

CURRICULUM VITAE

NAME: Rebecca W. Dolan

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EDUCATION: 1978, B.S., Botany, University of Michigan
1983, Ph.D., Botany, University of Georgia

EMPLOYMENT HISTORY:

1991–present Butler University, Friesner Herbarium

Director of the Friesner Herbarium (Associate Curator 1987-1991). I manage the Butler University Herbarium and Prairie. Herbarium duties include overseeing day-to-day operations, supervising student assistants, fundraising, collections development and independent research. Prairie duties include management of the 3-acre site and tours and presentations to school groups and other interested parties. I currently teach Local Flora on an every-other year basis and have also served as Visiting Assistant Professor in the Department of Biological Sciences, teaching introductory Biology for majors and non-majors.

1987-1991 Holcomb Research Institute, Butler University

Research Scientist. I conducted conservation biology research on genetics and demography of populations of rare plants, with the goal of providing data on basic biology to assist in management and preservation of plant resources. I developed an NSF funded study of the genetic and ecological functioning of small and isolated populations of *Silene regia*, a prairie relict. Additional research included community analysis and air pollution injury surveys in Ohio River Valley hardwood forests.

1986 Wabash College, Crawfordsville, IN

Visiting Assistant Professor of Biology. I taught courses in Introductory Biology for majors and nonmajors, Botany (Kingdom Survey), and Advanced Ecology. Wabash is a private liberal arts college for men that stresses quality teaching.

1983-1985 Tierra Madre Consultants, Riverside, CA

Plant Ecologist. I conducted field work and report writing for many biological assessments of utility and housing developments in southern California and Arizona. I conducted floristic and endangered species studies for environmental impact reports and designed mitigation measures for many projects. I secured the contract and served as project manager on several of these projects.

PUBLICATIONS:

- Dolan, R.W. 1984. The effects of seed size and maternal origin on the distribution of individual plant size in *Ludwigia leptocarpa* (Onagraceae). *American Journal of Botany* 71:1302-1307.
- Dolan, R.W. and R.R. Sharitz. 1984. Population dynamics of *Ludwigia leptocarpa* (Onagraceae) and some factors affecting size hierarchies in a natural population. *Journal of Ecology* 72:1031-1041.
- Dolan, R.W. and L.F. LaPre'. 1989. Taxonomy of *Streptanthus* sect. *Biennes*, the *Streptanthus morrisonii* complex. (Brassicaceae). *Madroño* 36:33-40.
- Dolan, R.W. and E.S. Menges. 1989. Vegetation and environment in an adjacent post oak flatwoods and barrens in Indiana. *American Midland Naturalist* 122:329-338.
- Dolan, R.W. 1991. The Friesner Herbarium (BUT) of Butler University. *Brittonia* 43:54-56.
- Dolan, R.W. 1992. "A complete index to the Butler University Botanical Studies, a journal of original research published by Butler University 1929-1964." *Proceedings of the Indiana Academy of Science* 101:1-18.
- Dolan, R.W. 1994. The Clute holotypes and the herbarium of Willard Nelson Clute in the Friesner Herbarium of Butler University (BUT). *The American Fern Journal* 84:71-72.
- Dolan, R.W. 1994. Patterns of isozyme variation in relation to population size, isolation, and phylogeographic history in royal catchfly (*Silene regia*; Caryophyllaceae). *American Journal of Botany* 81:965-973.
- Dolan, R.W. 1994. Effects of a prescribed burn on tree- and herb-layer vegetation in a post oak (*Quercus stellata*) dominated flatwoods. *Proceedings of the Indiana Academy of Science* 103:25-32.
- Dolan, R.W. 1995. The royal catchfly (*Silene regia*; Caryophyllaceae) in Indiana. *Proceedings of the Indiana Academy of Science* 104:1-10.
- Dolan, R.W. 1995. The rare, serpentine-endemic *Streptanthus morrisonii* (Brassicaceae) species complex, revisited using isozyme analysis. *Systematic Botany* 20:338-346.
- Crandall, R. and R. W. Dolan. 1997. Floristic inventory of Crooked Creek Community Juan Solomon Park, Indianapolis, IN. *Proceedings of the Indiana Academy of Science* 109:1-24.
- Menges, E.S. and R.W. Dolan. 1998. Demographic viability of populations of *Silene regia* in midwestern prairies: relationships with fire management, genetics, geography, population size, and isolation. *Journal of Ecology* 86:63-78.
- Quintana-Ascencio, P.F., R.W. Dolan and E.S. Menges. 1998. An experimental study of *Hypericum cumicola* demography in unoccupied and occupied Florida scrub patches with different time-since-fire. *Journal of Ecology* 86:640-651.
- Dolan, R.W., R. Yahr, E.S. Menges and M. Halfhill. 1999. Three rare, perennial plants endemic to Florida rosemary scrub with different patterns of genetic organization. *American Journal of Botany* 86:1556-1562.

