiana* (side-blotched lizard). Society for the Study of Amphibians and Reptiles, Kansas City, MO.
- Aubrey\*\*, D.P., and **D.A. Wait**. 2002. Fire effects on seedling and sapling composition in an Ozark forest: a demographic and physiological approach. Missouri Natural Resources Conference, Osage Beach, MO; and, Missouri Academy of Sciences, Springfield, MO.
- Barrett\*, K., **D.A. Wait**, and W.B. Anderson. 2001. Habitat subsidies and lizard communities on desert islands in the Gulf of California. Missouri Herpetological Association, Reese Biological Station, MO.
- Anderson, W.B. and **D.A. Wait**. 2001. Spatial subsidies alter species-area relationships on islands. Ecological Society of America, Madison, WI.
- Forseth, I.N., **D.A. Wait**, B. B. Casper. 2001. Physiological and developmental responses to drought in *Cryptantha flava* are size specific. Ecological Society of America, Madison, WI.
- McClain\*, W.E., Einhellig, F.A., and **D.A. Wait**. 2001. Interactive effects of ferulic acid and irradiance on soybean growth and photosynthesis. Missouri Academy of Sciences, Joplin, MO.
- Wait, D.A.** 2000 Nitrogen supply effects on compensatory growth and reproduction in response to herbivore damage: a test of the RGR trajectory hypothesis with *Abutilon theophrasti*. Ecological Society of America, Snowbird, UT.
- Wait, D.A.**, I.N. Forseth, and B.B. Casper. 1999. The relationship between carbon isotope discrimination, growth, flowering, and size transition in *Cryptantha flava*". Ecological Society of America, Spokane, WA.
- Forseth, I.N, **D.A. Wait**, and B.B. Casper. 1999. Variation in carbon isotope discrimination associated with plant size, year, and microhabitat in *Cryptantha flava*. Ecological Society of America, Spokane, WA.
- Peek\*, M.S., I.N. Forseth and **D.A. Wait**. 1999. Physiological response of the desert perennial, *Cryptantha flava*, to simulated Mule deer defecation. Ecological Society of America, Spokane, WA.
- Russek-Cohen, E., M.S. Peek\*, I.N. Forseth, and **D.A. Wait**. 1999. Nonlinear mixed models and the analysis of ecophysiological response curves. Ecological Society of America, Spokane, WA.
- Wait, D.A.**, I.N. Forseth, and B.B. Casper. 1998. The effects of drought and interspecific interactions on the demography of the herbaceous semi-desert perennial *Cryptantha flava*. Ecological Society of America, Baltimore, MD. *American Journal of Botany* 85 (6) p.28 .

- Wait, D.A.**, C.G. Jones, and J.S. Coleman. 1998. Nitrogen fertilization makes the world greener for folivorous insects by changing leaf development. Gordon Research Conference: Plant-Herbivore Interactions. Oxnard, CA
- Forseth, I.N., **Wait, D.A.** and B.B. Casper. 1998. Physiological and demographic responses of a semi-desert perennial to spatial and temporal heterogeneity. British Ecological Society. York, UK.
- Wait, D.A.**, J.S. Coleman, and C.G. Jones. 1996. Tolerance to herbivory is dependent on the trajectory of plant relative growth rate at the time of tissue removal. *Bulletin of the Ecological Society of America*. 77:464.
- Wait, D.A.**, J.S. Coleman, and C.G. Jones. 1995. Net effects of herbivory on plant performance measured under dynamic nutrient supply in the field. *Bulletin of the Ecological Society of America*. 76:276.
- Wait, D.A.**, C.G. Jones, and J.S. Coleman. 1995. Manipulation of leaf development and chemistry with novel use of fertilization: Leaf development determines where beetles feed and leaf chemistry determines how much they consume. Gordon Research Conference: Plant-Herbivore Interactions. Oxnard, CA
- Wait, D.A.**, J.S. Coleman, and C.G. Jones. 1994. Nutrient Supply, leaf nitrogen, and phenol glycoside composition in cottonwood: How they interact to affect beetle feeding. International Society of Chemical Ecology. 11th Annual Meeting. Syracuse, NY
- Wait, D.A.**, C.G. Jones, and J.S. Coleman. 1993. Fertilization and herbivore feeding: the relationship between leaf ontogeny and leaf biochemical composition. *Bulletin of the Ecological Society of America*. 74:474.
- Coleman, J.S., and **D.A. Wait**. 1993. Leaf ontogeny and herbivore performance: do herbivores care about leaf chronological age, developmental stage, or position on the stem? *Bulletin of the Ecological Society of America*. 74:197.
- Wait, D.A.**, C.G. Jones, and J.S. Coleman. 1992. Effects of steady-state nutrient supply on growth and physiology of cottonwood and the implications to three herbivores. Gordon Research Conference: Chemistry of Plant-Herbivore Interactions. Oxnard, CA
- Hartvigsen, G., **D.A. Wait**, and J.S. Coleman. 1992. The effect of plant quality and herbivorous and predatory mite populations on the growth of *Populus deltoides* saplings. *Bulletin of the Ecological Society of America*. 73:202.
- Wait, D.A.**, C.G. Jones, and M. Schaedle. 1991. Controlled plant growth: a boot-strap technique for growing *Populus* saplings at constant relative growth rates. *Bulletin of the Ecological Society of America*. 72:279.
- Wait, D.A.**, and G.M. Briggs. 1989. Stomatal conductance of *Acer nigrum* and *Platanus occidentalis* during the period of leaf senescence. *Bulletin of the Ecological Society of America*. 70:290.

