curriculum vitae, December 2007

JOHN ANDREW NYMAN

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Research Interests

My research spans many aspect of wetland ecology. Some of my interests are basic but many are associated with assumptions underlying wetland management and restoration. I am very interested in the role of vegetation in marsh vertical accretion, which allows coastal wetlands worldwide to gain the elevation needed to offset global sea-level rise and local subsidence. Microbiologically, I study factors controlling gross metabolic activity in soils (gross activity governs nutrient availability to plants among other things). Botanically, I study the effects of hydrologic impacts and management on submersed and emergent wetland plants. Regarding wildlife, I study relationships between wildlife and submersed and emergent wetland plants. Regarding systems ecology, I study roles of vegetation in nitrogen budgets and roles of hydrological conditions and habitat change on carbon and nutrient cycling. I apply my research, and research from other workers and disciplines, when I help state and federal agencies select, plan, monitor, and manage wetland restoration projects. These activities also illustrate useful skills for students planning to work for engineering and consulting firms, for management and regulatory agencies, or for non-governmental organizations active in resource conservation.

Teaching Goals

I base my evolving teaching strategy on Professional Development Seminars offered by the LSU's Center for Faculty Development, the LSU College of Agriculture's Annual Teaching Conference, my experience as a student, and advice from recent graduates. I'm interested in teaching future environmental professionals as well as voters and activists because I hope to improve environmental decision making. None-the-less, a Teaching Perspectives Inventory (see http://www.teachingperspectives.com/) indicated that "Transmission" was the only dominant perspective and "Social Reform" was the only recessive perspective in my teaching. I believe those results reflect my attempts to emphasize student understanding of ecosystem dynamics while minimizing my values. I teach facts and terminology by lecturing; I teach relationships and complexity by initiating discussions based on readings and field trips. I also want to teach students to be life-long learners, which I believe requires that students see me learn and occasionally see me struggle to learn. This can make a bad impression on sophomoric minds but is effective in the end. I also want to teach students to be life-long teachers, which I believe requires that students see me question and modify the instructional tactics that I use with students, professionals, and the general public.

Teaching Perspectives Profile (March, 2005):
Transmission: 38, Apprenticeship: 35, Development: 31, Nurturing: 28, Social Reform: 25.
(see http://www.teachingperspectives.com/)

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HISTORY OF ASSIGNMENTS AND EDUCATION

1. History Of Assignments

Associate Professor (July 2006 - present). School of Renewable Natural Resources, Louisiana State University, Baton Rouge, LA 70803. Research (60%) in wetland wildlife ecology and teaching (40%) in graduate and undergraduate programs in wildlife science and wetland ecology and management.

Assistant Professor (January 2001 – June 2005), School of Renewable Natural Resources, Louisiana State University, Baton Rouge, LA 70803. Research (60%) in wetland wildlife ecology and teaching (40%) in graduate and undergraduate programs in wildlife science and wetland ecology and management.

Research Associate (September, 1994- December, 2000), Department of Biology, University of Southwestern Louisiana, P.O. Box 42451, Lafayette, LA 70504-2451. Independently develop an externally funded program to conduct research and train graduate students in the ecology and management of wetlands. Contribute to education of graduate and undergraduate students.

Research Associate II, III (December, 1988-September 1994), Wetland Biogeochemistry Institute, Louisiana State University, Baton Rouge LA 70803-7511. Plan, design, and conduct ecological research in wetlands; communicate research results.

Research Assistant (June, 1987-December, 1988), School of Forestry, Wildlife, and Fisheries, Louisiana State University, Baton Rouge LA 70803. (20 hr/week). Study the effects of waterfowl management on aquatic vegetation, emergent vegetation, and marsh loss. Also assist with alligator tagging, aerial counting of alligator nests, waterfowl use surveys, nutria food habit studies, etc.

Wildlife Specialist II (June, 1985-January, 1987), Louisiana Department of Wildlife and Fisheries, 2415 Darnell Road, New Iberia 70560, LA. Work 8-day shifts at the remote Pass A Loutre Wildlife Management Area, which lies at the very end of the Mississippi River. Enforce hunting and boating regulations. Monitor sulfur mining and oil/gas mining for compliance with pollution regulations. Collect environmental data. Assist biologists from various agencies collect environmental data. Maintain numerous small boats, a crew boat, and an airboat.

2. Education

Ph.D. with a major in Oceanography and Coastal Studies, minor in Wildlife, 1993. Louisiana State University. Baton Rouge, Louisiana. Major Professor: W.H. Patrick, Jr. Dissertation: Soil processes related to wetland loss in coastal Louisiana.

M.S. with a major in Wildlife, 1989, Louisiana State University. Baton Rouge, Louisiana. Major Professor: R.H. Chabreck. Thesis: Some effects of weir-management on vegetation and marsh loss, Marsh Island, Louisiana.

B.S. with a major in Biological Sciences, 1984, University of New Orleans, New Orleans, Louisiana

6 hours, Center for Faculty Development, Louisiana State University, 1993-1994.

RESEARCH ACTIVITIES

1. Listing of research publications

Edited books

Rozas, L.P., J.A. Nyman, C.E. Proffitt, N.N. Rabalais, D.J. Reed, and R.E. Turner (editors). 1999. Recent research in coastal Louisiana: Natural system function and response to human influences. Louisiana Sea Grant College Program, Baton Rouge, Louisiana. 304pp.

Peer-reviewed articles and chapters

32. Lindaua, C.W., R.D. DeLaune, A.E. Scaroni and J.A. Nyman. 2008. Denitrification in cypress swamp within the Atchafalaya River Basin, Louisiana. Chemosphere 70:886-894.
31. La Peyre, M.K., B. Gossman, and J.A. Nyman. 2007. Assessing functional equivalency of nekton habitat in enhanced habitats: Comparison of terraced and unterraced marsh ponds. Estuaries and Coasts 33 (3), 526-536.
30. Nyman, J.A., P.L. Klerks, and S. Bhattacharyya. 2007. Effects of chemical additives on hydrocarbon disappearance and biodegradation in freshwater marsh microcosms. Environmental Pollution 149:227-238.
29. Kanouse, S., M.K. La Peyre, and J.A. Nyman. 2006. Nekton use of Ruppia maritima and non-vegetated bottom habitat types within brackish marsh ponds. Marine Ecology Progress Series 327:61-69.
28. Nyman, J.A., R.J. Walters, R.D. DeLaune, and W.H. Patrick, Jr. 2006. Marsh vertical accretion via vegetative growth. Estuarine Coastal and Shelf Science 69:370-380.
27. Marino, J.H., J.A. Nyman, and T. Michot. 2005. Effects of season and marsh management on submersed aquatic vegetation in coastal Louisiana brackish marsh ponds. Ecological Restoration 23:235-243.
26. La Peyre, M.K., C.S. Bush Thom, C. Winslow, A. Caldwell and J. A. Nyman. 2005. Comparison of seed bank size and composition in fringing, restored, and impounded marsh in southwest Louisiana. Southeastern Naturalist 4:273-286.
25. Chabreck, R.H., and J.A. Nyman. 2005. Management of coastal wetlands. Pages 839-860 *in* C.E. Braun, editor Techniques for wildlife investigations and management. Sixth Edition. The Wildlife Society, Bethesda, Maryland, USA.
24. Bush Thom, C.S., M.K.G. La Peyre, and J.A. Nyman. 2004. Evaluation of nekton use and habitat characteristics of restored Louisiana marsh. Ecological Engineering 23:63-75.
23. DeLaune, R.D, J.C. Callaway, W.H. Patrick, Jr., and J.A. Nyman. 2004. An analysis of marsh accretionary processes in Louisiana coastal wetlands. Geoscience and Man 38:129-146.
22. Klerks, P.L., J.A. Nyman, and S. Bhattacharyya. 2004. Relationship between hydrocarbon measurements and toxicity to a chrinomid, fish larvae, and daphnid for oils and oil spill chemical treatments in laboratory freshwater marsh microcosms. Environmental Pollution 129:345-353.
21. Bhattacharyya, S., P.L. Klerks, and J.A. Nyman. 2003. Toxicity to freshwater organisms from oils and oil spill chemical treatments in laboratory microcosms. Environmental Pollution 122:205-215.
20. Pezeshki, S.R., R.D. DeLaune, J.A. Nyman, J. Catallo, C.A. Ochs, S.A. Milburn, J. M. Melack, L. Mertes, L. Hess, and B. Forsberg. 2003. Wetland Biogeochemistry. pages 125-

156 In: M.M. Holland, E. Blood, and L.R. Shaffer, (eds.) Achieving sustainable freshwater systems, Island Press, Washington.