PUBLICATIONS (con't):

- Evans, M.E.K., R.W. Dolan, E.S. Menges and D.R. Gordon. 2000. Genetic diversity and reproductive biology in *Warea carteri* (Brassicaceae), a narrowly endemic Florida scrub annual. *American Journal of Botany* 87:372-381.
- Menges, E.S., R.W. Dolan, R. Yahr and D.R. Gordon. 2001. Comparative genetics of seven plants endemic to Florida's Lake Wales Ridge. *Castanea* 66:98-114.
- Dolan, R.W., E.S. Menges, and R. Yahr. 2004. Population genetic structure in *Nolina brittoniana*, a plant endemic to the central ridges of Florida. *The Southeastern Naturalist* 3:25-36.
- Salsbury, C.M., R.W. Dolan and E.B. Pentzer. 2004. The distribution of fox squirrels (*Sciurus niger*) leaf nests within forest fragments in central Indiana. *American Midland Naturalist* 151:369-377.
- O'Donnell, R. and R. W. Dolan. 2005. A new species of *Streptanthus* (Brassicaceae) from Three Peaks in Lake County, California. *Madroño* 52:202-206.
- Dolan, R. W., D.L. Marr, and A. Schnabel. 2008. Capturing genetic variation during ecological restorations: An example from Kankakee Sands in Indiana. *Restoration Ecology* 16:386-396.
- Dolan, R.W., P. Quintana-Ascencio, and E. Menges. 2008. Fire-induced genetic change in populations of a seed-banking perennial plant. *Oecologia* 158:355-360.
- Menges, E.S., R.W. Dolan, R. Pickert, R. Yahr and D.R. Gordon. Under revision. Genetic variation may be independent of population and landscape characteristics: Conservation implications based on assessment of six endemic Florida scrub plants. *Biological Conservation*.

INVITED SEMINARS:

- Wabash College, Biology Department- 1988, 1992, 1996, 2001
 Indiana University, Biology Department -1993
 Ball State University, Biology Department - 1995
 Indiana State University - 2001
 Indiana University – Purdue University, Indianapolis - 2006

PRESENTATIONS AND POSTERS:

- Dolan, R.W. 1981. The nature of early seedling vigor in *Ludwigia leptocarpa* (Onagraceae). Botanical Society of America annual meeting, Bloomington, Indiana.
- Dolan, R.W. 1982. The causes and implications of plant to plant variation in size and seed production in *Ludwigia leptocarpa*. Botanical Society of America annual meeting, State College, Pennsylvania.
- Dolan, R.W. 1983. Development of a size hierarchy in *Ludwigia leptocarpa* (Onagraceae): Causes and implications. Invited symposium paper, Botanical Society of America annual meeting, Grand Forks, North Dakota.
- Dolan, R.W. 1983. Aspects of the demography and life history of *Ludwigia leptocarpa* (Onagraceae). Association of Southeastern Biologists annual meeting, Lafayette, Louisiana.

PRESENTATIONS AND POSTERS (con't):