#### **GRANTS: (19)**

- Missouri Department of Conservation. Fire, Oak Regeneration, and Understory Flora Development in Managed Ozark Forests: Mechanistic Assessments for Managers. 7/11-6/12. \$3,500.
- Missouri State University: Faculty Center for Teaching and Learning. Sustainability in the Curriculum Workshop: Toward Sustainability in the Curriculum at Missouri State University. 4/10-12/11. \$8,031.
- Missouri State University: Faculty Research Grant. Island Ecology of the Puget Sound: Providing Knowledge for Conservation and Restoration of Marine Islands. 4/10-12/10.

\$7,500.

Missouri Department of Conservation. Fire, Oak Regeneration, and Understory Flora Development in Managed Ozark Forests: Mechanistic Assessments for Managers. 7/09-6/10. \$3,500.

Missouri Department of Conservation. Fire, Oak Regeneration, and Understory Flora Development in Managed Ozark Forests: Mechanistic Assessments for Managers. 2/09-12/09. \$3,500.

Missouri Department of Conservation. Fire, Oak Regeneration, and Understory Flora Development in Managed Ozark Forests: Mechanistic Assessments for Managers. 4/08-12/08. \$9,070.

Waste Management District O, State of Missouri. Cardboard Recycling Program. 6/08-6/09. \$17,400

National Parks Conservation Association. Natural Resource Assessment at Wilson Creek and Pea Ridge. 9/07-2/08. \$8,000.

Missouri Department of Conservation. Fire, Oak Regeneration, and Understory Flora Development in Managed Ozark Forests: Mechanistic Assessments for Managers. 4/07-6/07. \$6,500.

Missouri State University: Center for Resource Planning and Management. Recycling and Biomass Recovery at Missouri State University: Exploring Opportunities for a Sustainable Campus. 1/07-4/07. \$2,450.

Missouri State University: Funding for Results. Using Field-Based Classes to Increase Knowledge On Ecological Research Techniques And Increase Awareness Of Local Ecological Issues. Project Member. Janice Greene (PI) 5/07-8/07. \$3,100.

Missouri State University: Faculty Research Grant. Distribution, abundance, and ecology of hypolithic biological rock crusts in the Sonoran Desert. 3/05-12/05. \$4,270.

National Park Service. Inventory of Invasive Exotic Flora at George W. Carver National Monument. 9/01-2/03. \$10,070.

Andrew Mellon Foundation. The Effects of Marine Materials on Terrestrial Plant Communities and Ecosystems on Desert Islands in the Gulf of California. 5/01-5/04. \$58,000.

Missouri State University: Faculty Fellowship. Productivity and Biodiversity in Managed and Unmanaged Ozark Forests. 5/00-8/00. \$5,000.

Missouri State University: Faculty Research Grant. Nitrogen Fertilization and Plant Compensation for Herbivore Damage. 5/99-5/00. \$7,000.

Sigma Xi Grants-in-Aid of Research. The Net Effects of Nitrogen and Herbivory on Plant Performance: A Test Using Two Tree Species with Contrasting Ecological and Physiological Life History Traits. 4/95 - 4/96. \$700.

National Science Foundation Dissertation Improvement Grant. Nitrogen-Plant-Insect Interactions: Integrating Via a Net Effects Approach. 4/95 - 9/96. IBN-9423316. \$10,000.

Sigma Xi Grants-in-Aid of Research. The Net Effects of Nitrogen and Herbivory on Plant Performance: Leaf Development. 4/94 - 4/95. \$700.

**AWARDS and APPOINTMENTS:**

- Public Affairs Professor. 8/10-Present.
- President – Ozarks New Energy, Inc. 5/08-Present.
- Provost Fellow and Public Affairs Conference Chair. 2/08-4/09. Missouri State University
- College Award in Research. 7/05. Missouri State University



- College Award in Teaching. 7/02. Missouri State University.
- College Award in Research. 7/01. Missouri State University.
- Lawrence J. King Outstanding Biology Senior in Plant Science. 5/89. State University of New York, College at Geneseo.
- Dr. Mark J. Diamond Memorial Biology Research Award. 5/89. State University of New York, College at Geneseo.