19. Steyer, G.D., CE. Sasser, J.M. Visser, E.M. Swenson, J.A. Nyman, and R.C. Raynie. 2003. A proposed coast-wide reference monitoring system for evaluating wetland restoration trajectories. The Journal of Environmental Monitoring and Assessment 81:107-117.
18. Pezeshki, S.R., M.W. Hester, Q. Lin, and J.A. Nyman. 2000. The effects of oil spill and clean-up on dominant US Gulf Coast marsh macrophytes: a review. Environmental Pollution 108:129-139.
17. Nyman, J.A. and R.D. DeLaune. 1999. Potential impacts of global sea-level rise on coastal marsh stability. Current Topics in Wetland Biogeochemistry 3:112-117.
16. Nyman, J.A. 1999. Effects of crude oil and chemical additives on metabolic activity of mixed microbial populations in fresh marsh soils. Microbial Ecology 37:152-162.
15. Nyman, J.A., and R.H. Chabreck. 1996. Some effects of 30 years of weir management on coastal marsh aquatic vegetation and implications to waterfowl management. Gulf of Mexico Science 1:16-25.
14. Callaway, J.C., J.A. Nyman, and R.D. DeLaune. 1996. Sediment accretion in coastal wetlands: a review and a simulation model of processes. Current Topics in Wetland Biogeochemistry 2:2-23.
13. Nyman, J.A., and R.H. Chabreck. 1995. Fire in coastal marshes: history and recent concerns. In R.T. Engstrom (ed.) pages 135-141 In S.I. Cerulean and R.T. Engstrom (eds.). Proceedings 19th Tall Timbers Fire Ecology Conference- Fire in wetlands: a management perspective. Tall Timbers Research, Inc. Tallahassee, Florida.
12. Nyman, J.A., C.R. Crozier, and R.D. DeLaune. 1995. Roles and patterns of hurricane sedimentation in an estuarine marsh landscape. Estuarine Coastal and Shelf Science 40:665-679.
11. Nyman, J.A., R.D. DeLaune, S.R. Pezeshki, and W.H. Patrick, Jr. 1995. Organic matter cycling and marsh stability in a rapidly submerging estuarine marsh. Estuaries 18:207-218.
10. Pezeshki, S.R., R.D. DeLaune, J.A. Nyman, R.R. Lessard, and G.P. Canevari. 1995. Removing oil and saving oiled marsh grass using a shoreline cleaner. Proceedings of the 1995 Oil Spill Conference. American Petroleum Institute, Washington, D.C. 1995:203-209.
9. Crozier, C.R., J.A. Nyman, and R.D. DeLaune. 1994. Symbiotic N fixation by *Vigna luteola*, a legume of low-salinity Gulf coast marshes. Northeast Gulf Science 13:145-147.
8. DeLaune, R.D., J.A. Nyman, and W.H. Patrick, Jr. 1994. Peat collapse, ponding, and wetland loss in a rapidly submerging coastal marsh. Journal of Coastal Research 10:1021-1030.
7. Pardue, J.H., R.D. DeLaune, W.H. Patrick, Jr., and J.A. Nyman. 1994. Treatment of alligator farm wastewater using land application. Aquacultural Engineering 13:129-145.
6. Nyman, J.A., M. Carloss, R.D. DeLaune, and W.H. Patrick, Jr. 1994. Erosion rather than plant dieback as the mechanism of marsh loss in an estuarine marsh. Earth Surface Processes and Landforms 19:69-84.
5. Nyman, J.A. R.D. DeLaune, H.H. Roberts, and W.H. Patrick, Jr. 1993. Relationship between vegetation and soil formation in a rapidly submerging coastal marsh. Marine Ecology Progress Series 96:269-279.
4. Nyman, J.A., R.H. Chabreck, and N. Kinler. 1993 Some effects of herbivory and 30 years of weir management on emergent vegetation in a brackish marsh. Wetlands 13:165-175.

3. Nyman, J.A. and R.D. DeLaune. 1991. CO_2 emission and soil Eh responses to different hydrological conditions in fresh, brackish, and saline marsh soils. Limnology and Oceanography 36:1406-1414.
2. Nyman, J.A., R.H. Chabreck, and R.G. Linscombe. 1990. Effects of weir management on marsh loss, Marsh Island, Louisiana USA. Environmental Management 14:809-814.
1. Nyman, J.A., R.D. DeLaune, and W.H. Patrick, Jr. 1990. Wetland soil formation in the rapidly subsiding Mississippi River Deltaic Plain: mineral and organic matter relationships. Estuarine, Coastal and Shelf Science 31:57-69.

Other articles and chapters

9. Keim, R.F., J. L.Chambers, M. S.Hughes, J.A. Nyman, C.A. Miller, J.B. Amos, W.H. Conner, J.W. Day, Jr. S.P. Faulkner, E.S. Gardiner, S.L. King, K.W. McLeod, and G.P. Shaffer. 2006. Ecological consequences of changing hydrological conditions in wetland forests of coastal Louisiana. pages 383-396 In Y. J. Xu & V. P. Singh (editors). Coastal Environment and Water Quality. Water Resources Publications, LLC, Highlands Ranch, Colorado.
8. Chambers, J.L, R.F. Keim, W.H. Conner, John W. Day, Jr., S.P. Faulkner, E.S. Gardiner, M.S. Hughes, S.L. King, K.W. McCleod, C.A. Miller, J.A. Nyman, and G.P. Shaffer. 2005. Conservation of Louisiana's coastal wetland forests. pages 117-135 In T.F. Shupe and M.A. Dunn (eds.) Proceedings of Louisiana Natural Resources Symposium. LSU AgCenter, Baton Rouge, LA.
7. Nyman, J.A. 2002. Nutrient storage rates in a natural marsh receiving waste water. pages 135-139 In M.M. Holland, M.L. Warren, and J.A. Stanturf (eds.) Proceedings of a conference on sustainability of wetlands and water resources: How well can riverine wetlands continue to support society into the 21st Century? U.S.D.A. Forest Service, Southern Research Station, Asheville, North Carolina.
6. Nyman, J.A. and R.D. DeLaune. 1993. A preliminary comparison of vegetation and soil in healthy and deteriorating brackish marsh, Marsh Island, Louisiana. pages 313-322 In W.M. Wise (editor). Proceedings of the twelfth International Conference of the Coastal Society, San Antonia, TX. The Coastal Society, Gloucester, Massachusetts.
5. Nyman, J.A., M. Carloss, R.D. DeLaune, and W.H. Patrick, Jr. 1993. Are landscape patterns related to marsh loss processes? pages 337-348 In O.T. Magoon et al. (eds.) Coastal Zone '93, Proc. 8th Symposium Coastal Ocean Manage. Am. Soc. Civil Engineers. New York.
4. Nyman, J.A., R.H. Chabreck, R.D. DeLaune, and W.H. Patrick, Jr. 1993. Submergence, salt-water intrusion, and managed Gulf Coast Marshes. Coastal Zone '93. pages 1690-1704 In O.T. Magoon et al. (eds.) Coastal Zone '93, Proc. 8th Symposium Coastal Ocean Manage. Volume II. Am. Soc. Civil Engineers. New York.
3. Nyman, J.A., R.D. DeLaune, W.H. Patrick, Jr., and H.H. Roberts. 1993. Relationships among vegetation, mineral sediments, and vertical accretion in coastal marshes. pages 166-169 In M.C. Landin (editor). Wetlands: Proceeding of the 13th Annual Conference of the Society of Wetland Scientists, New Orleans, Louisiana. South Central Chapter of the Society of Wetland Scientists, Utica, Mississippi, USA. 990 pp.
2. Nyman, J.A., and R.D. DeLaune. 1991. Mineral and organic matter accumulation rates in coastal deltaic marshes and their importance to landscape stability. pages 166-170 In Coastal Depositional Systems of the Gulf of Mexico: Quaternary Framework and Environmental Issues. 12th Annual Research Conference Gulf Coast Section Society of Economic Paleontologists and Mineralogists Foundation. Earth Enterprises, Austin, Texas.

1. Chabreck, R.H., and J.A. Nyman. 1989. The effects of weirs on plants and wildlife in the coastal marshes of Louisiana. pages 142-150 in W.G. Duffy and D. Clark (eds.). Marsh management in coastal Louisiana: effects and issues--proceedings of a symposium. U.S. Fish and Wildlife Service and Louisiana Department of Natural Resources. U.S. Fish and Wildlife Service Biol. Rep. 89(22). 378 pp.