- Dolan, R.W. and L.F. LaPre'. 1986. Poster: Biosystematics of the rare serpentine endemic *Streptanthus brachiatus-morrisonii* complex. California Native Plant Society Conference on Rare Plants, Sacramento, California.
- Dolan, R.W. 1988. A re-examination of the serpentine endemic *Streptanthus morrisonii* F.W. Hoffman complex. Botanical Society of America annual meeting, Davis, CA.
- Dolan, R.W. 1990. The Friesner Herbarium and the Butler University Botanical Studies Journal. Indiana Academy of Science fall meeting, Manchester, IN.
- Dolan, T.E., S. Folke, and R.W. Dolan. 1991. Poster: *Pythium ssp.* dynamics in a small central Indiana pond. Mycological Society of America annual meeting, San Antonio, TX.
- Dolan, R.W. 1991. Effects of fire on species composition in a post oak flatwoods."Indiana fall of Science meeting, Evansville, IN.
- Dolan, R.W. 1992. Genetic variation within and between populations of royal catchfly (*Silene regia*), a rare prairie forb. Society for Conservation Biology annual meeting, Blacksburg, Va.
- Dolan, R.W. 1993. Poster: Population genetic structure and post-glacial migration in a North American prairie plant. European Society for Evolutionary Biology, 8th Congress, Montpellier, France.
- Dolan, R.W. 1993. The royal catchfly (*Silene regia*) in Indiana. Indiana Academy of Science fall meeting, Lafayette, IN.
- Dolan, R.W. 1994. Population genetic structure and post-glacial migration in a rare prairie plant. Botanical Society of America annual meeting, Knoxville, TN.
- Dolan, R.W. 1994. The Butler University Prairie. Indiana Academy of Science fall meeting, South Bend, IN.
- Dolan, R.W. 1996. Organization of genetic variation in *Warea carter*, a federally listed rare plant of the Lake Wales Ridge, Florida. Botanical Society of America annual meeting, Seattle, Washington.
- Crandall, R. and R.W. Dolan. 1996. A floristic survey of Juan Solomon Crooked Creek Community Park, Indianapolis, Indiana. Indiana Academy of Science fall meeting, Greencastle, IN.
- Dolan, R.W. 1996. Genetic variation in *Warea carteri*, a narrow endemic annual of the Lake Wales Ridge, Florida. Indiana Academy of Science fall meeting, Greencastle, IN.
- Dolan, R.W. and E.S. Menges. 1997. Demographic viability of populations of Royal Catch-fly in midwestern prairies. Indiana Academy of Science fall meeting, Rensselaer, IN.
- Dolan, R.W. and E.S. Menges. 1998. Demographic viability of populations of Royal Catch-fly in midwestern prairies. Midwestern Rare Plant Conference, Chicago Botanic Garden, Glencoe, IL.
- Dolan, T.E., R.W. Dolan and N. Batalis. 2000. Use of isozyme analysis for species identification and quantification of genetic variation in a pond population of *Saprolegnia ferax*. Mycological Society of America Annual Meeting, Burlington, VT.

PRESENTATIONS AND POSTERS (con't):

- Dolan, R.W., E.S. Menges and R. Yahr. 2001. Genetic variation in *Nolina brittoniana*, a plant endemic to the central ridges of Florida. Botanical Society of America annual meeting, Albuquerque, NM.
- Dolan, R.W., E.S. Menges and R. Yahr. 2002. Genetic variation in *Nolina brittoniana*, a plant endemic to the central ridges of Florida. Indiana Academy of Science fall meeting, Indianapolis, IN.
- Dolan, R. W., A. Schnabel and D. Marr. 2003. Genetic variation in plants in restored populations at Kankakee Sands. Indiana Academy of Science fall meeting, Anderson, IN.
- Dolan, R. W., M. Moore, and J. Stephens. 2004. A contemporary inventory of the flora of Marion County – a work in progress. Indiana Academy of Science fall meeting, Hanover, IN.
- K. Aaltonen, and R. Dolan. 2005. Effects of fire on the rare Florida scrub plant *Hypericum cumulicola*. Butler University Undergraduate Research Conference, Indianapolis, IN.
- Dolan R W., D. Marr, and A. Schnabel. 2005. Genetic variation in prairie restorations at Kankakee Sands, Newton County, Indiana. Botanical Society of America annual meeting, Austin, TX.
- Dolan, R. W. and M. Moore. 2006. The Contemporary Flora of Marion County, Indiana. Chicago Botanic Garden Urban Ecology Conference, Chicago, IL.
- Frasca, J., T.E. Dolan, and R.W. Dolan. 2006. Genetic variation among *Saprolegnia ferax* isolates infecting egg masses of the salamander *Ambystoma texanum*. Butler University Undergraduate Research Conference, Indianapolis, IN.
- Dolan, R.W, M. Moore, and M. Tienes. 2007. The Friesner Herbarium of Butler University II. Indiana Academy of Science fall meeting, Indianapolis, IN.

