

## LINDA A. DEEGAN

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### EDUCATION

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1985. Ph.D. Louisiana State University, Baton Rouge, LA. Department of Marine Science. Minor: Statistics. “The population ecology and nutrient cycling of gulf menhaden in Fourleague Bay, Louisiana.”
1979. M.S. University of New Hampshire, Durham, NH. Zoology Department. “The growth and survivorship of Coho salmon in Great Bay, New Hampshire.”
1976. B.S. Northeastern University, Boston, MA. Biology Department, “Cum laude with Departmental Honors. Thesis Title: The growth, production, and metabolism of the mummichog (*Fundulus heteroclitus*) in a New England saltmarsh.”

### EXPERIENCE

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- 2002 – present Senior Scientist; 1994-2002; Associate Scientist 1989-1994; Assistant Scientist, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA.
- 2004 – present. Professor, Dept. of Ecology and Evolutionary Biology, Brown University, Providence, RI
- 1997 to Present - Marine Biological Laboratory, Course lecturing and laboratory teaching in the Semester in Environmental Science.
- 1991-present. Adjunct Associate Professor; 1989-1990 - Adjunct Assistant Professor; 1985-1988 - Assistant Professor, Dept. of Natural Resource Conservation and Management, University of Massachusetts, Amherst, MA.

### PROFESSIONAL SOCIETIES, SERVICE AND AWARDS

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- Fulbright Fellowship, Brazil. University of São Paulo, Piracicaba, January to June 2007
- '400 People that Make a Difference', One of 9 in 'Scientists and Thinkers' category, Cape Cod Life Magazine, March 2007.
- Ecological Society of America, *Ecological Applications*, Editorial Board, 2002-present; Member 1979-present; 1984 Murray F. Buell Award Finalist.
- Coastal and Estuarine Research Federation, Scientific Co-Chair, 2007 Meeting; Awards Committee 2003, 2005-2007; Member-at-large 1993-1995; Governing Board 2000-present; *Estuaries*, Editorial Board 1987-1992, Co-Editor of Special Issue on Florida Bay 2000. Member 1976 – present;
- 2000-present. Science team, NASA Large-Scale Biosphere-Atmosphere (LBA) Experiment in Amazônia
- 2000-present. Supervise Research Experience for Undergraduates as part of “Coastal Bays of New England” REU site
- 1998-present. Teach in MBL’s Semester in Environmental Science undergraduate semester

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National Research Council, Ocean Studies Board, Committee of the Effects of trawling on seafloor habitats. 2000-2001. Florida Bay Scientific Oversight Panel, 1995-1999.

New England Estuarine Research Society, President 2000-present; President-Elect 1998-2000; Executive Committee 1988-1989; Member 1977-present.

American Fisheries Society, National Strategy Planning Committee 1993-1994; Member 1976-present.

Southern New England Chapter, American Fisheries Society President 1988-1989; President-elect 1987-1988; Secretary-Treasurer 1986-1987; Member 1985 – present.

Waquoit Bay Scientific Advisory Board, 1985 – 1989.

Buzzards Bay Project, Scientific Advisory Board, 1990 – 1998.

Massachusetts Audubon Society, Scientific Advisory Committee 1995 – present.

Marine Biological Laboratory Corporation member 1991 – present.

American Assoc. of University Women, LSU Chapter, 1983 Outstanding Graduate Student.

Phi Sigma Honor Society, 1976 Award for Excellence in Undergraduate Research.

Sigma Xi Honor Society, 1974 Grant-in-aid for Academic Scholarship.

### SYNERGISTIC ACTIVITIES

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- 1) Editorial Board of *Ecological Applications*, Ecological Society of America; Past editor for *Estuaries*, Scientific Co-Chair for 2007 meeting of the International Estuarine Research Federation. Past President of the New England Estuarine Research Society and the NE Chapter of the American Fisheries Society.
- 2) I have participated in non-traditional education such as the MBL Science Writers course, the development of three videos on environmental issues that have been broadcast on local TV stations, and outreach programs such as “Women in Science” sponsored by the New England Aquarium and developed a web site for the public (Changing Land-use and Estuaries) describing historical land-use change and the effects on estuarine ecosystems. The Gulf of Maine Council in their newsletter uses illustrations from the web site.
- 3) National Academy of Science/National Research Council committee review (2002) and coordinator of national meeting on the “Effects of trawling and dredging on the seafloor” (2003), and served on the Florida Bay Scientific Oversight Panel (1995-1999).
- 4) I am on or have served on several state and local advisory boards including the Town of Falmouth Conservation Commission, Massachusetts Audubon Society, Waquoit Bay National Estuarine Research Reserve and the EPA Buzzards Bay Project.
- 5) I have mentored 8 Postdoctoral Fellows, 8 graduate students and over 45 undergraduates on research projects. Out of 82 journal publications, I have co-authored 23 with postdoctoral associates, 14 with graduate students and 11 with undergraduates.

