

WILLIAM J. PLATT, III

CURRICULUM VITAE: January, 2008

PERSONAL: Birth: November 21, 1942; Gainesville, Florida

POSITION: Professor, Department of Biological Sciences
Louisiana State University
Baton Rouge, Louisiana 70803
Phone 225/388-6586; FAX 225/388-2597
Email: btplat@lsu.edu, billmaggie1@cox.net

SPECIALIZATIONS: Ecology:
Population/Community/Landscape Ecology
Disturbance Ecology: Fire Ecology/Hurricane Ecology
Global Climate Change Ecology: Effects of Changing
Climate and Environments on Disturbance Ecology
Conservation Biology:
Conservation of High Biodiversity Ecosystems
Restoration & Adaptive Management of Southeastern
Ecosystems and Landscapes in the Context of
Global Climate Change

EDUCATION:

Gainesville High School, Gainesville, Florida: 1956-1960

National 4-H Winner: Poultry (1958), Entomology (1959),
Conservation/Ecology (1960); Westinghouse National Science Talent
Search Finalist-1959; State and National Science Fair Winner-1960;
Valedictorian, Graduating Class of 1960

University of Florida: 1960-1964; B.S., Magna Cum Laude

Tuition scholarships, National 4-H scholarships 1960-64; Phi Beta
Kappa; Phi Kappa Phi; Research Associate, Florida State Museum 1960-
64; Undergraduate research & teaching assistant 1962-64

Cornell University: 1964-1970; Ph.D.

Woodrow Wilson Fellowship-1964; Andrew Dickson White Fellowship
1965-1968; National Institute of Health Graduate Fellowship 1967-69;
Cornell Teaching Award 1966-68; Graduate research & teaching
assistant 1964-70

PROFESSIONAL HISTORY

University of Iowa: Assistant Professor 1970-1975; Staff, Iowa Lakeside Laboratory 1970-1987

University of Illinois at Chicago: Assistant Professor 1975-1978; Associate Professor 1978

Tall Timbers Research Station: Research Biologist 1978-1987; Associate Scientist 1988-2008

Florida State University: Adjunct Associate Professor 1979-1987

Louisiana State University: Associate Professor, 1988-1994; Professor, 1994-2008

PUBLICATIONS

Refereed Publications (in chronological order; total = 90) * indicates publication is available as a pdf file

Platt, W.J. and N. Blakley. 1973. Short-term effects of shrew predation upon invertebrate prey in prairie ecosystems. *Proceedings of the Iowa Academy of Sciences* 80:60-66.

Platt, W.J. 1973. Comparison of vertebrate communities of the Coralville Reservoir and Cone Marsh, Iowa. *Proceedings of the Iowa Academy of Sciences* 80:117-128.

Platt, W.J. 1974. Metabolic rates of short-tailed shrews. *Physiological Zoology* 47:75-90.

Platt, W.J., G.R. Hill, and S. Clark. 1974. Seed production in a prairie legume (*Astragalus canadensis* L.): interactions between pollination, predispersal predation, and plant density. *Oecologia* 17:55-64.

Platt, W.J. 1975a. The colonization and formation of equilibrium plant species associations on badger disturbances in a tall-grass prairie. *Ecological Monographs* 45:285-305. (Citation classic)

Platt, W.J. 1975b. The vertebrate fauna of the Cayler Prairie Preserve, Dickinson County, Iowa. *Proceedings of the Iowa Academy of Sciences* 82:106-108.

- Hill, G.R. and W.J. Platt. 1975. Some effects of fire upon a tall-grass prairie plant community in northwestern Iowa. Pages 103-124 In (M.K. Wali, ed.), *Prairie: A Multiple View*. University of North Dakota Press, Grand Forks, North Dakota.
- Platt, W.J. 1976a. The natural history of a fugitive prairie plant (*Mirabilis hirsuta* (Pursh) MacM.). *Oecologia* 22:399-409.
- Platt, W.J. 1976b. The social organization and territoriality of short-tailed shrew (*Blarina brevicauda*) populations in old-field habitat. *Animal Behaviour* 24:305-318.
- Werner, P.A. and W.J. Platt. 1976. Ecological relationships among co-occurring goldenrods (*Solidago*; Compositae). *The American Naturalist* 110:959-971.
- Platt, W.J. and I.M. Weis. 1977. Resource partitioning and competition within a guild of fugitive prairie plants. *The American Naturalist* 111:479-513. (Citation Classic)
- Kinsman, S. and W.J. Platt. 1984. The impact of a herbivore upon *Mirabilis hirsuta*, a fugitive prairie plant. *Oecologia* 65:2-6.
- Platt, W.J. and I.M. Weis. 1985. Experimental study of competition among fugitive prairie plants. *Ecology* 66:708-720.
- Platt, W.J. and S.M. Hermann. 1986. Relationships between dispersal syndrome and characteristics of populations of trees in a mixed-species forest. Pages 309-321 In (A. Estrada and T. H. Fleming, eds.), *Frugivores and Seed Dispersal*. Dr W. Junk, Amsterdam.
- *Platt, W.J., G.W. Evans, and S.L. Rathbun. 1988. The population dynamics of a long-lived conifer (*Pinus palustris*). *The American Naturalist* 131:491-525.
- Platt, W.J., G.W. Evans, and M.M. Davis. 1988. Effects of fire season on flowering of forbs and shrubs in longleaf pine forests. *Oecologia* 76:353-363.
- Poulson, T.L. and W.J. Platt. 1989. Gap light regimes influence canopy tree diversity. *Ecology* 70:553-555.