FUNDED RESEARCH GRANTS, CONTRACTS, AND ASSISTANTSHIPS:

- City of Indianapolis, Department of Parks and Recreation. 9 mos., \$7,000. "Ten year resample of permanent plots at Eagles Crest and Spring Pond State Nature Preserves." 2007.
- The Nature Conservancy. 9 mos., \$10,486. "Cooperative Weed Management Area development for the eastern United States." Subcontract with TNC, original funding source: U.S.D.A. Forest Service, Electric Commons. 2006.
- Indianapolis Museum of Art, Art and Nature Park. "Quantitative Vegetation Analysis." 3 mos., \$4,611. Subcontract with Travis Ryan. 2005
- Indy Parks and Recreation. 3 mos., \$990. "Quantitative Vegetation Surveys at Eagle Creek Park and Along the Monon Trail." 2005.
- Indiana Department of Natural Resources, Division of Fish and Wildlife. 1 yr. \$58,796. "Best management practices for plant species at risk." 2004.
- City of Indianapolis, Department of Parks and Recreation. 9 mos., \$4,098. "Floristic inventory at Southwestways Park." 2004.
- Indianapolis Public Schools. 4 mos., \$4,423. "Floristic inventory at Cold Springs School." 2004.

FUNDED RESEARCH GRANTS, CONTRACTS, AND ASSISTANTSHIPS (con't):

USDA Forest Service. 18 months, \$27,000. "Conservation assessments for 9 rare plants of the Hoosier National Forests." 2003.

City of Indianapolis, Department of Parks and Recreation. 9 mos., \$3,616. "Floristic inventory at the Woolens' Gardens Nature Preserve." 2003.

USDA Forest Service. 9 months, \$35,450. "Population viability assessment for 50 rare plants of the Hoosier and Shawnee National Forests." 2002.

City of Indianapolis, Department of Parks and Recreation, Greenways Division. 9 mos., \$6,946. "Floristic inventory at the Marott Park and Town Run South Park." 2002.

Florida Division of Forestry, subcontract through Archbold Biological Station, 1 year, \$7,000. "Effects of fire and seed bank dynamics on patterns of genetic variation in *Hypericum cumulicola* and implications for management." 2002.

USDA Forest Service. 3 months, \$21,749. "Population viability assessment for 25 rare plants of the Hoosier and Shawnee National Forests." 2001.

The Nature Conservancy, Kankakee Sands Research Initiative. 2 years, \$14,500. "Genetic monitoring of reconstructed prairies", with Andrew Schnabel and Deborah Mar, IU South Bend. 2001-2002.

Florida Division of Forestry, subcontract through Archbold Biological Station, 1 year, \$13,000. "Effects of fire and seed bank dynamics on patterns of genetic variation in *Hypericum cumulicola* and implications for management." 2001.

City of Indianapolis, Department of Parks and Recreation, Greenways Division. 1 year, \$3,577. "Floristic inventory at the Indianapolis Museum of Art's Art and Nature Park." 2000.

Florida Division of Forestry, subcontract through Archbold Biological Station, 1 year, \$12,000. "Effects of fire and seed bank dynamics on patterns of genetic variation in *Hypericum cumulicola* and implications for management." 2000.

Indiana Department of Natural Resources, Division of Urban Forestry. 1 year, \$3,130. "Tree Identification for Teachers." 1999.

City of Indianapolis, Department of Parks and Recreation. 6 months, \$3,500. "Floristic Inventory at Eagle Creek Nature Center." 1998.

City of Indianapolis, Department of Parks and Recreation. 3 months, \$4,923. "Studies of Eagle's Crest Nature Preserve." 1997.

Indiana Campus Compact, summer, \$1,500. "Crooked Creek Watershed Projects." 1997.

Center for Earth and Environmental Science, I.U.P.U.I., summer grant development fellowship, \$5,000. 1997.

City of Indianapolis, Department of Parks and Recreation. 3 months, \$4,923. "Urban Forest Biological Inventory." 1996.

FUNDED RESEARCH GRANTS, CONTRACTS, AND ASSISTANTSHIPS (con't):

Florida Department of Agriculture and Consumer Services. 6 months, \$5,370. "Isozyme variation in *Nolina brittoniana*." 1996. Subcontract with Archbold Biological Station.

The Nature Conservancy's Ecosystem Research Program. 3 year, \$115,000. "Genetics, ecology, and preserve design for endemic plants of the Lake Wales Ridge, Florida." Co-PI with Eric Menges and Doria Gordon. 1994-1996.

