LAURA FOSTER HUENNEKE

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Professional Experience

-- **Professor,** School of Earth Sciences & Environmental Sustainability (with 10 % assignment to Biological Sciences), Northern Arizona University, July 2015 – present.

-- **Provost and Vice President for Academic Affairs,** Northern Arizona University, July 2012 – June 2015. Chief academic officer for 6 academic colleges, Graduate College, University College (for entering students, home of multiple student success and retention initiatives), Cline Library, Center for International Education, and Academic Sustainability Programs.

-- **Vice President for Research**, Northern Arizona University, March 2008 – June 2012. Institutional Official and Research Integrity Officer for compliance programs; Intellectual Property Official; responsible for research services and facilities, research policies, leadership of university investment in research capacity, technology transfer, grant and contract services.

-- **Founding Dean, College of Engineering & Natural Sciences**, Northern Arizona University, July 2004 – February 2008. Led formation, strategic visioning, and first few years of existence for new multi-disciplinary college. Successfully built enrollments and graduation numbers of increasingly diverse student body. Gained full accreditation for all ABET-accredited degree programs. Established strong Leadership Council and fundraising program.

-- **Dean, College of Arts & Sciences**, Northern Arizona University, June 2003 – June 2004. Leadership of curriculum, fiscal affairs, and personnel for largest college in university. Preparation for restructuring and reorganization of departments in college.

-- **Academic department head, Department of Biology**, New Mexico State University, July 1998 - June 2003.

-- **Regents Professor, Biology**, New Mexico State University, Jan 2003 – June 2003. **Full professor**, May 1998 – June 2003. **Associate professor**, May 1993 – May 1998. **Assistant professor**, Aug 1987 - May 1993.

-- **Postdoctoral research affiliate**, Stanford University, Oct 1984 -July 1987. Concurrent appointment, Center for Conservation Biology, Stanford, Feb 1987 - July 1987.

-- **Postdoctoral fellow**, Oak Ridge Assoc. Universities Postgraduate Training Program at Savannah River Ecology Laboratory, and Adjunct Assistant Ecologist, Institute of Ecology, University of Georgia. Aug 1983 - Sept 1984.

Education

-- Ph.D., Aug 1983, Cornell University, Ithaca NY, in Ecology & Evolutionary Biology.

-- A.B., May 1977, University of Missouri, Columbia, in Biological Sciences with departmental honors, *summa cum laude*.

Professional Honors and Recognitions

-- Elected member of Sigma Xi (research honor society), 1983
-- Donald Roush Award for Teaching Excellence, New Mexico State University, 1993
-- Named Regents' Professor, New Mexico State University, 2003
-- AAAS – Southwest and Rocky Mountain (SWARM) Chapter President's Award, 2000
-- selected as member of initial cohort, Aldo Leopold Leadership Program, 1999
-- (elected) member-at-large, Governing Board, Ecological Society of America, 1996-98
-- (elected) Vice President for Public Affairs, Ecological Society of America, 2008-2011
-- Elected as Fellow, Ecological Society of America, 2012, for service to the discipline

Professional Service

-- Board of Editors, *Conservation Biology*, 1987 - 1993
-- Board of Editors, *Journal of Ecology*, 1994 – 1998, 2015 - present
-- Board of Editors, *Ecological Applications*, 1997 - 2000
-- reviewer, manuscripts for *American Journal of Botany, American Naturalist, Ecology, Journal of Arid Environments, Oecologia, Proceedings of the National Academy of Sciences,* and others
-- panelist, NSF Division of Environmental Biology, Career Advancement Awards & Research Planning Grants for Women, 1993; NSF Long-Term Ecological Research, 1996; NSF Graduate Fellowships, 1999; NSF Ecology, 2000, 2001 (4 panels); LTER Network Office reviews (2003, 2008); NSF Transforming Undergraduate Education in Science (TUES), 2010
-- member, Committee of Visitors, reviewing Instrumentation cluster of Biological Instrastructure program at National Science Foundation, spring 2002
-- reviewer, proposals for NSF Population Biology & Physiological Ecology, Ecology, Ecosystems programs; USDA competitive grants programs; NASA Global Change fellowship program and Mission to Planet Earth science program; The Nature Conservancy Ecosystem Research program; NSERC (Canada)
-- panelist, Biodiversity Exploratory Program, Deutsche Forschungsgemeinschaft (German Research Foundation), 2006, 2007, 2008, 2009 (included site visits, Berlin panel meetings)
-- professional society service, Ecological Society of America: member, Student Awards Committee, 1989-1990; member, Cooper Award Committee, 1994-1996; Finance Committee, 1995–1998; (elected) member-at-large, Governing Board, Ecological Society of America, 1996-98; chair, Corporate Award subcommittee, ESA, 1999-2002; member, Steering Committee for the Sustainable Biosphere Initiative, 2001–2003; Chair, Advisory Board for SEEDS (Strategies for Ecology Education and Development) diversity program, 2002 – 2007; (elected) Vice President for Public Affairs, 2008-2011
-- member, Scientific Advisory Board, Biosphere 2, University of Arizona, 2005 - 2009
-- member, US Geological Survey Advisory Team for National Climate Change and Wildlife Science Center project, "Forecasting climate impacts on wildlife of the arid southwest at regional and local scales using downscaled climate models," 2010 – 2014