### COLLEAGUES, POSTDOCTORAL FELLOWS, STUDENTS, ADVISORS & CONFLICT OF INTEREST

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S. Ayvazian, EPA, Narragansett Lab, RI

J. Finn, Univ. Massachusetts, Amherst

B. Fry, Louisiana State University

A. Hershey, Univ. of North Carolina

G. Kling, Univ. of Michigan

Graduate Advisor to:

Heidi Golden, Hartford, CT

Doug Kinzey, SWFSC, FL

Sean Murphy, FERC, DC

K. Nadelhoffer, Univ. Michigan

Robert Buchsbaum, Audubon Society, MA

Martha Mather, USGS, MA

J. T. Finn, Univ. of Mass.

Cheryl Ondecka, Unknown

Cheryl Ryder, NOAA, NMFS, MA

Suesan Saucerman, EPA, CA

Postdoctoral Advisor to:

Jeffrey Hughes, Wellesley College, MA

Matthew Cieri, ME Dept. of Marine Resources

Heather Haas, NMFS, Woods Hole, MA

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Karen Buzby, Univ. West Virginia  
Melissa Weaver, University of Tennessee  
Suzanne Ayvazian, EPA, Narragansett Lab, RI

Jonathan Benstead, University of Alabama  
Jen Bowen, Princeton University

Graduate Student of:

John Day, Louisiana State University  
Bruce Thompson, Louisiana State University  
Roderick Smith, (University of New Hampshire,  
left profession)

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PUBLICATIONS. <sup>U</sup> with undergraduate, <sup>G</sup> graduate student author. (82 JOURNAL, 23 PD, 14 G, 11 UG)

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2008.

Bowen, J. L. , B. C. Crump, L. A. **Deegan**, and J. E. Hobbie. Submitted. Increased Supply Of Ambient Nitrogen Has Minimal Effect On Salt Marsh Bacterial Production. *Limnology and Oceanography*. Submitted July 2008.

Fry, B., M. Cieri, J. Hughes, C. Tobias, L. A. **Deegan**, B. Peterson. 2008. Stable Isotope monitoring of benthic-pelagic coupling with salt marsh fish. *Marine Ecology Progress Series*. Accepted July 2008.

Fleeger, J.W. D.S. Johnson, K.A. Galván and L.A. **Deegan**. 2008. Top-Down and Bottom-Up Control of Infauna Varies Across the Saltmarsh Landscape. In Press. *Journal of Experimental Marine Biology*.

Drake, D. C., L.A. **Deegan**, L.A. Harris, E. E. Miller, B.J. Peterson, and R.S. Warren. In Press. Plant N dynamics in fertilized and natural New England saltmarshes: A paired  $\delta^{15}\text{N}$  tracer study. *Marine Ecology Progress Series*.

2007

**Deegan**, L.A. J. L. Bowen, D. Drake, J. W. Fleeger, C. T. Friedrichs, K. A. Galván, J. E. Hobbie, C. Hopkinson, J. M. Johnson, D. S. Johnson, L. E. Lemay, E. Miller, B. J. Peterson, C. Picard, S. Sheldon, J. Vallino, R. S. Warren. 2007. Susceptibility of salt marshes to nutrient enrichment and predator removal. *Ecological Applications* 17(5):S42-S63.

Benstead, J. P., A. C., Green, L. A. **Deegan**, B. J. Peterson, K. Slavik, W. B. Bowden, A, E. Hershey. 2007. Recovery Of Three Arctic Stream Reaches From Experimental Nutrient Enrichment. *Journal of Freshwater Biology* 52(6): 1077-1089.

2006

Neill, C., L. A. **Deegan**, S. M. Thomas, C. L. Hauptert, A. Krusche, V. Ballester, R. Victoria. 2006. Deforestation alters the hydraulic and biochemical characteristics of small lowland Amazonian streams. *Hydrologic Processes*. 20:2563-2580.