Miscellaneous

6. Chambers, J.L., W.H. Conner, J.W. Day Jr., S.P. Faulkner, E.S. Gardiner, M.S. Hughes, R.F. Keim, S.L. King, K.W. McLeod, C.A. Miller, J.A. Nyman, G.P. Shaffer. 2005. Conservation, Protection and Utilization of Louisiana's Coastal Wetland Forests. Final Report to the Governor of Louisiana from the Coastal Wetland Forest Conservation and Use Science Working Group. 102pp.
5. Foret, J.D., J.A. Nyman, L.P. Rozas, K.A Rose, J.H. Cowan, and D. Baltz. 2004. Habitat Use Module. Louisiana Coastal Area - Ecosystem Restoration Study, Volume 4, Appendix C, Chapter 10. U.S. Army Corps of Engineers, New Orleans District.
4. Nyman, J.A. and M.G.K. La Peyre. 2002. High hopes for marsh terraces as a small-scale wetland restoration tool in coastal Louisiana. The Wildlife Society Restoration Working Group Newsletter. Fall 2002.
3. Restore America's Estuaries. 2002. A national strategy to restore America's estuaries. Arlington, VA. 162 pp. (Contributing Author).
2. Downer, C.W., R. DeLaune, and J.A. Nyman. 1995. Characteristics and long-term sedimentation patterns of wetlands constructed in the fluctuation zone of Granada Lake, Mississippi. Technical Report WRP-SM-7, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
1. Reed, D.J., and J.A. Nyman. 1995. Impact of hydrological modification. pages 99-128 In D.J. Reed (ed.) Status and trends of hydrological modification, reduction in sediment availability, and habitat/loss modification in the Barataria-Terrebonne estuarine system. BTNEP Publication No. 20, Barataria-Terrebonne National Estuary Program, Thibodaux, Louisiana, 338 pp. plus Appendices.

2. Participation in other professional meetings, symposia, workshops, and conferences.

Professional Meetings Organized

8. Ecosystem Functions and the Dynamic Atchafalaya River from the Old River Control Structure to the Continental Shelf. 10-11 January, 2008, Baton Rouge, Louisiana. I initiated this meeting, solicited a co-sponsor (Coalition to Restore Coastal Louisiana) and worked with a small committee to schedule and advertise the meeting. I arranged the technical program and am organizing a special issue of a peer-reviewed journal based on the meeting..
7. Annual Fall Meeting of the South Central Chapter of the Society of Wetland Scientists, October, 2006, Vicksburg, Mississippi. As President, I worked with the local host to arrange to schedule and advertise the meeting. I also arranged the technical program.
6. Restoring Greenspace. 17-18 May, 2005. New Orleans, Louisiana Wildlife Habitat Council. I was invited to organize and lead a breakout session on restoring wetlands in coastal areas.

5. Coastal Restoration Enhancement through Science and Technology (CREST), July 2003. Thibodaux, Louisiana. Duties: As member of the CREST Technical Board, I helped plan the technical agenda and select speakers.
4. Annual Meeting of the Society of Wetland Scientists, June 2003, New Orleans, Louisiana. As a member of the Executive Board of the host chapter, I assisted with funding, the social, and led an aerial field trip.
3. Annual Fall Meeting of the South Central Chapter of the Society of Wetland Scientists, October, 2002, Baton Rouge, Louisiana. As meeting host, I arranged meeting space, conference hotel, advertisement, technical program, social event, registration, call for abstracts, selection of speakers, etc.
2. 2000 Spring Meeting of the American Geophysical Union. I co-organized a session within Biogeosciences titled "Interactions between coastal ecosystems and sea-level changes."
1. Recent Research in Coastal Louisiana, 1998. As a member of the Organizing Committee, I helped arrange meeting space, conference hotel, advertisement, agenda, selection of abstracts, review of papers, and edit of accepted papers. I co-edited the resulting Sea Grant publication (Rozas, et al. 1999, Recent research in coastal Louisiana: Natural systems function and response to human influences, Louisiana Sea Grant College Program, Baton Rouge, Louisiana).

Talks and Posters Presented (presenter's name is underlined):

67. Nyman, J.A., A.E. Scaroni, C.W. Lindau, R.D. DeLaune, and R.F. Keim. 2007. Nutrient Removal by the Atchafalaya River Basin. Louisiana Water Quality Conference—Watershed Issues 2007, Lafayette, Louisiana, 29-31 October, 2007
66. O'Connell, J.L., and J.A. Nyman. 2007. Coastal marsh restoration using terraces: effects on waterbirds in Louisiana's Chenier Plain. 61st Annual Conference of the Southeastern Association of Fish and Wildlife Agencies. 21-24 October, 2007. Charleston, West Virginia.
65. Tobias, V.D., J.A. Nyman, R.D. DeLaune, and J.D. Foret. 2007. Application of leaf tissue chemistry to the identification of factors limiting biomass production in Spartina patens to improve restoration of coastal marshes. Society of Wetland Scientists South Central Chapter Meeting; October 4-6, 2007; Memphis, TN.
64. Tobias, V.D., J.A. Nyman, R.D. DeLaune, and J.D. Foret. 2007. Application of leaf tissue chemistry to the identification of factors limiting biomass production in Spartina patens to improve restoration of coastal marshes. Louisiana Association of Professional Biologists; August 9-10, 2007; Lafayette, LA.
63. King, S.K., and J.A. Nyman. 2007. Integrating wildlife ecology into wetlands ecology courses. 2007 Society of Wetland Scientists International Conference. Sacamento, California. 10-15 June, 2007.
62. O'Connell, J.L., and J.A. Nyman. 2007. Coastal marsh restoration using terraces: effects on waterbirds in Louisiana's Chenier Plain. 2007 Society of Wetland Scientists International Conference. Sacamento, California. 10-15 June, 2007.
61. Nyman, J.A. and R.R. Twilley. 2007. Effects of riverine influences on soil organic matter decomposition in Louisiana coastal marshes dominated by Spartina patens (Ait.) Muhl. 10th International Symposium on Wetland Biogeochemistry. Annapolis, Maryland, 1-4 April, 2007.

60. Scaroni, A.E., J.A. Nyman, and C.W. Lindau. 2007. Nutrient removal by habitat type in the Atchafalaya River Basin. 10th International Symposium on Wetland Biogeochemistry. Annapolis, Maryland, 1-4 April, 2007.
59. Tobias, V.D., J.A. Nyman, R.D. DeLaune, and J.D. Foret,. 2007. Effects of salinity and nutrients on the elemental composition of Spartina patens (Ait). Muhl. leaves. 10th International Symposium on Wetland Biogeochemistry. Annapolis, Maryland, 1-4 April, 2007.
58. Nyman, J.A. 2007. Challenges to Conserving Texas Coastal Marshes: global sea-level rise and increasing marine influence. Texas Chapter of the American Fisheries Society Annual Meeting. Lake Jackson, Texas, 2-4 March, 2007. (invited).
57. Nyman, J.A., R.D. DeLaune, C.W. Lindau, and R. Keim. 2006. Effects of restoration and habitat change on carbon and nutrient retention in the Atchafalaya River Basin. South Central Chapter of the Society of Wetland Scientists Annual Fall Meeting, Vicksburg, Mississippi, 5-7 October, 2006.
56. O'Connell, J. and J. Nyman. Waterbird use of terraced vs. unterraced ponds in coastal Louisiana. Ecological Society of America 2006 Annual Meeting, Memphis, Tennessee. 6-11 August, 2006.
55. Lindau, C., and A. Nyman. 2006. Water quality restoration in Atchafalaya River Basin cypress wwamp via denitrification. Lower Mississippi River Nutrient Symposium. New Orleans, Louisiana, 1-2 June, 2006. (invited)
54. Cannaday, C., and J.A. Nyman. 2006. The effect of terraces on Submersed Aquatic Vegetation in three southwest Louisiana marshes. Earthen Terraces: Status of the Technique. Baton Rouge, Louisiana, 12 April, 2006.
53. Bossman, B.P., M.K. La Peyre, and J.A. Nyman. 2006. Marsh Terracing as a restoration technique for creating nekton habitat. Earthen Terraces: Status of the Technique. Baton Rouge, Louisiana, 12 April, 2006.
52. O'Connell, J., and J.A. Nyman. 2006. Waterbird habitat use of terraced and unterraced ponds in coastal Louisiana. Earthen Terraces: Status of the Technique. Baton Rouge, Louisiana, 12 April, 2006.
51. Bordelon, S., D.G. Scognamillo, J.A. Nyman, and M.J. Chamberlain. 2006. White-tailed deer abundance and herbivory in a coastal bottomland hardwood forest. 29th Annual Meeting of the Southeast Deer Study Group, Baton Rouge, Louisiana, 26-28 February, 2006.
50. King, S.K., J.A. Nyman, and K.R. Hersey. 2006. Assessment of Whooping Crane habitat needs at White Lake, Louisiana: historic conditions and current questions. 10th North American Crane Workshop, Zacatecas, Zacatecus, Mexico, 7-10 February, 2006.
49. Nyman, J.A. and S.K. King. 2006. Potential whooping crane habitat at Marsh Island wildlife refuge, Louisiana. 10th North American Crane Workshop, Zacatecas, Zacatecus, Mexico, 7-10 February, 2006.
48. Bordelon, S., and J.A. Nyman. 2005. Effects of white-tailed deer herbivory on the growth and survival of juvenile trees in a mature coastal wetland forest. Society of Wetland Scientists 26th Annual Meeting, Charleston South Carolina, June 5-10, 2005
47. Cannaday, C.D., B.P. Gossman, J.L. O'Connell, M.K. La Peyre, and J.A. Nyman. 2005. Effects of terraces on vegetation, nekton, and waterbirds. Progress in Understanding Coastal Land Loss and Restoration in Louisiana. Lafayette, Louisiana, April, 2005.