-- member, National Research Council Study Committee, International Science at the US Geological Survey, 2010 – 2011
-- external advisor, NSF-funded Research Coordination Network, EREN (Establishing an Ecological Research/Education Network at Primarily Undergraduate Institutions), 2010 – 2014
-- officer, Northern Arizona Chapter of Sigma Xi (President, 2012; Past President, 2013)

Professional Memberships
-- American Association for the Advancement of Science
-- Council on Undergraduate Research
-- Ecological Society of America
-- Association for Public and Land-grant Universities (formerly NASULGC), Council on Academic Affairs
-- Society for the Advancement of Chicanos and Native Americans in Science
-- Society for Conservation Biology
-- Sigma Xi

Publications: (peer-reviewed; total > 50)

Huenneke, L.F. 1982. Wetland forests of Tompkins County, New York. Bulletin of the Torrey Botanical Club 109(1):51-63.

Huenneke, L.F. 1983. Understory response to gaps caused by the death of *Ulmus americana* in central New York. Bulletin of the Torrey Botanical Club 110(2):170-175.

Huenneke, L.F. 1985. Spatial distribution of genetic individuals in thickets of *Alnus incana* ssp. *rugosa*, a clonal shrub. American Journal of Botany 72(1):152-158.

Huenneke, L.F., K. Holsinger, & M.E. Palmer. 1986. Plant population biology and the management of viable plant populations. Ch. 13, pp 169-183 in: B.A. Wilcox, P.F. Brussard & B.G. Marcot, eds. The Management of Viable Populations: Theory, Applications, and Case Studies. Center for Conservation Biology, Stanford University, Stanford, CA.
[reprinted in 1992 as part of training manual, Program on Biodiversity and Genetic Resources, Commonwealth Science Council, London]

Huenneke, L.F. and R.R. Sharitz. 1986. Microsite abundance and distribution of woody seedlings in a South Carolina cypress- tupelo swamp. American Midland Naturalist 115:328-335.

Huenneke, L.F. 1987. Demography of a clonal shrub, *Alnus incana* ssp. *rugosa*. American Midland Naturalist 117:43-55.

Koide, R.T., **L.F. Huenneke**, and H.A. Mooney. 1987. Gopher mound soil reduces growth and affects ion uptake of two annual grassland species. Oecologia (Berlin) 72:284-290.

Huenneke, L.F. and C. Graham. 1987. A new sticky trap for monitoring seed rain in grasslands. Journal of Range Management 40:370-373.

Huenneke, L.F. and P.L. Marks. 1987. Stem dynamics of a clonal shrub: size-class transition matrices. Ecology 68:1234-1242.

Armstrong, J.K., K. Williams, **L.F. Huenneke**, and H.A. Mooney. 1988. Topographic position effects on growth depression of California Sierra Nevada pines during the 1982-83 El Nino. Arctic and Alpine Research 20(3):352-357.

Huenneke, L.F. and K.E. Holsinger. 1988. Managing land to protect rare plant populations. Fremontia 16(2):3-8.

Huenneke, L.F. 1988. SCOPE program on biological invasions: a status report. Conservation Biology 2:8-10.

Koide, R.T., **L.F. Huenneke**, S.P. Hamburg, and H.A. Mooney. 1988. Effects of applications of fungicide, phosphorus and nitrogen on the structure and productivity of an annual serpentine plant community. Functional Ecology 2(3):335-344.

Huenneke, L.F. and H.A. Mooney. 1989. Grassland structure and function: California annual grassland. Tasks for Vegetation Science vol. 20. Kluwer Academic Publishers, Dordrecht, The Netherlands.

Huenneke, L.F. 1989. Distribution and regional patterns of Californian grasslands. Pp 1-12, in: Huenneke & Mooney, op. cit.

Huenneke, L.F. and H.A. Mooney. 1989. The California annual grassland: an overview. Pp 213-218, in: Huenneke & Mooney, op. cit.

Huenneke, L.F., S.P. Hamburg, R. Koide, H.A. Mooney, & P.M. Vitousek. 1990. Effects of soil resources on plant invasion and community structure in Californian serpentine grassland. Ecology 71:478-491.

Huenneke, L.F. and R.R. Sharitz. 1990. Substrate heterogeneity and regeneration of a swamp tree, *Nyssa aquatica*. American Journal of Botany 77:413-419.

Huenneke, L.F. and P.M. Vitousek. 1990. Seedling and clonal recruitment of the invasive tree *Psidium cattleianum*: implications for management of native Hawaiian forests. Biological Conservation 53:199-211.

Schlesinger, W., J. Reynolds, G. Cunningham, **L.F. Huenneke**, W. Jarrel, R. Virginia, & W. Whitford. 1990. Biological feedbacks in global desertification. Science 247:1043-1048.