- Platt, W.J. and D.R. Strong. 1989. Gaps in forest ecology. *Ecology* 70:535.
- Platt, W.J. and M.W. Schwartz. 1990. Temperate hardwood forests. Pages 194-229, *In* (R. Myers and J. Ewel, eds.), *Ecosystems of Florida*. University of Florida Press, Orlando, Florida.
- Canham, C.D., J.S. Denslow, W.J. Platt, J.R. Runkle, T.A. Spies, and P.S. White. 1990. Light regimes beneath closed canopies and tree-fall gaps in temperate and tropical forests. *Canadian Journal of Forest Research* 20:620-631.
- Platt, W.J., J.S. Glitzenstein, and D.R. Streng. 1991. Evaluating pyrogenicity and its effects on vegetation in longleaf pine savannas. *Proceedings of the Tall Timbers Fire Ecology Conference* 17:143-161.
- Freese, E.L. and W.J. Platt. 1991. Vascular flora of the Kettlehole, Freda Haffner State Preserve, Dickinson County, Iowa. *Journal of the Iowa Academy of Science* 98:102-107.
- Devall, M.S., L.B. Thien, and W.J. Platt. 1991. The ecology of *Ipomoea pes-caprae*, a pantropical strand plant. Pages 231-249, *In* (R. Davidson-Arnott, ed.), *Proceedings of the Coastal Sand Dunes Symposium 1990*. National Research Council, Ottawa, Canada.
- Robertson, K.M. and William J. Platt. 1992. Effects of fire on bromeliads in subtropical hammocks of Everglades National Park, Florida. *Selbyana* 13:39-49.
- Doren, R.F., W.J. Platt, and L.D. Whiteaker. 1993. Density and size structure of slash pine stands in the everglades region of south Florida. *Forest Ecology and Management* 59:295-311.
- Hamrick, J.L., W.J. Platt, and M. Hessing. 1993. Genetic variation in longleaf pine. *Proceedings Tall Timbers Fire Ecology Conference* 18:193-203.
- Olmsted, I., H. Dunevitz, and W.J. Platt. 1993. Effects of freezes on tropical trees in Everglades National Park, Florida, USA. *Tropical Ecology* 34:17-34.
- Platt, W.J. and S.L. Rathbun. 1993. Dynamics of an old-growth longleaf pine population. *Proceedings Tall Timbers Fire Ecology Conference* 18:275-297.

- Rebertus, A.J., G.B. Williamson, and W.J. Platt. 1993. Impacts of temporal variation in fire regime on savanna oaks and pines. *Proceedings Tall Timbers Fire Ecology Conference* 18:215-225.
- Streng, D.R., J.S. Glitzenstein, and W.J. Platt. 1993. Evaluating season of burn in longleaf pine forests: a critical literature review and some results from an ongoing long-term study. *Proceedings Tall Timbers Fire Ecology Conference* 18:227-263.
- West, D.C., T.W. Doyle, M.L. Tharp, J.J. Beauchamp, W.J. Platt, and D.J. Downing. 1993. Recent growth increases in old-growth longleaf pine. *Canadian Journal of Forest Research* 23:846-853.
- Brewer, J.S. and W.J. Platt. 1994. Effects of fire season and soil fertility on clonal growth in a pyrophilic forb, *Pityopsis graminifolia* (Asteraceae). *American Journal of Botany* 81:805-814.
- *Brewer, J.S. and W. J. Platt. 1994. Effects of fire season and herbivory on reproductive success in a clonal forb, *Pityopsis graminifolia* (Michx.) Nutt. *Journal of Ecology* 82:665-675.
- Armentano, T.V., R.F. Doren, W.J. Platt, and T. Mullins. 1995. Effects of Hurricane Andrew on coastal and interior forests of southern Florida. *Journal of Coastal Research* 21:111-144.
- Baldwin, A.H., W.J. Platt, K.L. Gathen, J.M. Lessman, and T.J. Rauch. 1995. Hurricane damage and regeneration in fringe mangrove forests of southeast Florida, USA. *Journal of Coastal Research* 21:169-183.
- *Glitzenstein, J.S., W.J. Platt, and D.R. Streng. 1995. Effects of fire regime and habitat on tree dynamics in north Florida longleaf pine savannas. *Ecological Monographs* 65:441-476.
- *Grace, S.L. and W.J. Platt. 1995. Effects of adult tree density and fire on the demography of pre-grass stage juvenile longleaf pine (*Pinus palustris* Mill.). *Journal of Ecology* 95:75-86.
- Grace, S.L. and W.J. Platt. 1995. Neighborhood effects on juveniles in an old-growth stand of longleaf pine (*Pinus palustris* Mill.). *Oikos* 72:99-105.

- Noel, J.M., A. Maxwell, W.J. Platt, and L. Pace. 1995. Effects of Hurricane Andrew on cypress (*Taxodium distichum* var. *nutans*) in south Florida. *Journal of Coastal Research* 21:184-196.
- *Olson, M.S. and W.J. Platt. 1995. Effects of habitat and growing season fires on resprouting of shrubs in longleaf pine savannas. *Vegetatio* 119:101-118.
- Slater, H.H., W.J. Platt, D.B. Baker, and H.A. Johnson. 1995. Effects of Hurricane Andrew on damage and mortality of trees in subtropical hardwood hammocks of Long Pine Key, Everglades National Park, Florida, USA. *Journal of Coastal Research* 21:197-207.
- *Peters, R. and W.J. Platt. 1996. Growth strategies of main trees and forest architecture of a *Fagus-Magnolia* forest in Florida, U.S.A. *Vegetatio* 123:39-49.
- Poulson, T.L. and W.J. Platt. 1996. Replacement patterns of beech and sugar maple in Warren Woods, Michigan. *Ecology* 77:1234-1253.
- *Quigley, M.F. and W.J. Platt. 1996. Structure and pattern in temperate seasonal forests. *Vegetatio* 123:117-138.
- Brewer, J.S., W.J. Platt, J.S. Glitzenstein, and D.R. Streng. 1996. Effects of fire-generated gaps on growth and reproduction of golden aster (*Pityopsis graminifolia*). *Bulletin of the Torrey Botanical Club* 123:295-303.
- Batista, W.B. and W.J. Platt. 1997. An old-growth definition for southern mixed hardwood forests. United States Department of Agriculture Forest Service, Southern Research Station General Technical Report SRS-10. 12p.
- Huck, R.B., A.F. Johnson, A.J. Parker, K.C. Parker, W.J. Platt, and D.B. Ward. 1997. Management of natural communities of Choctawhatchee sand pine [*Pinus clausa* (Engelm.) Sarg. var. *immuginata* Ward] in the Florida panhandle. *Resource Management Notes* 8:89-91.
- *Batista, W.B., W.J. Platt, and R. Machiavelli. 1998. Demography of a shade-tolerant tree (*Fagus grandifolia*) in a hurricane-disturbed forest. *Ecology* 79:38-53.