46. Nyman, J.A., and M.K. La Peyre. 2005. A review of the brief history of terraces. 2005 CREST Symposium: Progress in Understanding Coastal Land Loss and Restoration in Louisiana. Lafayette, Louisiana, April, 2005.
45. Klerks, P.L., J.A. Nyman & S. Bhattacharyya. 2005. Chemical additives in oiled freshwater laboratory microcosms: Toxicity to aquatic organisms, relationship between hydrocarbon measurements and toxicity, and the influence of chemical additives on hydrocarbon disappearance. 23rd Information Transfer Meeting of the Minerals Management Service, Kenner, Louisiana, January 11-13, 2005.
44. Nyman, J.A., R.J. Walters, R.D. DeLaune, and W.H. Patrick, Jr. 2004. Marsh vertical accretion via vegetative growth. AGU Chapman Conference on salt marsh geomorphology: physical and ecological effects on landform. Halifax, Nova Scotia, Canada. 9-13 October, 2004.
43. Kanouse, S., J.A. Nyman and M. La Peyre. 2003. Nekton growth in two brackish marsh habitats in Louisiana. Estuarine Research Federation International Meeting. September 15-19, 2003, Seattle, WA. *Invited seminar*
42. Nyman, J.A., and D. Huval. 2003. Nutrient availability and salinity stress interact to affect growth of the emergent plant Spartina patens Ait muhl. Eighth International Symposium on Biogeochemistry of Wetlands. Gent, Belgium. 14-17 September, 2003.
41. Burcham, A.K., T.C. Michot, J.A. Nyman. 2003. The interactive effects of environmental stress and fungal infection on Spartina alterniflora in coastal Louisiana. Society of Wetland Scientists 24th Annual Meeting. New Orleans, Louisiana. 8-13 June, 2003.
40. Bush, C.S., M.K.G. La Peyre, and J.A. Nyman. 2003. Nekton utilization of restored habitat in a southwest Louisiana marsh. Society of Wetland Scientists 24th Annual Meeting. New Orleans, Louisiana. 8-13 June, 2003.
39. Caldwell, A.B., and J.A. Nyman. 2003. Terraces and coconut mats affect seeds and submerged aquatic vegetation at Sabine National Wildlife Refuge. Society of Wetland Scientists 24th Annual Meeting. New Orleans, Louisiana. 8-13 June, 2003.
38. Kanouse, S.C., M.K.G. La Peyre, and J.A. Nyman. 2003. Linking fish and habitats: nekton use of three brackish marsh pond microhabitat types. Society of Wetland Scientists 24th Annual Meeting. New Orleans, Louisiana. 8-13 June, 2003.
37. Winslow, C.J., J.A. Nyman, and B.C. Wilson. 2003. Do wintering waterfowl deplete food availability in fresh coastal marshes of Louisiana and Texas? Society of Wetland Scientists 24th Annual Meeting. New Orleans, Louisiana. 8-13 June, 2003.
36. Bush, C.S., M.K.G. La Peyre, and J.A. Nyman. 2002. Can fish habitat be restored using terraces and coconut mats in Louisiana marshes? Society of Wetland Scientists 23rd Annual Conference. Lake Placid, New York. 2-7 June, 2002.
35. Burcham, A.K., T.C. Michot, J.A. Nyman. 2002. The interactive effects of environmental stress and fungal infection on Spartina alterniflora dieback in coastal Louisiana. Society of Wetland Scientists 23rd Annual Conference. Lake Placid, New York. 2-7 June, 2002.
34. Huval, D.L., and J.A. Nyman. 2002. Effects of nutrient additions on salinity stress in Spartina patens. Society of Wetland Scientists 23rd Annual Conference. Lake Placid, New York. 2-7 June, 2002.
33. Melancon, G., J.A. Nyman, T.C. Michot, and J.D. Foret. 2002. Extensive dieback of non-saline coastal marshes in Louisiana, 1999-2001. Society of Wetland Scientists 23rd Annual Conference. Lake Placid, New York. 2-7 June, 2002.

32. McMurray, M.P., M.T. Favalaro, J.M. Meriwether, J.A. Nyman, and R.R. Twilley. 2001. Effect of hydrologic manipulation on the accumulation of organic matter in brackish marshes, Chenier Plain, Louisiana. Estuarine Research Federation 16th Biennial Conference. 4-8 November, 2001. St. Petersburg, Florida.
31. Nyman, J.A., and P.L. Klerks. 2001. Some effects of petroleum hydrocarbons on wetland plants, microbes, and animals. Estuarine Research Federation 16th Biennial Conference. 4-8 November, 2001. St. Petersburg, Florida.
30. Nyman, J.A. 2001. Are either nutrient storage in subsiding wetlands or nutrient release from eroding wetlands relevant to coastal eutrophication? Seventh Symposium on Biogeochemistry of Wetlands. Durham, North Carolina. 17-20 June, 2001.
29. Nyman, J.A, and P.L. Klerks. 2001. Some Effects of Petroleum Hydrocarbons on Wetlands and Suggested Response Actions. 24th Arctic and Marine Oilspill (AMOP) Technical Seminar. Edmonton, Alberta, Canada. 12-14 June, 2001.
28. Nyman, J.A., A.K. Burcham, J.D. Foret, G. Melancon, T.C. Michot, and T.J. Schmidhauser. 2001. Preliminary studies of brown marsh in a Chenier Plain, Spartina patens Marsh. Coastal Marsh Dieback in the Northern Gulf of Mexico: Extent, Causes, Consequences, and Remedies. Baton Rouge, Louisiana. 11-12 January, 2001.
27. Nyman, J.A. 2000. Nutrient burial in Louisiana coastal wetlands. Environmental State of the State - V Conference. Baton Rouge, Louisiana. 16-17 November, 2000.
26. Nyman, J.A. 2000. Nutrient storage in an estuarine marsh. Sustainability of wetlands and water resources, How well can riverine wetlands continue to support society into the 21st century? Oxford, MS. 23-25 May, 2000.
25. Nyman, J.A. Does coastal wetland loss affect nutrient availability in coastal waters? American Geophysical Union 2000 Spring Meeting. Washington, D.C. 30 May - 3 June, 2000.
24. Nyman, J.A. 2000. Permanent nutrient burial rates in an estuarine wetland. Quebec 2000: Millennium Wetland Event. Quebec, Canada, 6-12 August, 2000.
23. Foret, J.D., J.A. Nyman, and R.R. Twilley. 2000. Nutrient limitations of Spartina patens tidal marshes on the Chenier Plain, Louisiana. Quebec 2000: Millennium Wetland Event. Quebec, Canada, 6-12 August, 2000.
22. Hunter, J., and J. Nyman. 2000. SAV dynamics in a brackish marsh: season, herbivory, management. Quebec 2000: Millennium Wetland Event. Quebec, Canada, 6-12 August, 2000.
21. Nyman, J.A. 2000. Nutrient burial in Louisiana coastal wetlands. Environmental State of the State V. Baton Rouge, Louisiana, 16-17 November, 2000.
20. Hunter, J.J., and J.A. Nyman. 1999. Effects of season, waterfowl herbivory, and management on SAV abundance in a tidal, non-saline marsh. Estuarine Research Federation 15th Biennial International Conference. 25-30 September, 1999. New Orleans, Louisiana.
19. McGinnis II, T.E., and J.A. Nyman. 1999. Effect of crude oils on metabolic activity of soil biota in saline marsh soils. Estuarine Research Federation 15th Biennial International Conference. 25-30 September, 1999. New Orleans, Louisiana.
18. Mouton, E.C., and J.A. Nyman. 1999. Factors, including management, affecting flooding of tidal non-saline marsh in coastal Louisiana. Estuarine Research Federation 15th Biennial International Conference. 25-30 September, 1999. New Orleans, Louisiana.