Huenneke, L.F. 1991. Ecological implications of genetic variation in plant populations. Invited chapter, pp. 33-41 in: D.A. Falk & K.E. Holsinger, eds. Conservation of Rare Plants: Biology and Genetics. Oxford University Press.

Hobbs, R.J. and **L.F. Huenneke**. 1992. Disturbance, diversity, and invasion: implications for conservation. Conservation Biology 6(3):324-337. [Reprinted in: F.B. Samson & F.L. Knopf, eds. 1996. Ecosystem Management: Selected Readings. Springer-Verlag, NY.]

Armstrong, J.K., and **L.F. Huenneke**. 1992. Spatial and temporal variation in species composition in California grasslands: the interaction of drought and substrate. pp 213-233 in: A.J.M. Baker, J. Proctor, & R.D. Reeves, eds. Proc. First Int. Conf. on Serpentine Ecology, June 1991. Intercept Limited, Andover, UK.

Huenneke, L.F. 1995. Involving academic scientists in conservation research: perspectives of a plant ecologist. Ecological Applications 5:209-214.

Huenneke, L.F. and J.K. Thomson. 1995. Potential interference between a threatened endemic thistle and an invasive non-native plant. Conservation Biology 9:416-425.

Huenneke, L.F. and I. Noble. 1995. Arid and semi-arid lands. PP 349-354 in: V.H. Heywood, ed. Global Biodiversity Assessment. Published for the United Nations Environment Programme by Cambridge University Press, Cambridge, UK.

Huenneke, L.F. 1995. Effects of biodiversity on water distribution and quality in ecosystems. PP 412-417 in: V.H. Heywood, ed. Global Biodiversity Assessment. Published for the United Nations Environment Programme by Cambridge University Press, Cambridge, UK.

Phinn, S., J. Franklin, A. Hope, D. Stow, and **L. Huenneke**. 1996. Biomass distribution mapping using airborne digital video imagery and spatial statistics in a semi-arid environment. Journal of Environmental Management 47:139-164.

Huenneke, L.F. and I. Noble. 1996. Ecosystem function of biodiversity in arid ecosystems. PP 99-128 in: H.A. Mooney, J.H. Cushman, E. Medina, O.E. Sala, & E.-D. Schulze, eds. Functional Roles of Biodiversity: A Global Perspective. J. Wiley & Sons, Chichester.

Herrera, E.A. and **L.F. Huenneke**, eds. 1996. Biological Diversity in the Land of Enchantment: New Mexico's Natural Heritage. New Mexico Journal of Science, vol. 36 (375 pp). Includes preface by Huenneke.

Huenneke, L.F. 1996. Case study: *Cirsium vinaceum*, a threatened thistle endemic to the Sacramento Mountains of New Mexico. Pp 141-151 in: Herrera and Huenneke, eds. Biological Diversity in the Land of Enchantment: New Mexico's Natural Heritage. New Mexico Journal of Science, vol. 36.

Miller, R.E. and **L.F. Huenneke**. 1996. Size decline in a population of creosote bush (*Larrea tridentata*). Southwestern Naturalist 41:248-250.

Huenneke, L.F. 1997. Outlook for plant invasions: interactions with other agents of global change. PP 95-103 in: J.O. Luken and J.W. Thieret, eds. Assessment and Management of Plant Invasions. Springer-Verlag, NY.

Craddock, C.L. and **L. F. Huenneke**. 1997. Seed dispersal by water in an endemic thistle, *Cirsium vinaceum*: implications for population structure and dynamics. American Midland Naturalist 138:215-219.

Connin, S.L., R.A. Virginia, P.Chamberlain, **L. Huenneke**, K. Harrison, and W.H. Schlesinger. 1998. Dynamics of carbon storage in degraded arid land environments: a case study from the Jornada Experimental Range, New Mexico (USA). PP 132-148 in: V.R. Squires, E.P. Glenn, and A.T. Ayoub, eds. Combating Global Climate Change by Combating Land Degradation. Proceedings of a Workshop, Nairobi, Sept 95. United Nations Environment Programme.

Huenneke, L.F. 1999. A helping hand: facilitation of plant invasions by human activities. PP 562-566 in: D. Eldridge and D. Freudenberger, eds. People and Rangelands: Building the Future. Proceedings of the VI International Rangeland Congress, Townsville, Australia, July 1999. International Rangeland Congress Inc., Aitkenvale, Queensland, Australia.

Sala, O.E. and 18 others (including **L.F. Huenneke**). 2000. Global biodiversity scenarios for the year 2100. Science 287:1770-1774.

Miller, R.E. and **L.F. Huenneke**. 2000. Demographic variation in a desert shrub, *Larrea tridentata*, in response to a thinning treatment. Journal of Arid Environments 45:315-323.

Miller, R.E. and **L.F. Huenneke**. 2000. The relationship between density and demographic variation within a population of *Larrea tridentata*. Southwestern Naturalist 45:313-321.