2006. Logan, J., H. Haas, L. A. **Deegan**, and E. Gaines. Turnover rates of nitrogen stable isotopes in the salt marsh mummichog, *Fundulus heteroclitus*, following a laboratory diet switch. *Oecologia* 147:391-395.

2005. Krusche, A. V., M. V. R. Ballester, R. L. Victoria, M. C. Bernardes, N. K., L. Hanada, R. Marcondes, D. C. Victoria, A. M. Toledo, J. P. Ometto, M. Z. Moreira, A. M. Toledo, M. A. Boloso, S. G. Neto, N. Bonelli, L. A. **Deegan**, C. Neill, S. M. Thomas, A. Aufdenkampe and J. E. Richey. As mudanças no uso da terra e a biogeoquímica dos corpos d'água na Amazônia. *Acta Amazonia*. 35:197 – 205.

<sup>U</sup>2005. Deegan, L., H. Golden, J. Harrison, K. Kracko. Swimming ability and metabolism of 0+ Arctic grayling (*Thymallus arcticus*). *Journal of Fish Biology*. 67(4): 910 – 918.

2005. **Deegan**, L. A., and R. N. Buchsbaum. 2005. The Effect of Habitat Loss and Degradation on Fisheries. In: R. N. Buchsbaum, J. Pederson and W. E. Robinson (eds.). The decline of fisheries resources in New England: Evaluating the impact of overfishing, contamination, and habitat degradation. MITSG 05-5. MIT Sea Grant College Program. MIT SeaGrant Press, Cambridge, MA.

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- <sup>U</sup>2005. Benstead, J. P., L.A. **Deegan**, B. J. Peterson, A. D. Huryn, W. B. Bowden, K. Suberkropp, A. C. Green, K. M. Buzby, J. A. Vacca. Responses of a beaded arctic stream to short-term N and P fertilization. *Freshwater Biology*. 50:277-290.
- <sup>G</sup>2004. Salgado, J., M-J. Costa, H. Cabral & L. **Deegan**. Nekton use of salt marsh creeks in the upper Tejo Estuary. *Estuaries*. 27(5): 818-825.
- <sup>G</sup>2004. Salgado, J., M-J. Costa, H. Cabral & L. **Deegan**. Comparison of fish assemblages in tidal salt marsh creeks and in adjoining mudflat areas in the Tejo estuary. *Cahiers de Biologie Marine* 45 (3): 213-224.
2004. Buzby, K., and L. A. **Deegan**. Long-term survival of adult Arctic grayling in the Kuparuk River, Alaska. *Canadian Journal of Aquatic and Fisheries Science*. 61(10): 1954 – 1964.
2004. Thomas, S. M., C. Neill, L. A. **Deegan**, A. V. Krusche, V. M. Ballester and R. L. Victoria. Influences of land use and stream size on particulate and dissolved materials in a small Amazonian stream network. *Biogeochemistry* 68:135 – 151.
2004. Slavik, K., B. J. Peterson, L. A. **Deegan**, W. B. Bowden, A. E. Hershey, and J. Hobbie. Long-term response of the Kuparuk River to phosphorus fertilization. *Ecology* 85 (4): 939–954.
2003. Tobias, C. R., M. Cieri, B.J. Peterson, L. A. **Deegan**, J. Vallino, J. Hughes. Processing watershed-derived nitrogen in a well-flushed New England estuary. *Limnol. Oceanogr.* 48(5):1766 – 1778.
2003. Hobbie, J. E., G. Shaver, J. Laundre, K. Slavik, L. A. **Deegan**, J. O’Brien, S. Oberbauer, and S. MacIntyre. Climate forcing at the Arctic LTER Site, pp. 74-91. In: D. Greenland, D. Goodin and R. Smith (eds.), *Climate Variability and Ecosystem Response at Long-Term Ecological Research (LTER) Sites*. Oxford University Press, New York.
2003. Kratz, T. K., L. A. **Deegan**, M. E. Harmon, and W. K. Lauenroth. Understanding Ecological Variability in Space and Time from Long-Term Observations. *BioScience* 53:57 – 67. .
2002. **Deegan**, L. A. Lessons learned: the effects of nutrient enrichment on the support of nekton by seagrass and saltmarsh ecosystems. Special SCOR Volume. *Estuaries* 25(4b):585-600.
- <sup>U</sup>2002. **Deegan**, L. A., A. Wright, S. G. Ayvazian, J. T. Finn, H. Golden, R. R. Merson, and J. Harrison. Nitrogen loading alters seagrass ecosystem structure and support of higher trophic levels. *Aquatic Conservation: Marine and Freshwater Ecosystems* 12:193-212.
2002. Committee on Ecosystem Effects of Fishing. “Effects of Trawling and Dredging on Seafloor habitat.” National Academy Press, Washington, DC, 107 pp.
2002. Wyda, J. C., L. A. **Deegan**, J. E. Hughes, and M. J. Weaver. The response of fishes to submerged aquatic vegetation complexity in two ecoregions of the mid-Atlantic Bight: Buzzards Bay and Chesapeake Bay. *Estuaries* 25:86-100.
2002. Hughes, J. E., L. A. **Deegan**, J. C. Wyda, M. J. Weaver, and A. Wright. The effects of eelgrass habitat loss on estuarine fish communities of southern New England, USA. *Estuaries* 25:235-249.
2002. Hughes, J. E., L. A. **Deegan**, M. J. Weaver, and J. E. Costa. Regional application of an index of Estuarine Biotic Integrity based on fish communities. *Estuaries* 25:250-263.
2002. Hughes, J. E., L. A. **Deegan**, J. C. Wyda, and A. Wright. An Index of Biotic Integrity based on fish community structure applied to Rhode Island and Connecticut estuaries, pp. 49-58.