#### **INVITED SEMINARS:**

- Missouri Botanical Symposium. Rolla, MO. February 27, 2013
- William Paterson University. Wayne, NJ. February 2005.
- Missouri State University. Springfield, MO. October 2003.
- Missouri State University. Springfield, MO. March 1998.
- Rutgers University. Newark, NJ. March 1998.
- University of Maryland, BEES Program, College Park, MD. January 1998.
- USDA-AFS lab, Kearneysville, WV. December 1997.

#### **INVITED SPEAKER/PANELIST (not comprehensive, off campus/ or public addresses only):**

- Evolution and Society. Darwin Days Celebration (Ozarks Technical Community College). February 2013 (speaker)
- Show Me Your Solutions Coalition (American Lung Association, Audubon, League of Woman Voters, MO Coalition for the Env., MO Farmers Union, NRDC, Pew Env. Group, Sierra Club). Library Center, Springfield, MO June 2009. (panelist)
- Missouri Teachers Association. Jefferson City, MO. November 2008. (speaker).

#### **SYMPOSIUM, WORKSHOPS, TECHNICAL COURSES and COLLOQUIUM:**

- Living Learning Laboratories. June 8-11. Association for the Advancement of Sustainability in Higher Education. Portland, OR (participant)
- Panel Review on Digital Learning. December 6-8, 2012. Dubuque, IA (participant)
- Connecting with New Energy. May 2010. Springfield, MO (co-organizer).
- A Conference of Ideas and Practices for Sustainable Energy Use in the Ozarks. May 2009. Springfield, MO (co-organizer).
- Seabird Islands and Introduced Predators (SEAPRE). National Science Foundation: Research Coordination Network. April 7-10, 2009. West Sound, WA (participant)
- Sustainability Across the Curriculum Leadership Workshop. Emory University. January 8-10, 2009. Atlanta, GA (participant)
- Sustainability in the Curriculum. Missouri State University. Showcase on Teaching. August 20, 2008. Springfield, MO (organizer)
- Ozarks New Energy Conference: Exploring Promising New Technologies to Fuel Growth and Energy Independence in the Ozarks. February 2008. Springfield, MO (co-organizer)
- Seabird Islands and Introduced Predators (SEAPRE). National Science Foundation: Research Coordination Network. May 11-15, 2007. Branson, MO. (co-organizer, invited speaker and member steering committee).
- Panel Review on Introductory Biology Texts. Thomson Publishing. November 3-4, 2006. Chicago, IL. (invited panel member)

- Successful Proposal Writing. GRC. March 2-4, 2006. Washington, DC. (participant)
- NEON. National Science Foundation. Feasibility Study to Evaluate the Establishment of a Sustainable Development Innovation Center April 10-12, 2005. Knoxville, TN
- Improving Biology Education: Theory and Practice. McGraw-Hill. November 4-5, 2004, Chicago, IL. (invited participant)
- Stable Isotope Ecology Course. University of Utah. Salt Lake City, UT. June 16-27, 1997. (participant)
- Terrestrial Ecosystems and the Atmosphere. National Center of Atmospheric Research. Advanced Study Program. Boulder, CO. July 14-26, 1996. Contribution: Wait, D.A., and B. Lefer. Biosphere-Atmosphere Coupling of Global N and C Cycles. pp 323-350. (participant and contributor)
- Forseth, I.N. and **D.A. Wait**. 1998. Consequences of plant responses to spatial and temporal heterogeneity. Co-sponsored by Botanical Society of America and Ecological Society of America. Annual Meeting, August 2-6, Baltimore, MD. (co-organizer)

**GRADUATE STUDENTS:** (name, date awarded MS degree, title)

Becky Gehringer (December 2012) "Prescribed Fire Effects On Woodland Structure, Light Levels And Understory Plant Communities In Missouri Oak-Hickory Woodlands"

Alex Threkeld (December 2009) "Effects of burning and cutting on glade restoration".

Beth Dalrymple (August 2008): "Ecological limitations for southern wild rice associated with backwater lakes of the Illinois and upper Mississippi river valleys".

Jack Cornell (May 2008): "Short-term intensive management of high densities of the invasive plant *Sericea Lespedeza*".

Pam Brown (May 2005): "Foliar herbivory on understory oaks as a function of forest type and prescribed burning".

Doug Aubrey (August 2004): "Savanna restoration through prescribed fire: demographic and physiological responses of oak and hickory seedlings and saplings to a changing light environment".

Cynthia Andre (May 2003): "Biology of the rare woodland perennial *Trillium pusillum* Micheaux (Lilaceae) in southwest Missouri".

Kyle Barrett (August 2002): "The effect of spatial subsidies on the diet, density, and species richness of insular lizards in the Gulf of California".