Huenneke, L.F., D. Clason, and E. Muldavin. 2001. Spatial heterogeneity in Chihuahuan Desert vegetation: Implications for sampling methods in semi-arid ecosystems. Journal of Arid Environments 47:257-270.

Huenneke, L.F. 2001. Deserts. PP 201-222 in: O.E. Sala, F.S. Chapin and E. Huber-Sannwald, eds. Global Biodiversity in a Changing Environment: Scenarios for the 21st Century. Springer-Verlag, New York.

Rango, A., S. Goslee, J. Herrick, M. Chopping, K. Havstad, **L. Huenneke**, R. Gibbens, R. Beck, and R. McNeely. 2001. Remote sensing documentation of historic rangeland remediation treatments in southern New Mexico. J. of Arid Environments 50:549-572.

Huenneke, L.F., J.P. Anderson, M. Remmenga, and W.H. Schlesinger. 2002. Desertification alters patterns of aboveground net primary production in Chihuahuan ecosystems. Global Change Biology 8(3):247-264.

Symstad, A.J., F.S. Chapin, F.S. III, D.H. Wall, K.L. Gross, **L.F. Huenneke**, G.G. Mittelbach, D.P.C. Peters, and D. Tilman. 2003. Long-term and large-scale perspectives on the relationship between biodiversity and ecosystem functioning. BioScience 53:89-98.

Diaz, S., A.J. Symstad, F.S. Chapin III, D.A. Wardle, and **L.F. Huenneke**. 2003. Functional diversity revealed by removal experiments. Trends in Ecology & Evolution 18:140-146.

McGlone, C.M, and **L.F. Huenneke**. 2004. The impact of a prescribed burn on introduced Lehmann lovegrass versus native vegetation in the northern Chihuahuan Desert. Journal of Arid Environments 57:297-310.

Rango, A., **L. Huenneke**, M. Buonopane, J.E. Herrick, and K.M. Havstad. 2005. Using historic data to assess effectiveness of shrub removal in southern New Mexico. Journal of Arid Environments 62:75-91.

Buonopane, M., **L.F. Huenneke**, and M. Remmenga. 2005. Community response to removals of plant functional groups and species from a Chihuahuan Desert shrubland. Oikos 110:67-80.

Havstad, K.M., **L.F. Huenneke**, and W.H. Schlesinger, eds.. 2006. Structure and Function of a Chihuahuan Desert Ecosystem: The Jornada Basin Long-Term Ecological Research Site. Oxford University Press, Oxford and New York.

Peters, D.P.C., W. H. Schlesinger, J. E. Herrick, **L. F. Huenneke**, and K. M. Havstad . 2006. Future directions in Jornada research: applying an interactive landscape model to solve problems. Chapter 18, pp 369-386 in: Havstad et al., *op. cit.*

Huenneke, L.F. and W.H. Schlesinger. 2006. Patterns of net primary production in Chihuahuan Desert Ecosystems. Ch 11, pp 232-246 in: Havstad et al., *op. cit*.

Cox, S.B., C.P. Bloch, R.D. Stevens, and **L.F. Huenneke**. 2006. Productivity and species richness in an arid ecosystem: a long-term perspective. Plant Ecology 186:1-12.

Peters, D.P.C., J. Yao, **L.F. Huenneke**, R.P. Gibbens, K.M. Havstad, J.E. Herrick, A. Rango, and W.H. Schlesinger. 2006. A framework and methods for simplifying complex landscapes to reduce uncertainty in predictions. Ch 7 in: J. Wu, B. Jones, H. Li, and O. Loucks, eds. Scaling and Uncertainty Analysis in Ecology: Methods and Applications. Springer Verlag, Dordrecht.

Mandujano, M.C., J. Golubov, and **L.F. Huenneke**. 2007. Effect of reproductive modes and environmental heterogeneity in the population dynamics of a geographically widespread clonal desert cactus. Population Ecology 49(2):141-153.

Trotter II, R.T., K. Laurila, D. Alberts, and **L.F. Huenneke**. 2015. A diagnostic evaluation model for complex research partnerships with community engagement: The Partnership for Native American Cancer Prevention (NACP) model. Evaluation and Program Planning 48:10-20.

L.F. Huenneke, C. van Riper III, and K.A. Hays-Gilpin, editors. 2015. The Colorado Plateau VI: Science and Management at the Landscape Scale. University of Arizona Press, Tucson. 387 pp.

Non-refereed publications and proceedings:

Huenneke, L.F. 1991. Population biology of an invading tree, *Psidium cattleianum*, in Hawaii Volcanoes National Park. pp 177-188 in: T.D. Center, R.F. Doren, R.L. Hofstetter, R.L. Meyers, L.D. Whiteaker, eds. Proceedings of the Symposium on Exotic Pest Plants, Miami, FL (Nov 1988). Technical Report NPS/NREVER/NRTR-91/06, US National Park Service.