Indiana Department of Natural Resources Division of Nature Preserve. 1 year, \$9,500. Study of rare plant communities at the U.S. Army Jefferson Proving Ground in Southeastern Indiana. 1994.

Indiana Academy of Science. \$680 for student wages for study of rare Indiana prairie plants. 1994.

Archbold Biological Station. 1 year, \$ 10,000 contract to survey rare plants of the Lake Wales Ridge of central Florida for levels of genetic variation. 1992.

National Science Foundation. 3 year, \$ 169,000 grant to study the relationship between genetic variation and estimates of population viability for a rare perennial plant (*Silene regia*). Principal investigator. Co-PI Eric Menges. 1990-1993.

Indiana Academy of Science. \$700 grant to cover supplies and student assistance for electrophoretic genetic analysis of *Silene regia* populations in Indiana. Summer 1989.

Department of the Interior, Bureau of Land Management. 3-year \$83,000 contract to study the taxonomy and geographic distribution of a rare species complex that occurs on serpentine soil in Lake, Napa, and Sonoma counties, California. Principal Investigator. 1984-1986.

Laboratory Graduate Research Fellow, Department of Energy Graduate Thesis Research Program, Savannah River Ecology Laboratory, Aiken, South Carolina. Summers 1979, 1980, 1982 and 1/81 -9/81.

Oak Ridge Associated Universities Travel Grant. 9/79-8/83. Covered expenses to visit field research sites.

Graduate Teaching Assistantship, University of Georgia. 11 quarters.

AWARDS AND HONORS:

Fellow, Indiana Academy of Science, 1999

"An Apple for You Award", Butler University Student Government Association, 2004

GRADUATE STUDENTS:

Karen Simons Gartner. Master's thesis, 1990. "Vegetation recovery along abandoned logging roads in Yellowwood State Forest, central Indiana."

REVIEWER FOR FOLLOWING JOURNALS, PRESSES AND AGENCIES:

Annals of the Missouri Botanical Garden
American Journal of Botany
American Midland Naturalist
Australian Journal of Botany
Bulletin of the Torrey Botanical Club
Collections Forum
Conservation Biology
Ecology
Ecoscience
Evolutionary Ecology
Indiana University Press
International Journal of Plant Sciences
Journal of Applied Ecology
Journal of Ecology
Madroño
Molecular Ecology
Natural Areas Journal
National Science Foundation
Plant Ecology
Proceedings of the Indiana Academy of Science (on Editorial Board since 1999)
Restoration Ecology
University of Michigan Press
Western North American Botanist

OTHER PROFESSIONAL EXPERIENCE:

Elected Positions:

- President, Indiana Native Plant and Wildflower Society, 2004-05
- President, Indiana Academy of Science, 1998.
- Secretary of the Ecological Section of the Botanical Society of America, 1996-98
- Chair, Plant Taxonomy Section, Indiana Academy of Science, 1994

Appointed Positions:

- Board of Directors, Central Indiana Land Trust, 2005-2011
- Associate Editor, Plant Ecology, American Midland Naturalist, 2004-2007
- Member, Conservation Research Review Subcommittee, Indianapolis Zoo, 2005-
- Supervisor, Marion County Soil and Water Conservation District, 1998-2000.
- Member, Advisory Board, Indiana Native Plant and Wildflower Society, 1998-2001
- Research Affiliate, Archbold Biological Station, Lake Placid, FL, 1998-
- National Science Foundation Panelist, Population Biology 1997, 2000, 2002, 2003
- Recording Secretary, Indiana Native Plant and Wildflower Society, 1996-97
- National Science Foundation Panelist, Post-doctoral and Mid-career Fellowships in Environmental Science, 1991-1993.
- Chair of Conservation Committee of the Botanical Society of America, 1993-94
- Chair, Environment and Public Policy Committee, American Society of Plant Taxonomists 1995

PROFESSIONAL AFFILIATIONS:

American Society of Plant Taxonomists
Association of Systematic Collections
Botanical Society of America
Ecological Society of America
Indiana Academy of Science
Indiana Native Plant and Wildflower Society
Natural Areas Association
Society for Ecological Restoration
Society for the Preservation of Natural History Collections
The Nature Conservancy
The Society for Conservation Biology

1/20/09