- *Kwit, C., M.W. Schwartz, W.J. Platt, and J. P. Geaghan. 1998. The distribution of tree species in steepheads of the Apalachicola Bluffs, Florida. *Journal of the Torrey Botanical Society* 125:309-318.
- *Noel, J.M., W.J. Platt, and E.B. Moser. 1998. Structural characteristics of old- and second-growth stands of longleaf pine (*Pinus palustris*) in the Gulf coastal region of the U.S.A. *Conservation Biology* 12:533-548.
- *Platt, W.J. and R.K. Peet. 1998. Ecological concepts in conservation biology: lessons from southeastern ecosystems. *Ecological Applications* 8:907-908.
- DeCoster, J., W.J. Platt, and S.A. Riley. 1999. Pine savannas of Everglades National Park: An endangered ecosystem. Pages 81-88, *in*: Jones, D.T. and B.W. Gamble (Eds.), *Florida's Garden of Good and Evil, Proceedings of the 1998 Joint Symposium of the Florida Exotic Pest Plant Council and the Florida Native Plant Society*. South Florida Water Management District, West Palm Beach, Florida.
- *Gilliam, F.S. and W.J. Platt 1999. Effects of long-term fire exclusion on the species composition and stand structure in an old-growth *Pinus palustris* (longleaf pine) forest. *Plant Ecology* 140:15-26.
- *Platt, W.J. 1999. Southeastern pine savannas. Pages 23-51, *in*, R.C. Anderson, J.S. Fralish, J. Baskin, eds. *The savanna, barren, and rock outcrop communities of North America*. Cambridge University Press, Cambridge, England.
- *Platt, W.J., R.F. Doren, and T. Armentano. 2000. Effects of Hurricane Andrew on stands of slash pine (*Pinus elliottii* var. *densa*) in the everglades region of south Florida (USA). *Plant Ecology* 146:43-60.
- Kwit, C., W.J. Platt, and H.H. Slater. 2000. Post-hurricane regeneration of pioneer plant species in south Florida subtropical hardwood hammocks. *Biotropica* 32:244-251.
- *Baldwin, A.H., M.S. Egnotovich, M.A. Ford, and W.J. Platt. 2001. Regeneration in fringe mangrove forests damaged by Hurricane Andrew. *Plant Ecology* 57:151-164.

- *Platt, W.J. and R.M. Gottschalk. 2001. Effects of exotic grasses on potential fine fuel loads in the groundcover of south Florida slash pine savannas. *International Journal of Wildland Fire* 10:155-159.
- Robertson, K.M. and W.J. Platt. 2001. Effects of multiple disturbances (fire, hurricane) on epiphyte-host tree associations in a subtropical forest, Florida, U.S.A. *Biotropica* 33:573-582.
- *Drewa, P.B., W.J. Platt, and E.B. Moser. 2002. Community structure along elevation gradients in southeastern longleaf pine savannas. *Plant Ecology* 160:61-78.
- *Drewa, P.B., W.J. Platt, and E.B. Moser. 2002. Fire effects on resprouting of shrubs in southeastern longleaf pine savannas. *Ecology* 83:755-767.
- *Platt, W. J., B. Beckage, R. F. Doren, and H.H. Slater. 2002. Interactions of large-scale disturbances: prior fire regimes and hurricane mortality of savanna pines. *Ecology* 83:1566-1572. (Report)
- *Schmitz, M., W.J. Platt, and J. DeCoster. 2002. Substrate heterogeneity and numbers of plant species in Everglades savannas (Florida, USA). *Plant Ecology* 160:137-148.
- *Batista, W.B. and W.J. Platt. 2003. Tree population response to hurricane disturbance: syndromes in a southeastern United States old-growth forest. *Journal of Ecology* 91:197-212.
- *Beckage, B. and W. J. Platt. 2003. Predicting severe wildfire years in the Florida Everglades. *Frontiers in Ecology and the Environment* 1:235-239.
- *Beckage, B., W.J. Platt, M.G. Slocum, and R. Panko. 2003. Influence of the El Niño-Southern Oscillation on fire regimes in the Florida Everglades. *Ecology* 84:3124-3130. (Report)
- *Kwit, C. and W.J. Platt. 2003. Disturbance history influences regeneration of non-pioneer understory trees. *Ecology* 84:2575-2581. (Report)
- *Platt, W.J. and J.H. Connell. 2003. Natural disturbances and directional replacement of species. *Ecological Monographs* 73:507-522 (Concepts and Synthesis Section).