17. Nyman, J.A. 1999. Determining if mineral or organic accumulation control marsh vertical accretion: a model and new technique. Estuarine Research Federation 15th Biennial International Conference. 25-30 September, 1999. New Orleans, Louisiana.
16. Nyman, J.A., P.L. Klerks, and S. Bhattacharyya. 1999. Which hydrocarbon analyses best predicts toxicity of contaminated wetland soils? Wetlands and Remediation, an International Conference. Salt Lake City, Utah. 16-17 November, 1999.
15. Nyman, J.A., and T.E. McGinnis. 1999. Optimizing crude oil disappearance and disturbance to soil microbial activity. Wetlands and Remediation, an International Conference. Salt Lake City, Utah. 16-17 November, 1999.
14. Nyman, A., and T.E. McGinnis, II. 1999. Effects of crude oils on metabolic activity of soil biota in saline soils. Sixth Symposium on Biogeochemistry of Wetlands. Fort Lauderdale, Florida, 14-11 July, 1999.
13. Foret, J.D., R.R. Twilley, and J.R. Meriwether, and J.A. Nyman. 1998. Response of vertical accretion and nutrient accumulation rates to hydrologic manipulations in the marshes of the Chenier plain. 19th Annual Meeting of the Society of Wetland Scientists. Anchorage, Alaska.
12. McGinnis, T. E., II, and J. A. Nyman. 1997. Factors associated with soil strength and effectiveness of management efforts to slow wetland loss in a Louisiana brackish marsh. 18th Annual Meeting of the Society of Wetland Scientists. Bozeman, Montana.
11. Foret, J.D., R.R. Twilley, J.A. Nyman, and J.R. Meriwether. 1997. Soil formation, nutrient storage, and marsh vertical accretion in a hydrologically manipulated tidal salt marsh of the Chenier Plain, Louisiana. Fifth Symposium on Biogeochemistry of Wetlands. Virginia Water, Surrey, U.K. 16-19 September, 1997.
10. Nyman, J.A., and R.D. DeLaune. 1997. Potential impacts of global sea-level rise on coastal marsh stability. Fifth Symposium on Biogeochemistry of Wetlands. Virginia Water, Surrey, U.K. (*invited* by Dr. William H. Patrick Jr.). 16-19 September, 1997.
9. Nyman, J.A. R.D. DeLaune, and W.H. Patrick Jr. 1995. Marsh vertical accretion via vegetative growth. Geological Society of America Annual Meeting (*invited* by Dr. S. Jeffress Williams, USGS). New Orleans, Louisiana. November 1995.
8. Nyman, J.A., and R.H. Chabreck. 1995. Fire in coastal marshes: history and recent concerns. 19th Tall Timbers Fire Ecology Conference- Fire in wetlands: a management perspective. Tallahassee, Florida.
7. Nyman, J.A., M. Carloss, R.D. DeLaune, and W.H. Patrick, Jr. 1993. Are landscape patterns related to marsh loss processes? 8th Symposium Coastal and Ocean Management. New Orleans, La. 19-23 July, 1993.
6. Nyman, J.A., R.H. Chabreck, R.D. DeLaune, and W.H. Patrick, Jr. 1993. Submergence, salt-water intrusion, and managed Gulf Coast Marshes. 8th Symposium Coastal and Ocean Management. New Orleans, La. 19-23 July, 1993.
5. Nyman, J.A., and R.D. DeLaune. 1993. Case study of a rapidly submerging coastal environment: relationships among vertical accretion, carbon Cycling, and marsh loss in Terrebonne Basin, Louisiana. The Hilton Head Island South Carolina, U.S.A. International Coastal Symposium (*invited* by Dr. Randal W. Parkinson, FIT). June 1993.
4. Nyman, J.A. 1993. Organic matter accumulation controls vertical accretion in stable and deteriorating Louisiana coastal marshes. Second Symposium on Biogeochemistry of Wetlands. Baton Rouge, Louisiana, 22-24 February, 1993.
3. Nyman, J.A., R.D. DeLaune, W.H. Patrick, Jr., and H.H. Roberts. 1992. Relationships among vegetation, mineral sediments, and vertical accretion in coastal marshes. 13th Annual

Conference of the Society of Wetland Scientists, New Orleans, Louisiana. 31 May-6 June, 1992.

2. Nyman, J.A. and R.D. DeLaune. 1991. CO_2 Emission and Soil Eh Responses to Different Hydrological Conditions in Fresh, Brackish, and Saline Marshes. Coastal Wetland Ecology and Management Symposium (*invited* by Dr. Edward Maltby). December, 1991.
1. Chabreck, R.H., and J.A. Nyman. 1989. The effects of weirs on plants and wildlife in the coastal marshes of Louisiana. Marsh management in coastal Louisiana: effects and issues. U.S. Department of Interior and Louisiana Department of Natural Resources. Baton Rouge, Louisiana, 7-10 July, 1988.

3. Other Scholarly or creative activities or other contributions to the Profession:
Membership in Professional Organizations

Society of Wetland Scientists
member 1993-present
Executive Board Member 2006-2007
South Central Chapter of the Society of Wetland Scientists:
Executive Board Member, 2000-2002, 2002-2004
President-Elect 2005-2006.
President, 2006-2007
Past-President, 2007-2008.
The Wildlife Society, member
The Restoration Working Group of The Wildlife Society:
Executive Board Member from Southeastern Region, 2003-2005
Louisiana Association of Professional Biologists, member
Estuarine Research Federation, member
Gulf Estuarine Research Society, member

4. Other awards, lectureships, or prizes that show recognition of scholarly or artistic achievement

Louisiana Wildlife Biologists Association. 2006 Outstanding Publication Award. In recognition of Chabreck, R.H., and J.A. Nyman. 2005. Management of coastal wetlands. Pages 839-860 *in* C.E. Braun, editor Techniques for wildlife investigations and management. Sixth Edition. The Wildlife Society, Bethesda, Maryland, USA.

U.S. Army Corps of Engineers and the State of Louisiana. Team Achievement. In recognition of contributions to the completion of the Louisianan Coastal Area, Coastal Ecosystem Restoration Study. 2005.

Coastal America. Partnership Award. In recognition of efforts to protect and restore Louisiana as a member of the Breaux Act Task Force, Academic Advisory Group. 2004.

Louisiana Wildlife Biologists Association. Outstanding Publication Award. In recognition of Nyman, J.A., R.H. Chabreck, and N. Kinler. 1993 Some effects of herbivory and 30 years of weir management on emergent vegetation in a brackish marsh. Wetlands 13:165-175. 1994.

5. Research Support/Grant Activities: Recently funded proposals (18)

Nyman, J.A. R.D. DeLaune, C.W. Lindau, and R. Keim. June 2006-September, 2006. Pilot Studies of Water Quality Restoration in Atchafalaya River Basin via Denitrification, Sedimentation, and Biomass Accumulation. $72,000. U.S. Army Corps of Engineers.

Nyman, J.A., R.D. DeLaune, and J.D. Foret. August, 2006-July, 2008. Developing a tool to map coastal wetlands affected and unaffected by freshwater introductions. $68,023. Coastal Restoration Enhancement through Science and Technology (CREST) Program.

Lindau, C.W., and J.A. Nyman. August, 2005- July, 2006. Denitrification potential of Atchafalaya River Basin Bottomland hardwood Forests and Cypress Swamps: backwater vs. river flooded. $63,000. Louisiana Governor's Office of Coastal Activities Applied Research and Development Program.

Mesehle, E.A., J.A. McCorquodale, I. Georgious, J.A. Nyman, and E.H. Habib. August 2004-July 2006. Comprehensive water and sediment budget analysis for the Chenier Plain. $202,609. Coastal Restoration Enhancement through Science and Technology (CREST) Program.

Nyman, J.A. September 2004 -August, 2006. Comparing waterbird density between unrestored coastal marshes and marshes restored with terraces. $56,350. Gulf Coast Joint Venture.

Nyman, J.A. September 2003-December 2004. Assistance from the School of Renewable Natural Resources, LSU Ag Center to PPL-14 activities of the Coastal Wetland Planning and Restoration Act Task Force. $2,478. Coastal Wetland Planning, Protection, and Restoration Act Task Force, Academic Advisory Group, Louisiana Universities Marine Consortium (LUMCON).

Nyman, J.A., and M.K. Le Peyre. August 2003-July 2005. Effectiveness of marsh terracing as a restoration technique: nekton habitat. $60,973. Coastal Restoration Enhancement Through Science and Technology (CREST) Program.

Nyman, J.A. June 2003 through December 2005. Proposal to determine the effects of marsh terraces on the abundance of submersed aquatic vegetation. $57,032. Louisiana Department of Wildlife and Fisheries.

Day, J.W, P. Kemp, V. Aravamuthan, D. Justic, H. Mashriqui, S. Moorthy, J Ko, C. Sasser, J. Visser, I. Mendelssohn, K. Rose, E. Swenson, J. Cowan, A. Nyman, I. Van Heerden, S.A. and Binselam. 2002-2004. Conceptual ecological models for planning and evaluating the Louisiana Area Restoration Plan. $268,999. Louisiana Department of Natural Resources.

Nyman, J.A.. 2001-2004. Estimation of waterfowl food plant availability in freshwater marshes of the Gulf Coast Joint Venture Area. $52,500. Gulf Coast Joint Venture.

Nyman, J.A., and M.K. Le Peyre. 2001-2003. Proposal to determine the effect of marsh terraces at Sabine National Wildlife Refuge on the abundance of submersed aquatic vegetation and fish. $90,000 U.S Fish and Wildlife Service.

Nyman, J.A. 2003. Six weather-proof video camera and image storage devices with solar power. $23,600. Louisiana State University AgCenter.

La Peyre, M.K., and J.A. Nyman. 2003. Comparing nekton growth rates between vegetated and unvegetated marsh ponds using enclosures. $9,100. National Marine Fisheries Service.