Huenneke, L.F. and J. Thomson. 1993. Evaluating the potential for interference between an invasive non-native plant and a rare native species: a case study. pp 188-194 in: R. Sivinski & K. Lightfoot, eds. Southwestern Rare and Endangered Plants: Proceedings, Southwestern Rare and Endangered Plant Conference, Santa Fe, NM (April 1992). NM Forestry and Resources Conservation Division, Santa Fe.

Huenneke, L.F. 1995. Ecological impacts of plant invasions in rangeland ecosystems. Proceedings, Symposium on Alien Plant Invasions: Increasing Deterioration of Rangeland Ecosystem Health. Society for Range Management Annual Meeting, Jan 1995, Phoenix.

Huenneke, L.F. 1996. Shrublands and grasslands of the Jornada Long-Term Ecological Research site: desertification and plant community structure in the Northern Chihuahuan Desert. PP 48-50 in: Barrow, J.R., E.D. McArthur, R.E. Sosebe, and R.J. Tausch, eds. Proceedings, Shrubland Ecosystem Dynamics in a Changing Environment. Wildland Shrub Symposium, May 1995, Las Cruces, NM; USDA Forest Service, Intermountain Forest Experiment Station, General Technical Report INT-GTR-338.

Book reviews:

1981. North American forest types. A review of "Forest Cover Types of North America" by Society of American Foresters. Ecology 62(6):1694-1695.

1987. A review of "Wetlands" by W.J. Mitsch and J.G. Gosselink, Van Nostrand Reinhold, NY. Quarterly Review of Biology 62:210.

1987. An unconventional plant ecology text. A review of "Plant Ecology" by M. Crawley (ed), Academic Press, NY. Ecology 68(6):2070-2071.

1989. The vegetation of North America -- a major treatise. A review of "North American Terrestrial Vegetation" by M.G. Barbour and W.D. Billings (eds), Cambridge Univ. Press, Cambridge. Ecology 70(1):286-287.

1989. Conservation needs close to home. A review of three books on conservation biology in Hawaii. Science 244:854-855.

1990. A review of "Matrix Population Models" by H. Caswell, Sinauer Associates, Sunderland, MA. Vegetatio 86:187-188.

1994. Redundancy in natural systems. A review of "Biodiversity and Ecosystem Function" by E-D. Schulze and H.A. Mooney (eds), Ecological Studies 99, Springer-Verlag. Trends in Ecology and Evolution 9:76.

1996. European perspectives on plant invasions. A review of "Plant Invasions: General Aspects and Special Problems" by P. Pysek, K. Prach, M. Rejmanek, and M. Wade (eds), SPB Academic Publishing, Amsterdam. Ecology 77:1957-58.

1996. A review of "The Conservation of Plant Biodiversity" by O.H. Frankel and J.J. Burdon, Cambridge University Press, Cambridge. EcoScience 3:514-515.

1998. A review of "Biological Invasions" by M. Williamson, Chapman and Hall, London. Quarterly Review of Biology 73:102.

1998. A review of "Adapting to Climate Change: An International Perspective" by J.B. Smith and 8 others, editors; Springer, New York. Quarterly Review of Biology 73:379.

2002. A review of H.A. Mooney and R.J. Hobbs (eds), 2000, Invasive Species in a Changing World. Island Press, Washington, D.C. Restoration Ecology 10(3):603.

2006. Turning Species Invasions to Advantage. A review of "Species Invasions: Insights into Ecology, Evolution and Biogeography" by D.F. Sax, J.J. Stachowiz, and S.D. Gaines (eds), Sinauer Associates. Ecology 87(3):798-799.

Invited presentations and seminars:

1988. Ecological consequences of plant invasions. Invited paper, COGENE Symposium on "Ecological and Evolutionary Consequences of Genetic Engineering," Basel, Switzerland.

1988. Invited seminar, Department of Biology & Ecology Program, Pennsylvania State Univ.

1989. Ecological implications of genetic variation in rare plant populations. Invited paper, Conference on Rare Plant Genetics, sponsored by Center for Plant Conservation. St. Louis.

1989. Contribution of sprouting behavior to population persistence in woody species. Invited contribution to symposium, "Demographic and community implications of vegetative reproduction in woody plants." Botanical Society of America annual meeting, Toronto.

1992. Science and the management of sensitive plants and plant communities: applied plant population biology. Invited contribution to symposium, "Connecting applied conservation knowledge and basic ecological research." Ecological Society of America annual meeting, August 1992, Honolulu. Abstract published, Bulletin of the ESA 73(2):215.

1992. Invited seminar, Ecological, Evolutionary, and Organismal Biology, Tulane University.

1994. Invited participant, Biodiversity: patterns and function in arid lands. SCOPE Workshop, Canberra, Australia. Biodiversity and ecosystem process, synthesis meeing, Asilomar CA.

1995. Invited speaker, ecological impacts of invasive plants, Society for Range Management / Bureau of Land Management Symposium on Invasive Alien Plants. Phoenix, AZ.