- *Quigley, M.F. and W.J. Platt. 2003. Composition and structure of seasonally deciduous forests in the Americas. *Ecological Monographs* 73:87-106.
- *Slocum, M.G., W.J. Platt, and H.C. Cooley. 2003. Effects of differences in prescribed fire regimes on patchiness and intensity of fires in subtropical savannas of Everglades National Park, Florida. *Restoration Ecology* 11:91-102.
- Kwit, C., C.C. Horvitz, and W.J. Platt. 2004. Conserving slow-growing, long-lived tree species: input from the demography of a rare understory conifer, *Taxus floridana*. *Conservation Biology* 18:432-443.
- *Huffman, J.M., W.J. Platt, H.D. Grissino-Mayer, and C.J. Boyce. 2004. Fire history of a barrier island slash pine (*Pinus elliottii*) savanna. *Natural Areas Journal* 24:258-268.
- Grace, S.L., J.L. Hamrick, and W.J. Platt. 2005. Estimation of seed dispersal in an old-growth population of longleaf pine (*Pinus palustris*) using maternity exclusion analysis. *Castanea* 69:207-215.
- Masters, R.E., K. Hitch, W.J. Platt, and J.A. Cox. 2005. Fire - the missing ingredient for natural regeneration and management of southern pines *in* Proceedings of the Joint 2004 Canadian Institute of Forestry and Society of American Foresters Annual Convention. Online reviewed ms & CD - ROM published by Society of American Foresters.
- *Beckage, B., W.J. Platt, and B. Panko. 2005. A climate-based approach to the restoration of fire-dependent ecosystems. *Restoration Ecology* 13:429-431.
- *Beckage, B., L. J. Gross, and W. J. Platt. 2006. Modelling responses of pine savannas to climate change and large-scale disturbance. *Applied Vegetation Science* 9:75-82.
- *Drewa, P B., J. M. Thaxton, and W. J. Platt. 2006. Responses of root-crown bearing shrubs to differences in fire regimes in *Pinus palustris* (longleaf pine) savannas: exploring old-growth questions in second-growth systems. *Applied Vegetation Science* 9:27-36.

- *Gilliam, F.S. and W. J. Platt. 2006. Conservation and restoration of the *Pinus palustris* ecosystem. *Applied Vegetation Science* 9:7-10.
- *Gilliam, F.S., W. J. Platt, and R.K. Peet. 2006. Natural disturbances and the physiognomy of pine savannas: a phenomenological model. *Applied Vegetation Science* 9:83-96.
- *Platt, W.J., S.M. Carr, M. Reilly, and J. Fahr. 2006. Pine savanna overstorey influences on ground-cover biodiversity. *Applied Vegetation Science* 9:37-50.
- *Platt, W. J., J. M. Huffman, M.G. Slocum, and B. Beckage. 2006. Fire Regimes and Trees in Florida Dry Prairie Landscapes. Pages 3-13, in R. Noss (ed.) *Land of Fire and Water: The Florida Dry Prairie Ecosystem. Proceedings of the Florida Dry Prairie Conference.*
- Vargas-Rodriguez, Y.L., J. A. Vázquez-García and W.J. Platt. 2006. Gradientes ambientales en el establecimiento de poblaciones relictas de *Acer saccharum* subsp. *Skutchii* y *Podocarpus reichei* en el occidente de Mexico. *Ibugana* 12:35-41.
- *Thaxton, J.M. and W. J. Platt. 2006. Small-scale fuel variation alters fire intensity and shrub abundance in a pine savanna. *Ecology* 87:1331-1337.
- *Gagnon, P.R., W.J. Platt, and E.B. Moser. 2007. Response of a native bamboo [*Arundinaria gigantea* (Walt.) Muhl.] in a wind-disturbed forest. *Forest Ecology and Management* 241:288-294.
- *Slocum, M. G., W. J. Platt, B. Beckage, B. Panko, and J.B. Lushine. 2007. Decoupling natural and anthropogenic fire regimes: a case study in Everglades National Park, Florida. *Natural Areas Journal* 27:41-55.
- *Thaxton, J.M., S.J. Dewalt, and W.J. Platt. 2007. Spatial patterns of regeneration after Hurricane Andrew in two south Florida fringe mangrove forests. *Florida Scientist* 70:148-156.
- *Drewa, P. B., W. J. Platt, C. Kwit, and T. W. Doyle. 2008. Stand structure and dynamics of sand pine differ between the Florida panhandle and peninsula. *Plant Ecology* (published online 10.1007/s11258-007-9333-6).

Manuscripts accepted for publication and in press (to be published in 2007-2008)

Beckage, B., L. Joseph, P. Belisle, D. B. Wolfson, and W. J. Platt. 2007. Bayesian Change-Point Analyses in Ecology. *New Phytologist* (in press).

Gagnon, P.R. and W.J. Platt. 2007. Multiple disturbances accelerate clonal growth in a potentially monodominant bamboo. *Ecology* (in press).

Technical reports

Platt, W.J. 1990. Fire ecology of southeastern longleaf pine savannas. In, (L.C. Duever and R.F. Noss, eds.), *Proceedings of the 1988 symposium on wiregrass biology and management*. KBN Engineering & Applied Sciences. Gainesville, Florida, USA. 5p.

Platt, W.J., J. Stenberg, S. Husari, and D. Lentz. 1990. Fire ecology of everglades habitats: experimental study of effects of differences in fire regimes on short-hydroperiod savannas and imbedded rockridge habitats. *Everglades National Park*, 57p.

Platt, W.J. 1994. Evolutionary models of plant population/community dynamics and conservation of southeastern pine savannas. Pages 263-273, in *Proceedings of the North American Conference on Savannas and Barrens*. Illinois State University, Normal, Illinois, USA.

Glitzenstein, J.S., D.R. Streng, and W.J. Platt. 1996. Evaluating effects of season of burn on vegetation in longleaf pine savannas. Final report, GFC-84-014. Florida Game and Fish Commission, Nongame Wildlife Program, Tallahassee, Florida. 118 p.