Nyman, J.A. 2002. Obtain, compile and analyze water level, water salinity, and land loss data collected by CWPPRA Task Force to test for indicators of wetland loss. $7,300 Coastal Wetland Planning, Protection, and Restoration Act Task Force, Academic Advisory Group, Louisiana Universities Marine Consortium (LUMCON).

Nyman, J.A., and M.K. La Peyre. 2002. Submerged aquatic vegetation: assessing fish community use and habitat linkage effects. $12,000 Louisiana Department of Wildlife and Fisheries.

Nyman, J.A. 2002. Assistance from the School of Renewable Natural Resources, LSU Ag Center to PPL-12 activities of the Coastal Wetland Planning and Restoration Act Task Force. $9,387 Coastal Wetland Planning, Protection, and Restoration Act Task Force, Academic Advisory Group, Louisiana Universities Marine Consortium (LUMCON).

Nyman, J.A. 2001-2002. Salinity at Marsh Island. $10,480. Louisiana Department of Wildlife and Fisheries.

Nyman, J.A. 2001. Participate in planning activities of the CWPPRA Project List 11. $3,513. Coastal Wetland Planning, Protection, and Restoration Act Task Force, Academic Advisory Group, Louisiana Universities Marine Consortium (LUMCON).

6. Theses/dissertations directed

Louisiana State University (8)

Amy Scaroni. in progress. Nutrient removal by river floodplains. Ph.D. Dissertation.

Vanessa Tobias. in progress. Restoring coastal marsh with riverine inflow. Ph.D. Dissertation.

Jessica O'Connell. 2006. Coastal marsh restoration using terraces: effects on waterbird habitat in Louisiana's Chenier Plain. Masters Thesis.

Chris Cannaday, M.S. 2006. Effects of terraces on submersed aquatic vegetation. Masters Thesis.

Seth Bordelon. 2005. Effects of white-tailed deer herbivory on forest regeneration at Jean Lafitte National Historical Park and Preserve. Masters Thesis.

Barrett K. Fortier. 2004. Mortality of pen-raised white-tailed deer (*Odocoileus virginianus*) released on three areas in Louisiana. Masters Thesis.

Aaron Caldwell. 2003. Effects of marsh terraces on submersed aquatic vegetation. Masters Thesis.

Christian Winslow. 2003. Estimation of waterfowl food plant availability in freshwater marshes of Gulf Coast Joint Venture Area. Masters Thesis.

University of Louisiana at Lafayette (3)

Joy J. Hunter. 2000. Relative effects of season, waterfowl herbivory, and marsh management on submersed aquatic Vegetation in a tidal, non-saline marsh. Masters Thesis.

John Foret. 1997 (co-Chair with R.R. Twilley). Accretion, sedimentation, and nutrient accumulation rates as influenced by manipulations in marsh hydrology in the Chenier Plain, Louisiana. Masters Thesis.

Thomas E. McGinnis II. 1997. Factors of soil strength and shoreline movement in a Louisiana coastal marsh. Masters Thesis.

7. Major Areas of Research Interest

wetland ecology, wetland restoration

8. Cooperative/collaborative efforts with other faculty

Lindau, C.W., and J.A. Nyman. August, 2005- July, 2006. Denitrification potential of Atchafalaya River Basin Bottomland hardwood Forests and Cypress Swamps: backwater vs. river flooded. $63,000. Louisiana Governor's Office of Coastal Activities Applied Research and Development Program.

Mesehle, E.A., J.A. McCorquodale, I. Georgious, J.A. Nyman, and E.H. Habib. August 2004-July 2006. Comprehensive water and sediment budget analysis for the Chenier Plain. $202,609. Coastal Restoration Enhancement through Science and Technology (CREST) Program.

Nyman, J.A., and M.K. Le Peyre. August 2003-July 2005. Effectiveness of marsh terracing as a restoration technique: nekton habitat. $60,973. Coastal Restoration Enhancement Through Science and Technology (CREST) Program.

Day, J.W, P. Kemp, V. Aravamuthan, D. Justic, H. Mashriqui, S. Moorthy, J Ko, C. Sasser, J. Visser, I. Mendelssohn, K. Rose, E. Swenson, J. Cowan, A. Nyman, I. Van Heerden, S.A. and Binselam. 2002-2004. Conceptual ecological models for planning and evaluating the Louisiana Area Restoration Plan. $268,999. Louisiana Department of Natural Resources.

Nyman, J.A., and M.K. Le Peyre. 2001-2003. Proposal to determine the effect of marsh terraces at Sabine National Wildlife Refuge on the abundance of submersed aquatic vegetation and fish. $90,000 U.S Fish and Wildlife Service.

La Peyre, M.K., and J.A. Nyman. 2003. Comparing nekton growth rates between vegetated and unvegetated marsh ponds using enclosures. $9,100. National Marine Fisheries Service.

Nyman, J.A., and M.K. La Peyre. 2002. Submerged aquatic vegetation: assessing fish community use and habitat linkage effects. $12,000 Louisiana Department of Wildlife and Fisheries.

9. Community Involvement as it relates to the University Mission

Certified Hunter Safety Education Instructor. 2004 to present.

10. Overall Program Impact

Restoration of coastal marshes and bottomland hardwoods are common in the southeastern United States. Land managers need to know how effective different wetland restoration techniques are, and why some techniques are more effective in some situations than in others. With my research, I try to help land managers understand the effects of restoration techniques commonly used in coastal marshes. The cost effectiveness of environmental restoration should improve as land managers more accurately predict the impacts of their efforts. The impact of my research is reflected in the Coastal America Partnership Award that I received for my work with the Breaux Act Task Force's Academic Advisory Group in 2004, and in the Team Achievement Award that I received from the US Army Corps of Engineers and the State of Louisiana for my contribution to the Louisiana Coastal Area, Louisiana Ecosystem Restoration Study in 2005.

SERVICE ACTIVITIES

1. Organizations Advised

Coastal Wetland Planning Protection and Restoration Act Task Force
Coastal Restoration Enhancement through Science and Technology (CREST) Program
Governor's Office of Coastal Activities

2. Recruitment of Students and Faculty

member of search committee for Wildlife Ecologist (filled August, 2003)

3. University Service

Cooperative State Research, Education, and Extension Service (CSREES) Review of Research and Extension Self-Study Committee. I'm preparing the portion of the 200-page self-study document that deals with wildlife research and extension. 2007-present

Self-appointed spokesperson for efforts to construct Moist Soil Units in University Lake. In the fall of 2007, I corresponded with the USCOE and their consultant, and met with Directors, Deans, and Vice-Chancellors until the university, USCOE, and consultant working for USCOE agreed to incorporate a five-acre Moist Soil Unit into plans to restore University Lake.

Graduate Education and Research Committee School of Renewable Natural Resources, Louisiana State University, 2001-present. This committee considers applications to our graduate program.

Lee Memorial Forest, School of Renewable Natural Resources, LSU AgCenter, 2002-2004

Student Recruiting, School of Renewable Natural Resources, Louisiana State University, 2003-present

Promotion and Tenure, School of Renewable Natural Resources, Louisiana State University, 2003-present

Seminar and Lecture, School of Renewable Natural Resources, Louisiana State University, 2003-present

New Degree Committee, School of Renewable Natural Resources, Louisiana State University, 2003-2004

White Lake Working Committee, Louisiana State University, 2002-2004

Chancellor's Future Leaders in Research, faculty mentor for William Tujaegue, 2002-2003

4. Professional Service

Advisory Boards

Coastwide Reference Monitoring System Analytical Team. 2006 to present.

Coastal Wetland Forest Conservation and Use Task Force: Science Working Group. 2003-2005

Coastal Restoration Enhancement through Science and Technology (CREST), Technical Board member, 2001-present

The Restoration Working Group, The Wildlife Society, Southeast Board Member, 2003-2005

Congress on Building Capacity for Coastal Solutions. Renewable Natural Resources Foundation. Washington, D.C. 6-7 December, 2004. (Delegate)

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Lacassine National Wildlife Refuge, Biological Review. 2002.
Restore America's Estuaries, National Strategy for Coastal Habitat Restoration Initial Working Group, member and contributing author (see http://www.estuaries.org/), 2000-2002.
Coalition to Restore Coastal Louisiana 2001 Coastal Stewardship Awards, judge
Coastal Fringe HGM Workshop, September, 1996.