1996. Invited speaker, ecological impactsof invasive plants, Western Society for Weed Science Symposium on Weed Management in Natural Resource Areas. Albuquerque, NM.

1996. Invited participant, Scenarios of Future Biodiversity. Workshop sponsored by National Center for Ecological Analysis and Synthesis and by Global Change in Terrestrial Ecosystems program of the International Geological/Biological Programme. Santa Barbara, CA.

1997. Invited participant, US-Mexico Workshop on Establishing a Network of Long-Term Ecological Research Sites in Mexico. Sevilleta Biological Field Station, Socorro, NM.

1997. No species is an island: interactions between plant invasions and other aspects of global change. Invited contribution to symposium, Non-native species effects on ecosystem function, sponsored by The Nature Conservancy in conjunction with the Annual Meeting of the Ecological Society of America, Albuquerque, NM.

1997. Invited participant and panel speaker, Southwestern Regional Climate Change Workshop. Sponsored by US Global Change Research Program and by Office of Science and Technology Policy. Tucson, AZ.

1998. Invited seminars, The Ecology Center, Utah State University, Logan.

1999. Invited seminars, Montana State University, Department of Biology and Graduate Training Program in Conservation.

1999. A helping hand: facilitation of plant invasions by human activities. Invited contribution to symposium, People and plant invasions of rangelands, VI International Rangeland Congress, Townsville, Queensland, Australia, June 1999.

2003. Invited to convene symposium on Vegetation Management in a Context of Global Environmental Change, VII International Rangeland Congress, Durban, South Africa, July 2003. (Organized symposium, but did not attend or present.)

2003. The Research-Education Link: Looking to the Future. Invited speaker, Symposium, Integrating Scientific Research and Ecological Education. Annual Meeting, Ecological Society of America,

2005. Lessons from an NSF Project: Recruiting and Retaining Women of Color. Decolonizing the University: Women of Color in Arizona Higher Education. Fifth Annual Conference, Flagstaff, AZ.

2005. How Mathematics Led Me to Ecology, or A Tale of Two Equations. Opening address, Sonia Kovalevsky Mathematics Day for High School Women. Northern Arizona University, Flagstaff, AZ.

2009. The Importance of Communicating Uncertainty. Invited presentation for Symposium, "Global Sustainability in the Face of Uncertainty: How to More Effectively Translate Ecological Knowledge to Policy Makers, Managers, and the Public." Ecological Society of American Annual Meeting, August 2009, Albuquerque NM.

2011. Ecosystem Services as a Way of Linking Ecology and Community Sustainability. Workshop presented at Western Leadership Meeting, Ecological Society of America SEEDS (student leadership program).

2013. Innovative Approaches to Sustainability in Academic Curricula. Invited presenter, webinar, American Association for Sustainability in Higher Education (AASHE).

2014. Moving Collectively Forward: View from the Top. Invited panelist, Arizona Higher Education Sustainability Conference (AHESC).

Conservation Service

-- instructor in workshops focusing on Management of Viable Populations, 1987, Center for Conservation Biology / Stanford University; 1989, Bureau of Land Management.

-- instructor/invited lecturer, Monitoring for Desired Future Conditions, USFWS Cooperative Research Unit, NMSU, January 1992, Las Cruces, NM.

-- member, New Mexico Rare Plant Recovery Team (advisory committee for US Fish & Wildlife Service's program in New Mexico), 1989 - 2000; team leader, 1991 – 2000.

Fellowships, Honors, and Awards

-- National Science Foundation Graduate Research Fellowship
-- Danforth Foundation Graduate Fellowship
-- Andrew D. White (Cornell University) Fellowship
-- Sigma Xi
-- Phi Beta Kappa
-- Selected as member of first cohort of Aldo Leopold Leadership Program, 1999
-- President's Award, AAAS-SWARM (Southwest and Rocky Mountain Chapter), 2000
-- Regents' Professor: Master Teacher, New Mexico State University, 2003
-- Named as Fellow, Ecological Society of America, 2012
-- Named to Who's Who in Arizona Business, top 50 executives, by Arizona Republic, 2014

Community Service and Board Memberships

-- Board of Directors, Southern New Mexico Museum of Natural History
-- Board of Directors, Chihuahuan Desert Nature Park
-- Board of Directors, The Arboretum at Flagstaff
-- Board of Directors, Sustainable Economic Development Initiative of Coconino County
-- City of Flagstaff/Northern Arizona Economic Development Advisory Council; now member of Advisory Committee, Economic Coalition of Northern Arizona (ECoNA)
-- Arizona Bioscience Roadmap Steering Committee
-- Board of Trustees, The Nature Conservancy, Arizona Chapter (2011 – present)

Teaching at NMSU

-- *Roush Award for Excellence in Teaching (campus teaching award), 1993*
-- *Regents' Professor: Master Teacher, New Mexico State University, 2003*