Published Special Features and Symposia

Platt, W.J. and D.R. Strong (eds.). 1989. Special Feature: Treefall gaps and forest dynamics. *Ecology* 70:535-576.

Platt, W.J. and R.K. Peet (eds.). 1998. Ecological concepts in conservation biology: lessons from southeastern ecosystems. Special Feature:

Ecological Applications 8:907-989.

Gilliam, F.S. and W.J. Platt (eds.) 2006. Old-Growth Pine Savannas as Models for Management of Upland Coastal Systems: The Role of Disturbance in a Time of Global Change. *Applied Vegetation Science*, Volume 9.

Book Reviews

Platt, W.J. 1976. Evolutionary concepts in the study of ecological systems. *Evolution* 30: 857-858. (Review of M. Cody and J. Diamond, eds., *Ecology and Evolution of Communities*)

Platt, W.J. 1981. Terrestrial plant ecology. *American Scientist* 69: 230. (Review of M. Barbour, J. Burk, and J.W. Pitts, eds., *Terrestrial Plant Ecology*)

Platt, W.J. 1983. Ecology of fire. *Ecology* 65:333-334. (Review of H.A. Mooney, T.M. Bonnicksen, N.L. Christensen, J.E. Lotan, and W.A. Reiners, eds. *Fire Regimes and Ecosystem Properties*)

Platt, W.J. 1994. Fire ecology of boreal forests. *Journal of Vegetation Science* 5:287-288. (Review of E.A. Johnson, *Fire and Vegetation Dynamics: Studies from the North American Boreal Forest*)

Platt, W.J. 1994. Ecology of the southeastern United States. *Ecology* 75: 1857. (Review of W.H. Martin, S.G. Boyce, A.C. Echternacht, eds. *Biodiversity of the southeastern United States, Upland terrestrial communities and Lowland terrestrial communities*)

Platt, W.J. 1997. Fire ecology. *American Scientist* 85:188-189. (Review of R. J. Whelan, *The Ecology of Fire*)

Platt, W.J. 2007. Pine savanna restoration. *Ecological Restoration* 25:152-154. (Review of Shibu Jose, Eric J. Jokela and Deborah L. Miller, eds., *The Longleaf Pine Ecosystem: Ecology, Silviculture, and Restoration*)

RESEARCH SUPPORT

Prior Grants and Contracts while at Louisiana State University (Total = \$3,209,898)

- 1980-1988: National Science Foundation. The dynamics of fire-adapted communities: an experimental study of longleaf pine forests (LTREB). \$260,000.
- 1988-1991: National Park Service, Everglades National Park. Fire ecology of Everglades habitats: effects of differences in fire regimes on short-hydroperiod prairies and imbedded rockridge habitats. 1988-1991: \$20,000.
- 1988-1991: National Science Foundation. Collaborative research on spatial and temporal components of the genetic structure of a longleaf pine population. With J.L. Hamrick, co-PI. \$146,000 (UGA), \$114,000 (LSU).
- 1990-1991: National Science Foundation. Demography and genetic structure of seeds and juveniles in an old-growth longleaf pine population. Dissertation Improvement Grant, with S. Grace, co-PI. \$3000.
- 1990-1991: Department of Natural Resources, State of Florida: Research on the ecology of longleaf pine in Myakka River State Park. \$10,000.
- 1991-1993: National Science Foundation. Life history responses to fire in a clonal herb, *Pityopsis graminifolia*. Dissertation Improvement Grant, with S. Brewer, co-PI. \$9,396.
- 1993-1994: National Science Foundation. Effects of fire on tree demography and species composition of south Florida tropical hammocks. Dissertation Improvement Grant, with H. Slater, co-PI. \$10,000.
- 1993-1994. National Science Foundation. Effects of Hurricane Andrew on subtropical hardwood hammocks of Everglades National Park, Florida. SGER: \$15,299.
- 1991-1995: U.S. Fish and Wildlife Service. Evaluation of effects of large-scale disturbances on Gulf Coastal Wetlands. \$225,000.
- 1993-1995. U.S. Forest Service. Ecological assessment of the Harrison Research Natural Area, DeSoto National Forest, Mississippi and Reed Brake Natural Area, Talladega National Forest, Alabama, with J. Noel. \$13,000.
- 1993-1995. U.S. Forest Service. Ecological characterization of upland plant communities in the Evangeline District of the Kisatchie National Forest, with J. Bruser & S. Carr. \$23,000.

- 1985-1996: Nongame Wildlife Program, State of Florida. Restoration and management of fire-adapted communities: experimental study of longleaf pine forests. 1985-1990: \$151,223; 1990-1996: with J. Glitzenstein and D. Streng, co-Pis. \$84,061.
- 1994-1996. National Science Foundation. Plant community dynamics in southeastern coastal plain forests: demography of overstory species. Dissertation Improvement Grant, with W. Batista, co-PI. \$5,280.
- 1994-1996: National Park Service, Everglades National Park. Effects of Hurricane Andrew on stands of south Florida slash pine (*Pinus elliottii* var. *densa*). \$263,500.
- 1994-1996. National Park Service, Everglades National Park. Effects of Hurricane Andrew on subtropical hardwood hammocks of Long Pine Key, Everglades National Park, Florida, with H. Slater, co-PI. \$136,000.
- 1996-1998: National Park Service, Everglades National Park. Community characterization and disturbance effects on wetland communities in Everglades National Park: understanding disturbance and wetlands restoration. \$278,032.
- 1997-1998. Earthwatch Institute. Everglades ecology: long-term study of the effects of Hurricane Andrew on pine savannas and subtropical hardwood hammocks of Long Pine Key, Everglades National Park. with H. Slater, co-PI. \$47,800.
- 1996-1999. Nongame Wildlife Program, State of Florida. The effects of fire on plant demography and species composition along environmental gradients in longleaf pine savannas. Dissertation Improvement Grant, with P. Drewa, co-PI. \$13,084.
- 1997-1999. Florida Plant Conservation Program, State of Florida. Life history, demography, and conservation of the Florida Yew, *Taxus floridana*. Dissertation Improvement Grant, with C. Kwit, co-PI. \$8,000.
- 1998-2001: National Park Service, Everglades National Park. Composition and structure of groundcover plant communities in the Long Pine Key region of Everglades National Park. \$491,953.
- 2000-2003: TNC Ecosystem Research program. Effects of overstory removal on fire behavior and shrub invasion in pine savannas. with J. M. Thaxton, co-PI. \$22,535.