Journals edited, manuscripts referred, books and proposals reviewed
Manuscript Reviewer for:
Wetlands, Catena, Journal of Soil and Water Conservation, Estuaries, Estuarine Coastal and Shelf Science, Proceedings of the Southeastern Association of Fish and Wildlife Agencies, Environmental Science and Technology.
Wetland Management Plan Reviewer for: CALFED Bay-Delta Program, U.S. Fish and Wildlife Service, U.S. Department of Defense.
Proposal Reviewer for: National Science Foundation Ecosystem Studies Program, Petroleum Research Atlantic Canada, NOAA National Ocean Service Coastal Ocean Program, and California Sea Grant College Program, National Estuarine Research Reserve Program.
Co-editor for Current Topics in Wetland Biogeochemistry. 1994-1998 (this start up journal ceased publication after I resigned as co-editor)

5. Other External Service: Invited presentations regarding regional environmental issues
Coastal Marsh Dieback Conference, 11-12 January, 2001, Baton Rouge, Louisiana.
Status and Trends of the Acadiana Bays, 22-23 April, 2002, Baton Rouge, Louisiana.

TEACHING ACTIVITIES

1. Documentation of teaching activities

Teaching History and Evaluations

RNR 1001, Natural Resource Conservation (3 credit hours)

semester	enrollment	% A's	% B's	% C's	% D's	% F's	instructor SPOT	college SPOT
spring '02	80	54	16	10	2	6	3.30	4.07

RNR 1002, Issues in Natural Resources Management (1 credit hour)

semester	enrollment	% A's	% B's	% C's	% D's	% F's	instructor SPOT	college SPOT
spring '04	8	100	0	0	0	6	4.39	4.12

RNR 2031, Principles of Wildlife Management (3 credit hours)

semester	enrollment	% A's	% B's	% C's	% D's	% F's	instructor SPOT	college SPOT
fall '01	61	43	18	12	5	5	4.03	4.08
spring '03	54	20	26	28	13	4	4.52	4.03
fall '03	34	44	31	16	9	0	4.47	4.12
spring '04	38	33	28	17	6	6	4.32	4.12
fall '04	23	39	26	17	9	9	4.70	4.09
fall '05	50	18	20	7	1	3	4.44	4.09
fall '06	31						4.27	4.03
spring '07	38						4.35	4.09

RNR 3018, Ecology of Louisiana Wildlife (4 credit hours)

semester	enrollment	% A's	% B's	% C's	% D's	% F's	instructor SPOT	college SPOT
spring '05	24	71	25	0	0	0	3.81	4.10
spring '06	21							

RNR 3108, Case Studies in Habitat Restoration (2 credit hours)

semester	enrollment	% A's	% B's	% C's	% D's	% F's	instructor SPOT	college SPOT
spring '06	9	78	12				4.41	4.03
spring '07	7	100						

RNR 4101, Integrated Natural Resources Management and Policy (4 credit hours)

semester	enrollment	% A's	% B's	% C's	% D's	% F's	instructor SPOT	college SPOT
spring '05	13	85	8			8	4.39	4.10
spring '06	26						4.33	4.03
spring '07	21	46	54					

RNR 7029, Restoration and Management of Wetland Functions (4 credit hours)

semester	enrollment	% A's	% B's	% C's	% D's	% F's	instructor SPOT	college SPOT
fall '02	11	100	0	0	0	0	4.18	4.03
fall '04	11	73	27	0	0	0	4.17	4.09
fall '06	7	100						
fall '07	8	75	25					

In addition to the courses noted above for which SPOT evaluations were available, the following courses were taught.

RNR 2061, Problems in Natural Resources Management
Fall 2004 (1 student, A)
Spring 2005 (1 student, A)
Fall 2005 (2 students, 1 A, 1 B)

HNRS 3991, Honors Thesis
Fall 2007 (1 student, A)

HNRS 3993, Honors Thesis
Spring 2008 (1 student)

RNR 4061, Problems in Natural Resources Management
Fall 2002 (1 student, dropped)
Spring 2003 (1 student, A)
Spring 2005 (1 student, B)
Fall 2005 (2 students, 2 A's)
Summer 2007 (1 student, 1 A)

RNR 8000, Thesis Research,

Fall 2001:	2 students
Spring 2002:	2 students
Summer 2002:	2 students
Fall 2002:	3 students
Spring 2003:	4 students
Summer 2003:	5 students
Fall 2003:	5 students
Spring 2004:	3 students
Summer 2004:	3 students
Fall 2004:	3 students
Spring 2005:	3 students
Summer 2005:	3 students
Fall 2005:	2 students
Spring 2006:	2 students
Fall 2006	1 students

RNR 9000, Dissertation Research

Spring 2007	2 students
Summer 2007	2 students
Fall 2007	2 students
Spring 2008	2 students

BIOL 101, Principles of Biology, University of Louisiana at Lafayette
Spring 1995, (166 students)

BIOL 121, Biological Principles and Issues University of Louisiana at Lafayette
Spring 1995, (263 students)

BIOL 489, Topics in Marine Science: Wetland Biogeochemistry, Louisiana Universities Marine Consortium
Summer, 1996 (8 students)
Summer, 1997 (11 students)
Summer, 2000 (10 students)

New Courses Developed

RNR 3108 Case Studies in Habitat Restoration (2) S Prereq.: RNR 2101, 1 hr. lecture, 3 hr. lab, 2 weekend field trips. Students are responsible for paying for travel expenses associated with this course. The general University drop/add dates do not apply because this is an 8-week course. The instructor will provide students with the drop/add dates established by the University Registrar. Principles related to the context, planning, design, and implementation of habitat restoration and mitigation; evaluation of habitat restoration efforts using the case study method.

RNR 4101, Integrated Natural Resources Management and Policy (developed with M.J. Stine and S. J. Chang). (4) S Prereq.: RNR 4039 and senior status in School of Renewable Natural Resources. 2 hrs. lecture; 4 hrs. lab. Students are responsible for paying for travel expenses associated with this course. Development of problem solving skills for the management of renewable natural resources; application and integration of renewable natural resource management theory, policy and practices; analysis of management and policy decisions.

RNR 7029, Restoration and Management of Wetland Function. F-E 2 hrs. lecture, 3 hrs. lab. 2 weekend field trips. Transportation Fee. Prereq: consent of instructor. Wetland ecology with a focus on functions valued by society; natural history of commonly managed wetland types; fundamentals of restoration ecology; wetland restoration programs in theory and in practice. This course has been taught four times (fall 2002, fall 2004, fall 2006, fall 2007) as a Special Topics (7029) rather than a permanent course because the Department of Oceanography and Coastal Sciences objects.

Graduate Committees

Louisiana State University
Associate Member of Graduate Faculty, 2001-2006
Full Member of Graduate Faculty, 2006-2013
University of Louisiana at Lafayette
Member of Graduate Faculty, 1995-2000, 2001-2006

Graduate Committees Chaired, Louisiana State University (8)

Amy Scaroni. in progress. Nutrient removal by river floodplains. Ph.D. Dissertation.
Vanessa Tobias. in progress. Restoring coastal marsh restoration with riverine inflow. Ph.D. Dissertation.
Jessica O'Connell. 2006. Effects of terraces on waterbirds. Masters Thesis.
Chris Cannaday, M.S. 2006. Effects of terraces on submersed aquatic vegetation. Masters Thesis.
Seth Bordelon. 2005. Effects of white-tailed deer herbivory on forest regeneration at Jean Lafitte National Historical Park and Preserve. Masters Thesis.
Barrett K. Fortier. 2004. Mortality of pen-raised white-tailed deer (*Odocoileus virginianus*) released on three areas in Louisiana. Masters Thesis.
Aaron Caldwell. 2003. Effects of marsh terraces on submersed aquatic vegetation. Masters Thesis.
Christian Winslow. 2003. Estimation of waterfowl food plant availability in freshwater marshes of Gulf Coast Joint Venture Area. Masters Thesis.

Graduate Committees Chaired, University of Louisiana at Lafayette (3)

Joy J. Hunter. 2000. Relative effects of season, waterfowl herbivory, and marsh management on submersed aquatic Vegetation in a tidal, non-saline marsh. Masters Thesis.
John Foret. 1997 (co-Chair with R.R. Twilley). Accretion, sedimentation, and nutrient accumulation rates as influenced by manipulations in marsh hydrology in the Chenier Plain, Louisiana. Masters Thesis.
Thomas E. McGinnis II. 1997. Factors of soil strength and shoreline movement in a Louisiana coastal marsh. Masters Thesis.

Graduate Committees Served, Louisiana State University (24)

John Gordon. in progress. An index of habitat support for nekton within Louisiana coastal marshes.
Jonathon Valent. in progress. Distribution and Habitat Characteristics of Breeding King Rails (Rallus elegans) and Other Marsh Birds in Natural, Restored and Agricultural Wetlands in Northeast Louisiana
Biao Zhong. in progress. Spatial analyses of pedosphere carbon stock and sequestration potential in Louisiana's watersheds. Ph.D. Dissertation.
Meya Holloway. in progress. Public perceptions in the Mississippi River drainage basin of the status and value of coastal wetlands in Louisiana. Masters Thesis.
Greg Steyer. in progress (Department of Oceanography and Coastal Sciences). Assessing vegetation restoration assessment. Ph.D. Dissertation.
J.W. Cochran. in progress. Coarse woody debris characteristics of managed and unmanaged bottomland hardwood forests. Masters Thesis.