-- Botany (fall 87, fall 88, fall 90, fall 94, fall 95) - enrollment 70-100
-- Plant Ecology (spring 89, spring 91, spring 93, spring 95, spring 97) - enrollment 20-40
-- Field Ecology (falls, 88, 89, 90, 91, 92, 97) - enrollment 7 - 20
-- General Biology for non-majors (spring 90, spring 92) - enrollment 200-250
-- Natural History of Life, general biology, semester 1, for majors and non-majors (fall 96, fall 98, fall 2000) - enrollment 600 (2 sections; shared with one other instructor)
-- Ecology seminar (fall 87, conservation biology; spring 89, Tilman's "Plant Strategies & the Dynamics and Structure of Communities;" fall 89, climate change; fall 91, Hairston's "Ecological Experiments")
-- Plant Communities of the West / field trip course - (spring 88) - enrollment 12
-- Human Ecology (spring 93, fall 94, spring 96, spring 99) - enrollment 25 - 40
-- Advanced Ecology/Applications in Ecology (spring 95) -- enrollment 14
-- Ecological Aspects of Biogeochemistry, grad (spring 96) - enrollment 12

-- Foundations of Ecology, grad (spring 97) - enrollment 12
-- Communities & Ecosystems, grad (springs 98, 2000, 2002) - enrollment 11, 15, 17
-- Integrated Natural Sciences for Elementary Education Majors (fall 98, fall 99, fall 2000) – enrollment 18 (team taught)
-- Ecology (spring 2000, spring 2001) – enrollment 85 – 98
-- Conservation Biology (spring 2003) – enrollment 13
-- Human Biology or non-majors' biology (fall 2001, fall 2002) -- team-taught, enrollment 300

University service at New Mexico State University

-- Bachelor of Independent Studies committee, 1991-present
-- faculty search committees: Biology Department, 1991, 1993, 1996; Wildlife Department, 1993
-- departmental committees (Budget, Graduate Assistantship, Vehicles, Undergraduate Teaching, Promotion and Tenure)
-- initiated and for 2 years organized weekly Lunch Bunch for Ecology & Evolutionary Biology student/faculty group
-- initiated Department annual research symposium (now in its 15th year)
-- member, NMSU Strategic Planning subcommittee, Financial and Physical Resources, 1997
-- member, internal review / self-study committee, Dept. of Geography, 1997
-- elected member of University Research Council, 1997-1999
-- member, interview committee for Arts & Sciences Associate Dean, summer 2001
-- member, search committee, Vice Provost for Research, 2001-02
-- development coordinator for Department of Biology, 1999, 2001, 2002
-- member, Department Head Resource Manual development committee, 2001-02
-- member, Committee on the Status of Women in Science, Mathematics, and Engineering Departments at NMSU, 2001-03; chair, Faculty Development Subcommittee, ADVANCE program, same period
-- member, Women's Studies Steering Committee, 2002

University service at Northern Arizona University

-- member, Task Force on the Freshman Year
-- co-chair, Committee on Faculty Effort and Expectations
-- chair, Working Group on Merit [Raise] Allocations
-- member, Research and Graduate Education Task Force
-- chair, search committee for Dean of College of Arts & Letters
-- invited presenter, New Chair and Administrator workshops, annually since 2006
-- member, University Space Advisory Committee [recommends allocation of space]
-- chair, Conflict of Interest Working Group
-- chair, Indirect Cost Policy Working Group

Graduate students directed at NMSU:

Steven R. Ripple, "Germination, establishment, and survival of riparian tree species in the Lower Box of the Gila River, New Mexico," M.S. thesis, December 1990.

James K. Thomson, "Demographic study of Cirsium vinaceum, an endemic thistle of the Sacramento Mountains, New Mexico," M.S. thesis, May 1991.

Karen S. Lightfoot, "Shrub-specific associations of spring and summer annuals in Chihuahuan desert communities," M.S. thesis, August 1991.

Ron Kass, "The effects of snow avalanche disturbance on plant community structure in the Wasatch Mountains, Utah," Ph.D. dissertation, December 1992.

Jim Siscoe, "A comparison of an invasive riparian shrub species *Tamarix pentandra* with a native species *Salix exigua*," M.S. thesis, April 1993.

Lisa Beres, " Response potential of three perennial desert grasses to various disturbances ," M.S. thesis, May 1993.

Kelly Burks, "The effects of population size and density on the pollination biology of a threatened thistle (*Cirsium vinaceum*)," M.S. thesis, May 1994.

Tony Taylor, non-thesis master's in plant ecology; completion of degree, May 1994.

Joe Daraio, non-thesis master's in plant ecology; completion of M.S. degree, May 1994.

Jamey Thompson, "Shrub islands as germination microsites for perennials in the Chihuahuan desert," M.S. thesis, May 1995.

Sarah Wood, “Weedy behavior in the native thistle, *Cirsium parryi* Gray (Asteraceae) in the Sacramento Mountains, New Mexico,” M.S. thesis, Dec 1995.

Octavio Jimenez-Moreno, non-thesis M.S. student; degree completed June 1996.