- 2000-2003: TNC Ecosystem Research Program. Landscape-level patterns of fire and vegetation in frequent-fire ecosystems of south-central Florida. with J.M. Huffman, co-PI. \$15,958.
- 2001-2002. Environmental Defense. Restoration and management of longleaf pine savannas: evaluation of five years of experimental approaches, with Girl Scout Council of Southeast Louisiana. \$15,000.
- 2001-2002. Johnston Scientific Foundation. Testing the interactive effects of fire and selective logging as restoration techniques in longleaf pine savannas. With H.A. Passmore, co-PI. \$5,000.
- 2001-2003: National Parks Foundation/Mellon Foundation. The effects of hurricane-fire interactions on the population dynamics of south Florida slash pine. With B. Beckage, co-PI. \$150,000.
- 2002-2004. Johnston Scientific Foundation. Restoration and management of canebrakes. With P.R. Gagnon, co-PI. \$5,000.
- 2003-2004. Johnston Scientific Foundation. Effects of fire intensity on invasive shrubs in a Louisiana pine savanna. With J. M. Thaxton, co-PI. \$5,000.
2004. Louisiana State University Council on Research Grants. Effect of global climate change and natural disturbances on ecological landscapes along the northern Gulf of Mexico. \$10,000.
- 2006-2007. National Science Foundation. Collaborative SGER Research: Do Hurricanes Spur Responses of Coastal Communities to Changing Sea Level? With K-B. Liu, L. Battaglia, J. Whitbeck, co-PIs. \$50,000.

Current Grants and Contracts (Total = \$1,274, 876)

- 2004-2008. Department of Defense (Avon Park Air Force Range). Landscape fire models for the Avon Park Air Force Range. With B. Beckage, M. Slocum, co-PIs \$503,754.
- 2005-2008. Department of Defense (Avon Park Air Force Range). Dendrochronological study of the fire history of Avon Park Air Force Range. \$234,122.
- 2005-2008. National Science Foundation. Ecological processes influencing local biodiversity in species-rich pine savanna groundcover. With K.E. Harms, co-PI. \$ 400,000.

2006-2007. Louisiana State University Council on Research Grants. Climate change, sea level rise, and hurricanes/typhoons in two of the world's largest river systems: developing comparative ecological study of the Yangtze and Mississippi River deltas. With K. Liu, co-PI. \$10,000.

2008-2009. DOE: National Institute for Climatic Change Research. Effects of Past and Recent Hurricanes on Gulf Coast Ecosystems: Implications for Future Climate Changes. With K. Liu, N. Lam. \$77,000.

RESEARCH ASSOCIATES AND STUDENTS

Sabbatical Associates

Dr. Thomas Poulson: University of Illinois at Chicago, Spring semester, 1995
Dr. Carl von Ende: Northern Illinois University, Spring semester, 1986.
Dr. Norma Fowler: University of Texas, Fall semester, 1987.
Dr. Steve Brewer. University of Mississippi, Spring semester, 2005.

Postdoctoral Associates

Dr. Jeff Glitzenstein: Tall Timbers Research Station 1987-1990.
Dr. Donna Streng: Tall Timbers Research Station. 1987-1990.
Dr. Mark Hessing: Louisiana State University. 1988-1991.
Dr. James DeCoster: Everglades National Park. 1996-1999.
Dr. Stephen McMann: Everglades National Park. 1999.
Dr. Matthew Slocum: Louisiana State University. 2000-2001; 2005-2006.
Dr. Brian Beckage, Louisiana State University. 2000-2002.

Prior Graduate Students at Louisiana State University

J. Stephen Brewer, Ph.D. 1994. NSF Doctoral Dissertation Improvement Grant. Four published papers from dissertation. Current Position: Associate Professor, Dept. of Biology, University of Mississippi, Oxford, MS.
Matthew S. Olson, M.S. 1994. USFS Challenge Cost-Share Grant. One published paper from thesis. Ph. D., 1999, Duke University. Current Position: Assistant Professor, University of Alaska, Fairbanks, AS.
Martin F. Quigley, Ph.D. 1994. LA Board of Regents Fellowship, Earthwatch Research Grant, LSU Distinguished Dissertation Award, 1994. Three papers published from dissertation. Current position: Associate Professor, University of Central Florida, Orlando, FL.
Susan L. Grace, Ph.D. 1994. NSF Doctoral Dissertation Improvement Grant. Graduate Student Teaching Award. Three published papers from