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- Proceedings of the 5<sup>th</sup> Biennial Long Island Sound Research Conference, November 2000, Stamford, CT. Connecticut Sea Grant College Program and the Long Island Sound Foundation.
2001. Neill, C., L. A. **Deegan**, S. M. Thomas, and C. Cerri. Deforestation for pasture alters nitrogen and phosphorous in soil solution and stream water of small Amazonian watersheds. *Ecological Applications* 11(6):1817-1828.
- <sup>G</sup>2001. Richey, J. E., A. Krusche, L. A. **Deegan**, V. Ballester, T. Biggs, and R. Victoria. Land use changes and the biogeochemistry of river corridors in the Amazon. *IGBP Global Change Newsletter* 45:19-22.
2001. Emeis, K.-C., J. R. Benoit, L. A. **Deegan**, A. J. Gilbert, V. Lee, J. M. Glade, M. Meybeck, S. B. Olsen, and B. von Bodungen. Group 4: Unifying Concepts for Integrated Coastal Management, pp. 341-364. In: B. Von Bodungen and R. K. Turner (eds.), *Science and Integrated Coastal Management*, 378 pp. Dahlem University Press, Berlin.
- <sup>G</sup>2001. **Deegan**, L. A., J. Kremer, T. Webler, and J. Brawley. The use of models in integrated resource management in the coastal zone, pp. 295-306. In: Von Bodungen, B., and R. K. Turner, (eds.), *Science and Integrated Coastal Management*, 378 pp. Dahlem University Press, Berlin.
- <sup>G</sup>2001. Wollheim, W. M., B. J. Peterson, L. A. **Deegan**, J. E. Hobbie, B. Hooker, W. B. Bowden, K. J. Edwardson, D. B. Arscott, and A. E. Hershey. Influence of stream size on ammonium and suspended particulate nitrogen processing. *Limnology and Oceanography* 46(1):1-13.
2000. **Deegan**, L. A., J. E. Hughes, and R. A. Rountree. Salt marsh ecosystem support of marine transient species, pp. 333-365. Invited chapter In: M. P. Weinstein and D. A. Kreeger, (eds.), *Concepts and Controversies in Tidal Marsh Ecology*. Kluwer Academic Publisher, The Netherlands
2000. Simenstad, C., S. Brandt, A. Chalmers, R. Dame, L. A. **Deegan**, R. Hodson, and E. Houde. Habitat-Biotic Interactions, Chapter 16, pp. 427- 455. In: J. Hobbie (ed.), *Estuarine Science: A synthetic approach to research and practice*. Island Press, Washington, DC.
2000. Buzby, K., and L. A. **Deegan**. Inter-annual fidelity to summer feeding sites in Arctic grayling. *Environmental Biology of Fishes* 59:319-327.
2000. Hughes, J. E., L. A. **Deegan**, B. J. Peterson, R. M. Holmes, and B. Fry. Nitrogen flow through the food web in the oligohaline zone of a New England estuary. *Ecology* 81:433-452.
2000. Holmes, R. M., B. J. Peterson, L. A. **Deegan**, J. E. Hughes, and B. Fry. Nitrogen biogeochemistry in the oligohaline zone of a New England estuary. *Ecology* 81:416:432.
1999. Wollheim, W. M., B. J. Peterson, L. A. **Deegan**, M. Bahr, D. Jones, W. B. Bowden, A. E. Hershey, G. W. Kling, and M. C. Miller. A coupled field and modeling approach for the analysis of nitrogen cycling in streams. *Journal of the North American Benthic Society* 18:199-221.
1999. Hobbie, J. E., B. J. Peterson, N. Bettez, L. A. **Deegan**, W. J. O'Brien, G. W. Kling, G. W. Kipphut, B. Bowden, and A. Hershey. Impact of global change on biogeochemistry and ecosystems of arctic freshwaters. *Polar Research* 18:1-8.
1999. Buzby, K., and L. A. **Deegan**. Relative retention of anchor and passive integrated transponder tags in arctic grayling. *North American Journal of Fisheries Management* 19:1147-1150.
- <sup>G</sup>1999. **Deegan**, L. A., H. Golden, C. J. Harvey, and B. J. Peterson. Influence of environmental variability on the growth of age-0 and adult arctic grayling. *Transactions of the American Fisheries Society* 128:1163-1175.