Joanne Baggs, “The role of *Bouteloua eriopoda* in the community structure and ecosystem function of a semi-arid grassland,” M.S. thesis, Dec 1997.

Michelle Zeisset, “Effect of plant community structure on insect community structure in the Chihuahuan Desert,” M.S. thesis, Aug 1998.

Chris McGlone, “Community impacts of an invasive grass, *Eragrostis lehmanniani*, in the northern Chihuahuan Desert,” M.S. thesis, Aug 2001.

Pedro Osuna-Avila, co-advised by Jerry Barrow, “The development of an in vitro system to determine the role of endophytic fungus (*Aspergillus ustus*) on *Daucus carota* roots,” Ph.D. dissertation, Dec 2002.

Amanda Gonzales Skarsgaard, co-advised by Jeff Herrick, “The effect of burial by unpaved road dust deposition on cyanobacterial crusts,” M.S. thesis, Dec 2003.

Kathy Whiteman, “Vegetation of the Gila River in Grant and Catron Counties, NM : a shift in historic riparian plant community assemblages,” M.S. thesis, 2004.

Yang Xia, “Seed bank dynamics in Jornada Basin ecosystems,” M.S. thesis, 2004.

Research and external support:

National Geographic Society, "Population ecology of an invading tree in Hawaii Volcanoes National Park," $12,000, June 1987 - December 1988.

National Science Foundation, "Interactions of time and space variability in a Chihuahuan desert ecosystem: Jornada LTER," $2,100,000, January 1989 - October 1995; one of 6 PI's. For 2 years, served as sole PI at NMSU.

National Science Foundation, "Long-term ecological studies in the Chihuahuan desert: The Jornada LTER Program." $3,780,000, October 1995 - October 2000; one of 11 investigators (W.H. Schlesinger, Duke, PI).

New Mexico Department of Energy, Minerals, and Natural Resources (Forestry), "Population biology of the threatened species *Cirsium vinaceum*," 1989 - 1990. Contract: $3,500.

New Mexico Energy, Minerals, and Natural Resources Department, "Population biology of rare New Mexico plants," $3,000, April 1991 - August 1991.

Center for Plant Conservation, "Ecological genetics of *Hedeoma todsenii*," $4,000, August 1991 - September 1992.

Bureau of Land Management, New Mexico State Office, "Ecological studies of a rare shrub, *Lepidospartum burgessii*," $7,000, July 1991 - May 1992.

National Science Foundation, Conservation Biology special initiative, "Population size and density effects on population viability: a case study of two *Cirsium* species," $118,000, August 1991 - July 1994. (Two REU supplements, for $5000 and $10,000, were awarded.)

Bureau of Land Management, New Mexico State Office, "Global climate change and the dynamics of southern New Mexico plant communities," $750,000, Sept 1991 - Sept 1999. After Sept 1994, this project was administered by the National Biological Service, now the Biological Resources Division of the US Geological Survey.

National Science Foundation, Long-Term Ecological Research (LTER). Co-PI of Jornada Basin LTER, 1988 to 2003. From 2000 - 2003, Lead PI and Program Coordinator, leading a group of 13 PI's in the funding cycle for 2000-2006, $700K per year plus annual supplements of roughly $50K per year.

National Center for Ecological Analysis and Synthesis (NCEAS). Analysis of diversity reduction experiments to address the ecosystem consequences of biodiversity loss. Sandra Diaz, co-PI. $35,000, 2002 – 2004.

Science Foundation Arizona, K-12 Grant Program. Teachers as Investigators: Teacher Summer Research Program. Barbara Austin, co-PI, 2007-08. Joseph Shannon, co-PI, 2008-09. $650,000.

Science Foundation Arizona, Graduate Research Fellowships Program. Cumulative funding $1,320,500. 2007 – present.

National Cancer Institute, Minority Institutions – Cancer Center Partnerships. The Partnership for Native American Cancer Prevention (U54). LF Huenneke, Lead Investigator for NAU; David Alberts, University of Arizona Cancer Center, co-PI. NAU budget, $8,917,603, 2009 – 2014.

Science Foundation Arizona, Bisgrove Postdoctoral Scholars: Building Exceptional Scholarship in Sustainable Systems. Lead Investigator. $120,000, 2010-2012.

US Geological Survey, Basic Operations of the Colorado Plateau Research Station. $399,259, 2008 – 2011.

US Geological Survey, National Climate Change and Wildlife Science Center, Impact of Climate Change on Wildlife in the Southwest. $357,000, 2009 – 2011.

Arizona Governor's Office of Economic Recovery, Partnership between Northern Arizona University and Northern Arizona Center for Entrepreneurship & Technology (NACET). Co-investigator, Russ Yelton of NACET. $1 million; NAU budget, $500,000, 2010-2011.

National Cancer Institute, Partnerships to Advance Cancer Health Equity. The Partnership for Native American Cancer Prevention (U54). LF Huenneke, Lead Investigator for NAU; David Alberts, University of Arizona Cancer Center, co-PI. NAU budget, $6.98 million over 5 years, 2014 – 2019.