- dissertation. Current position: Southeastern Regional Fire Ecologist, USFWS, Slidell, LA.
- William B. Batista**, Ph.D. 1996. Conicet Fellowship, NSF Doctoral Dissertation Improvement Grant, Invited speaker, Natural Areas Association Symposium. Three published papers from dissertation. Current position: Associate Professor, University of Buenos Aires, Argentina.
- Paul B. Drewa**, Ph.D. 1999. FL Nongame Research Grant, LSU Dissertation Fellowship, LSU teaching award, LSU Edgerton Award for Outstanding Dissertation, Nominated for LSU Distinguished Dissertation Award, 1999, Invited speaker, Society of Ecological Restoration Symposium. Three papers published from dissertation. Current position: Assistant Professor, Case Western Reserve University, Cleveland, Ohio.
- Jill M. Noel**, M.S. 1999. USFS Challenge Cost-Share and Research Grants. One published paper from thesis. Current position: Ph.D. student, University of Texas, Austin, TX.
- Charles Kwit**, Ph.D. 2000. LA Board of Regents Fellowship, FL Nongame/DOF research grant for work on *Taxus floridana* demography. Three papers published from dissertation. Current position: Adjunct Assistant Professor, Miami University, Miami Ohio.
- Susan M. Carr**, M.S. 2000. USFS Challenge-Cost Share and Research Grants. One ms in press from thesis. Current position: Ph.D. student, University of Florida, Gainesville, FL.
- Jarrod M. Thaxton**, Ph.D. 2003. LA Board of Regents Fellowship, TNC Ecosystem Research Grant. Johnston Scientific Foundation Grant. Two manuscripts from dissertation research in press, two ms being prepared for publication. Current position: Fire Ecologist, U.S.G. S. and Pacific Islands Institute of Forestry, Hilo HI.
- Yalma Vargas-Rodriguez**, M.S. 2005. University of Guadalajara graduate research grant, IDEAWILD research grant. One manuscript from M.S. research submitted for publication. Current position: Ph.D. student, Louisiana State University.
- Heather A. Passmore**, Ph.D. 2005. Economic Development Assistantship, American Women in Science Fellowship, Johnston Scientific Foundation Grant. Two manuscripts from dissertation research being prepared for publication. Current position: Postdoctoral researcher, Louisiana State University, Baton Rouge, LA.
- Jean M. Huffman**, Ph.D. 2006. LA Board of Regents Fellowship, TNC Ecosystem Research Grant. Two manuscripts from dissertation research published, two in preparation. Current Position: Manager, St. Joseph Bay Buffer Preserve, Gulf County Florida, and Research Scientist, Apalachicola National Estuarine Research Reserve.
- Paul R. Gagnon**, Ph.D. 2006. Dissertation topic: Population demography and ecology of bamboos in southeastern canebrakes. LA Board of Regents Fellowship, EPA STAR Fellowship, American Bamboo Society Research

Grant, Johnston Scientific Foundation Grant. Two ms from dissertation in press; two manuscripts in preparation for submission.

Current Graduate Students

- Becky Carmichael, Ph.D. candidate. Dissertation topic. Localized disturbances and groundcover biodiversity in pine savannas of eastern Louisiana. Office of Environmental Education Research Grant. Submitted NSF DDIG proposal.
- Raelene Crandall, Ph.D. candidate. Dissertation topic: Effects of fire and sea level rise on the population and community dynamics of woody reseeders and resprouters in the groundcover of coastal longleaf pine savannas. Garden Club of America Wetlands Research Grant, Office of Environmental Education Research Grant.
- Darin Ellair, Ph.D. candidate. Dissertation topic: fire ecology of pine savannas. Dendrology Research Assistantship.
- Tracy Hmielowski, Ph.D. candidate. Dissertation topic: fire ecology of pine savannas.
- Demetra Kandalepas, Ph.D. candidate. Dissertation topic: effects of sea level rise on fungal-plant relationships in coastal plant communities. Office of Environmental Education Research Grant. Submitted NSF DDIG proposal. First place in 2007 student presentations at Natural Areas Association Conference.
- Erin Lawrence, Ph.D. candidate. Dissertation topic: natural disturbances of coastal transitions along the northern Gulf of Mexico. Submitted NSF DDIG proposal.
- Ellen Leichty, Ph.D. candidate. Dissertation topic: Conservation ecology of Bachman's sparrows in frequently burned longleaf pine savannas. LA Board of Regents Fellowship, Holmes Research Fellowship.
- Mindy McCallum, M.S. candidate. Thesis topic: effects of seasonality on intensity and patchiness of fires in pine flatwood savannas.
- Yalma Vargas-Rodriguez, Ph.D. candidate. Dissertation topic: population demography of disjunct populations of sugar maple (*Acer saccharum* ssp *skutchii*) in Mexico. University of Guadalajara graduate study and research grant.

RESEARCH PRESENTATIONS

Invited talks (last five years)

Conferences and Symposia

2003 - "How do restoration-oriented overstory manipulations based on concepts from old-growth pine savannas interact with frequent lightning-season fires to influence the

- groundcover in second-growth pine savannas? ESA symposium, August 2003.
- 2003 - "Interacting ecological forces and the dynamics of southeastern ecosystems" ESA symposium, August 2003.
- 2003 - "Invasions in fire-frequented ecosystems: a perspective from southeastern pine savannas. Invited speaker in symposium: Invasive plants in natural and managed systems: linking science and management. 7th International Conference on the Ecology and Management of Alien Plant Invasions. November, 2003.
- 2003 - "Managing invasions of fire-frequented ecosystems: hardwoods and graminoids in southeastern savannas, prairies, and marshes. Invited workshop speaker, 7th International Conference on the Ecology and Management of Alien Plant Invasions. November, 2003.
- 2004 - "Fire ecology of southeastern pine savannas". Savanna symposium, University of Kentucky, April, 2004
- 2004 - "Fire ecology of Florida dry prairie". Plenary Speaker, Dry Prairie Symposium, October, 2004.
- 2006 - "The role of hurricane-fire interactions in sustainable forests. Plenary Speaker. Sustainable Forestry Initiative Symposium, Boulder Colorado, April, 2006.
- 2006 - "Do Hurricanes Spur Responses of Coastal Communities to Changing Sea Level? Invited Speaker, ESA symposium, August 2006.
- 2007 - "Is Global Climate Change the Restoration Camel's Back?" Plenary Speaker, Natural Areas Association Conference, October 2007.
- 2007 - "Global Climate Change And Coastal Transitions: Input From The Hurricane-Ravaged Third Coast." Plenary Speaker, National Estuarine Research Reserves Annual Conference, October 2007.