Sarah Barlow. 2006. Monitoring anuran richness and relative abundance in created wetlands of central Louisiana. Masters Thesis.

Jason Burke. 2006. Individual and population-level responses of bobwhites to selective herbicide use. Masters Thesis.

David M. Fox. 2006. Effects of insectivorous birds on tree growth in the Maurepas swamp. Masters Thesis.

Eric I. Johnson. 2006. Impacts of fire on habitat associations, abundance, and survival of wintering Henslow's sparrows (Ammodramus henslowii) in southeastern Louisiana longleaf pine savannas. Masters Thesis.

Christopher Pennington. 2006. (Department of Geography and Anthropology). Burn scar mapping in the Sabine NWR using Landsat and ETM imagery. Masters Thesis.

Dawn Shaffer. 2006. Swamp Tours in Louisiana Post Hurricane Katrina and Hurricane Rita: A Descriptive Study. Masters Thesis.

Greg Snedden. 2006 (Department of Oceanography and Coastal Sciences). River, tidal, and wind interactions in a deltaic estuarine system. Ph.D. Dissertation.

Michael J. Anteau. 2005. Nutritional ecology of lesser scaup during spring migration in the upper-Midwest: mechanisms and scope of the spring condition hypothesis. Ph.D. Dissertation.

Brian Gossman. 2005. Use of terraced marsh habitats by estuarine nekton in southwestern Louisiana. M.S. Thesis.

Sean Kinney. 2004. Estimating the population of greater and lesser scaup during winter in off-shore Louisiana. Masters Thesis.

Charles L. Kitts. 2004. Individual and landscape-level effects of selective herbicide application on habitat quality for northern bobwhite. Masters Thesis.

Daniel Scognamillo. 2005. Ecological, environmental, and spatial variables in the distribution and abundance of river otter (Lontra canadensis) populations in Louisiana: a spatially explicit model (SEM). Ph.D. Dissertation.

Julie A. Neer. (Dean's representative). 2005. (Department of Oceanography and Coastal Sciences). Utilizing bioenergetics and matrix projection modeling to quantify population fluctuations in long-lived elasmobranchs: Tools for fisheries conservation and management. Ph.D. Dissertation.

Gregg Snedden. 2004. (Department of Oceanography and Coastal Sciences). Forcing Mechanisms Governing Low-Frequency Variability in Estuaries of the Mississippi River Deltaic Plain. Ph.D. Dissertation.

Bush, C.S. 2003. Nekton utilization of restored habitat in a southwest Louisiana marsh. Masters Thesis.

Kris S. Davis. 2003. Diet similarity of pen-raised versus native, Louisiana white-tailed deer in southeastern Louisiana. Masters Thesis.

Sarai Kanouse. 2003. Nekton use and growth in three brackish marsh pond microhabitats. Masters Thesis.

Joseph M. McGowan. 2003. Habitat assessment and subspecies identification of sandhill cranes wintering in Louisiana. Masters Thesis.

Graduate Committees Served, University of Louisiana at Lafayette (5)

Angela K. Burcham. in progress. The interactive effects of environmental stress and fungal infection on the growth and survival of *Spartina* in coastal Louisiana. Ph.D. Dissertation.

Nicole Cormier. 2003. Belowground productivity in mangrove forests of Pohnpei and Kosrae, Federated States of Micronesia. Masters Thesis.

Leigh Anne Phillips. 2002. Vertical accretion and marsh elevation dynamics on the Chenier Plain, Louisiana. Masters Thesis.

John D. Foret. 2001. Nutrient limitation of tidal marshes on the Chenier Plain, Louisiana. Ph.D. Dissertation.

Sue Bhattacharyya. 1999. Toxicity to freshwater organisms from oil spill and oil spill chemical responses in laboratory microcosms. Masters Thesis.

2. Participation in professional meetings, symposia, workshops, and conferences on teaching

King, S.L., and J.A. Nyman. 2007. Integrating wildlife ecology into wetlands ecology courses. 2007 International Society of Wetland Scientists. Sacramento, California.

Dean's Conference on Teaching, 2007 (attendee)

Dean's Conference on Teaching, 2006 (attendee)

Dean's Conference on Teaching, 2005 (attendee)

Centers for Ocean Sciences Education Excellence, Louisiana Teacher/Scientist Institute, Cocodrie, Louisiana, 20-25 June, 2004. The goals of these week-long, residential workshops are to: promote the development of effective partnerships between research scientists and educators; to disseminate effective ocean sciences programs and the best practices that do not duplicate but rather build on existing resources; and to promote a vision of ocean education as a charismatic, interdisciplinary vehicle for creating a more scientifically literate workforce and citizenry.

Dean's Conference on Teaching, 2004 (attendee)

Dean's Conference on Teaching, 2003 (attendee)

Dean's Conference on Teaching, 2002 (attendee)

6 hours, Center for Faculty Development, Louisiana State University, 1993-1994.

3. Other instructional activities or contributions to the profession.

New Area of Concentration: Wetland Science

I developed a new Area of Concentration in Wetlands Science for students majoring in Natural Resource Ecology and Management. Students graduating with a B.S. from the School of Renewable Natural Resources frequently find careers in which they are expected to apply ecological knowledge of wetlands and wetland science. Until recently, the demand was low enough that such training was generally acquired on the job. Today however, employers in the public and private sector desire entry-level employees with a firm understanding of wetland issues, wetland ecology, and wetland science. Such knowledge is needed by professionals who delineate wetlands, manage wetland mitigation banks, plan development to minimize undesirable impacts to wetlands, regulate development, etc. Such knowledge also will make students more competitive for graduate study in some programs. This Area of Concentration requires:

AGRO 2051 Soil Science 4

OCS 4165 Environmental Chemistry of Wetlands 3

OCS 4166 Wetland Delineation and Function. Assess. 3
RNR 2001 Dendrology 3
RNR 2031 Principles in Wildlife Management 3
RNR 4011 Wildlife Management Techniques 4
RNR 4033 Silviculture and Management of Hardwoods 4
Either:
ENVS/RNR 4900 Watershed Hydrology 3
RNR 4151 Hydrology of Natural Landscapes 3

New teaching methods/material developed:

I developed simulation models for use in RNR 2031 (Principles of Wildlife Management). Ninety-three students enrolled in RNR 2031 were exposed to models during 2003-2004, 2004-2005. I initially demonstrated models (alligator harvest), but found that the students become more involved if I ran models as a class exercise (American bison). Exposing students to models allowed them to quickly grasp the complex behavior that ecological systems can generate. This fall, I will try basing a homework assignments on models that I have constructed but that the students manipulate independently.

I was part of a team of four faculty that guided students to develop simulation models in RNR 4101 (Integrated Natural Resource Management and Policy). Thirteen students enrolled in RNR 4101 in the spring of 2005 constructed models as team projects. There were two assignments in which students were to construct simulation models based upon published literature gathered by the students. The results met my expectations regarding the realism of models' behavior as well the increase in the students' understanding of the relationships among population density, age to sexual maturity, harvest, predation, etc. My expectations were exceeded when several students began contacting researchers and managers for more complete data than were available in the literature. The first assignment resulted in models of harvested populations of fish such as book trout, lake trout, and sac-a-lait (black and white crappie); the second assignment resulted in models of wildlife populations in the Greater Yellowstone Ecosystem Area such brown bear, wolves, American bison, and elk.

4. Awards, lectureships, or prizes

Teaching Merit Honor Roll. 2007. College of Agriculture and the Louisiana State University Chapter of The Honor Society of Agriculture Gamma Sigma Delta.

Certificate for Dedication to Instruction of Freshmen Students. Fall 2004. Alpha Lambda Delta Freshman Honor Society.

5. Teaching support/grant activities

Field Trip Support for Graduate Wetland Training in the School of Renewable Natural Resources. J.A. Nyman, $1,000, funded by Natural Resource Professionals, LLC.

Using Ecological Simulation Models to Teach Renewable Resource Management. S.J. Chang, J.A. Nyman, D.A. Rutherford, and M. Stine. $6,886, funded by Student Tech Fee program, spring 2003. Proposal Summary: Simulation models are mathematical tools used to understand and predict the behavior of real systems. Simulation modeling was formerly limited to research scientists with access to supercomputers but is increasingly used in

business, classrooms, and resource management agencies. Although used at other universities, simulation models are uncommon teaching tools at LSU's School of Renewable Natural Resources. We proposed to increase student participation in the learning process by incorporating simulation models into two of the five core courses recently developed for students majoring in Forestry and in Wildlife and Fisheries (RNR 2031: Principles of Wildlife Management, and RNR 4101:Integrated Natural Resources Management and Policy). Funds were requested ($4,711) to purchase four faculty versions of model-construction software, 14 student versions of that software, and 13 copies of introductory documentation. The 14 student versions were installed on computers in the undergraduate computer lab in the SRNR (room 214).