**UNDERGRADUATE STUDENT RESEARCH ADVISOR:**

Destiny Case (summer 99); Cindy Austin (BIO 499, summer 00); Doug Aubrey (BIO 499, summer-fall 01); David Pulley (BIO 499, spring 03); Kate Heckman (Drury University, HNRS 401 and 402, 03-04); Stuart Miller (BIO 498, spring 04); Carla Atkinson (BIO 499, spring-summer 05) Mari Shuler (BIO 499, spring-summer 05); Diane Dorey (spring-summer 06). Charles Hendrix (BIO 398, spring-summer 07); Charles Hendrix (BIO 499, fall 07); John Chiles (BIO 499, spring 08); Michelle Highfill (BIO 499, fall 08-spring 09); Ashley Baechle (BIO 499, fall 08); Marcia Hines (BIO 499, summer 09); Carter Kincade (BIO 527, spring 2010); Geoff Zahn (BIO 527, spring

2010); Patrick Goforth (BIO 499, fall 2011); Rachel Posey (fall 11-spring 12); Tasha Jacobsen (BIO 499, spring 2013); Micayla Kiepert (BIO 499, spring 2013).

**JOURNAL/GRANT REFEREE:**

*Biogeochemistry; Ecology; Ecoscience; Functional Ecology; Global Change Biology; Journal of Ecology, New Phytologist; Plant Ecology; Proceedings of the Prairie Conference; Scientia Agricola; Soil Biology and Biochemistry; Department of Energy: Strategic Environmental Research and Development Program; Journal of Environmental Technology*

**COURSES TAUGHT:**

BIO 122 (General Biology); BIO 4365/636 (Plant Ecology); BIOL 491 (Ecology Research in Greece); BIO 527 (Mountain Ecology); BIO 527 (Field Ecology in Mexico); BIO 527 (Field Ecology Methods and Analysis); BIO 227/627 (Tropical Biology in Ecuador); BIO 533 (Wetlands Ecology); BIO 544 (Plant Physiology); BIO 567 (Physiological Ecology); BIO 579 (Conservation Biology); BIO 597 (Topics in Plant Biology); BIO 597 (Global Change Biology); BIO 628 (Plant/Animal Interactions); BIO 628 (Research Priorities in Conservation); BIO 628 (Classics Papers in Ecology); BIO 628 (The Nature of Life).

**SERVICE (not comprehensive):**

- Distinction in Public Affairs faculty facilitator, Missouri State University (2012-2013 semester)
- Chair and organizer: Sustainability Action Minor Committee. Missouri State University (9/11-Present)
- Domain Science and Education Coordinating Committees (DSECCs). National Ecological Observatory Network (NEON). National Science Foundation (advisory committee member Domain 8, 6/09-present)
- Numerous activities associated with being Chair for Public Affairs Conference and running Convocation series
  - <http://publicaffairs.missouristate.edu/conference/>
  - <http://publicaffairs.missouristate.edu/42805.htm>
    - Nine speakers were hosted fall 2008-spring 2009 along with Bearfest event and National-teach-in events
- Numerous activities associated with sustainability on campus and in the community. Examples include:
  - Chair: Sustainability Minor Action Committee (2011-present)
  - Chair: Ad Hoc Senate Committee on paper use and sustainability at Missouri State University. Two resolutions presented to Senate and both passed 12/2009.
  - Book Review and numerous invited editorials on climate change and sustainability in Springfield News Leader
  - Numerous panels on campus
  - Seminar in Jefferson City before MO education community
  - Numerous formal and informal committees related to sustainability in Springfield and region (Ride Share, Common Reader, Recycling, Green Team for Hickory Hills Middle School)
- Organizing Committee Member. Ozarks New Energy Conferences. 7/07-5/11
- Organizer for Focus the Nation at Missouri State University. 1/07-1/09.

- National Science Foundation. RCN: SEAPRE: **Seabird Islands and Introduced Predators: Impacts of Presence and Eradication on Island Function**. Core Participant and Steering Committee member. Christa Mulder (PI) and Wendy Anderson (Co/PI). 3/07-3/10..
- MEDAVERA, Inc. (medical education company). Content Development Consultant. 2006-2009
- Drury University: Human Subjects Research Council. External committee member. 5/06-Present
- Missouri State University: Graduate Council. Member - 8/02-Present, Chair, Scholarship Committee - 8/06-5/07
- Student Organization Faculty Advisor: Ozark Biology Graduate Students (9/99-Present); Students for a Sustainable Future (5/07-Present).
- Missouri Stream Team (Team Leader; BIO 122 laboratory). 8/00-Present.
- Text book reviews (30 to date)
- Science Fair Judge (Ozarks Science and Engineering Fair – Special Judge, Science Olympiad, MSU Graduate Interdisciplinary Forum) (yearly)