Invited Seminars

- 2001 - University of Illinois,
2002 - Louisiana State University, University of North Carolina
2004 - Southern Illinois University, Case Western Reserve University, University of Hawaii, Auburn University,
2005 - Southeastern Louisiana University, University of Central Florida
2006 - University of Vermont

Author of Papers Presented at Society Meetings

1995 - Ecological Society of America
1996 - Ecological Society of America
1997 - Ecological Society of America; Society for Ecological Restoration
1998 - Ecological Society of America
1999 - Ecological Society of America
2000 - Ecological Society of America
2001 - Ecological Society of America, Natural Areas Conference
2002 - Ecological Society of America
2003 - Ecological Society of America
2004 - Ecological Society of America
2005 - Ecological Society of America,
2006 - Ecological Society of America
2007 - Ecological Society of America, Natural Areas Conference

PROFESSIONAL ACTIVITIES

Professional Societies

American Society of Naturalists, Association for Tropical Biology, Botanical Society of America, Ecological Society of America, International Wildland Fire Association, Natural Areas Association, Society for Conservation Biology, Society for Ecological Restoration, Society for Study of Evolution, Torrey Botanical Society

Ad hoc positions (last 5 years)

Mentor for Dr. Frank Gilliam, Marshall University, as part of EpsCor program for enhancement of science at smaller universities
Everglades scientific advisory panel for restoration of abandoned agricultural land
Forest Ecologist, scoping team for sustainable forestry certification of large timber companies: Smartwood/Forest Stewardship Council
National Center for Ecological Analysis and Synthesis workshop participant: A synthesis of demography and dispersal
North Florida Fire Council advisory panel member
Invited lecturer in Community Ecology, University of California at Irvine
Invited lecturer in Ecology, Fudan University, Shanghai, China

Editorial Activities

Editorial Board: *ESA publications (Ecology & Ecological Monographs)* (1999-2003)
Editorial Board: *Plant Ecology* (1999-2005)
Special Features Editor for *Ecology*: forum on gap dynamics in forests

(1988-1989)

Special Features Editor for *Ecological Applications*: invited feature on the role of ecological concepts in conservation biology, with R.K. Peet (1995-1998)

Special Features Editor for *Applied Vegetation Science*: invited feature on longleaf pine ecosystems, with F. Gilliam (2004-2006)

Reviewer of grant proposals for >20 agencies, including NSF, USDA, NPS, USFWS, Canada, Australia, State Agencies in U.S.A.

Ad hoc reviewer of textbook in Plant Ecology (M. Barbour, J. Burk, J.W. Pitts, F. Gilliam, eds., *Terrestrial Plant Ecology*)

Reviewer of manuscripts submitted to professional journals while at LSU: *American Journal of Botany*; *American Midland Naturalist*; *American Naturalist*; *Animal Behavior*; *Applied Vegetation Science*; *Aquatic Botany*; *Bioscience*; *Biotropica*; *Canadian Journal of Botany*; *Canadian Journal of Forest Research*; *Conservation Biology*; *Conservation Ecology, Ecography*; *Ecological Applications*; *Ecological Monographs*; *Ecology*; *Evolution*; *Forest Ecology and Management*; *Forest Science*; *Holarctic Ecology*; *International Journal of Wildland Fire*; *Journal of Biogeography*; *Journal of Coastal Research*, *Journal of Ecology*; *Journal of Forestry*; *Journal of Mammalogy*; *Journal of Range Management*; *Journal of the Torrey Botanical Society*; *Journal of Vegetation Science*; *Oecologia*; *Plant Ecology*; *Quaternary Research*; *Science*; *Southwestern Naturalist*; *TREE*; *Vegetatio*; *Wetlands*; *Proceedings of the Royal Society of London*.

Courses Taught at Louisiana State University:

Undergraduate: General Biology, Plant Ecology, Genetics, Genetics of the Evolutionary Process, Conservation Biology, Human Responses to Disasters (honors)

Graduate: Plant Population Biology, Population Demography, Fire Ecology, Hurricane Ecology, Biology of Invasions, Ecological Succession

Conservation and Management Activities (last five years)

1978-2006: Consultant for state of Florida (Department of Environmental Regulation) on management of coastal/barrier island systems, hardwood forests, and pine savannas in state parks; member of advisory panel on fire effects on pine-dominated ecosystems.

1976-2006: Advisor for The Nature Conservancy on acquisition, design, and stewardship of natural areas, and endangered lands; member Florida Board of Trustees; Louisiana Technical Advisory Board.

1979-2006: Consultant for the U.S. Fish and Wildlife Service and U.S.

- Forest Service on the management of upland & lowland pine savannas and bog wetlands in the southeastern United States. Panel member - U.S.F.S. prescribed fire workshop.
- 1993-2004: Advisor, Everglades National Park & Dade County Environmental Resources Management on management of areas affected by Hurricane Andrew; development of Hurricane Andrew recovery plan for pine savannas and subtropical forests in Everglades National Park.
- 1987-2006: Advisor for National Park Service (Everglades national park) on: fire management plans for restoration and management of pine rockland and short-hydroperiod prairies, restoration of agricultural land, control of cogongrass (*Imperata brasiliensis/cylindrica*) in Everglades National Park.
- 1988-2006: Advisor to Girl Scout Council of Louisiana on: fire management of habitats at Girl Scout camps, management plans for Camp Whispering Pines; exotic control, and sustainable forestry programs at Camp Whispering Pines.