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- <sup>G</sup>1998. Golden, H. E., and L. A. **Deegan**. The trophic interactions of young Arctic grayling (*Thymallus arcticus*) in an Arctic tundra stream. *Freshwater Biology* 39:637-648.
1998. Harvey, C. J., B. J. Peterson, W. B. Bowden, A. E. Hershey, M. C. Miller, L. A. **Deegan**, and J. C. Finlay. Biological responses of Oksrukuyik Creek, a tundra stream, to fertilization. *Journal of the North American Benthological Society* 17(2):190-209.
1997. **Deegan**, L. A., B. J. Peterson, H. Golden, C. C. MacIvor, and M. C. Miller. Effects of fish density and river fertilization on algal standing stocks, invertebrate communities and fish production in an arctic river. *Journal of the Canadian Fisheries and Aquatic Sciences* 54(2):269-283.
- <sup>U</sup>1997. Gettel, G. M., L. A. **Deegan**, and C. J. Harvey. A comparison of whole and thin-sectioned otolith aging methods for arctic grayling and validation of annuli. *Northwest Science* 71(3): 224-232.
1997. **Deegan**, L. A., J. T. Finn, S. G. Ayvazian, C. A. Ryder, and J. Buonaccorsi. Development and validation of an estuarine biotic integrity index. *Estuaries* 20(3): 601-617.
1997. **Deegan**, L. A. and R. H. Garritt. Evidence for spatial variability in estuarine food webs. *Marine Ecology Progress Series* 147:31-47.
1997. Harvey, C. J., B. J. Peterson, W. B. Bowden, L. A. **Deegan**, J. C. Finlay, A. E. Hershey, and M. C. Miller. Organic matter dynamics in the Kuparuk River, a tundra river in Alaska, USA. *Journal of the North American Benthological Society* 16(1):18-23.
1996. Hershey, A. E., W. B. Bowden, L. A. **Deegan**, J. E. Hobbie, B. J. Peterson, G. W. Kipphut, G. W. Kling, M. A. Lock, M. C. Miller, and J. R. Vestal. The Kuparuk River: A long-term study of biological and chemical processes in an arctic river, pp. 107-130. In: A. Milner and M. W. Oswood (eds.), *Alaskan Freshwaters*. Springer-Verlag, New York.
1995. **Deegan**, L. A., J. Finn, C. S. Hopkinson, A. E. Giblin, B. J. Peterson, B. Fry, and J. Hobbie. Flow model analysis of the effects of organic matter-nutrient interactions on estuarine trophic dynamics, pp. 273-281. Joint ECSA/ERF Conference September 14-18, 1992, Plymouth England. In: K R. Dyer and R. J. Orth (eds.), *Changes in Fluxes in Estuaries: Implications from Science to Management*. Olsen & Olsen, Denmark, Sweden.
1995. Hobbie, J. E., L. A. **Deegan**, B. J. Peterson, E. B. Rastetter, G. R. Shaver, G. W. Kling, W. J. O'Brien, F. S. Chapin, M. C. Miller, G. W. Kipphut, W. B. Bowden, A. E. Hershey, and M. E. McDonald. Long-term measurements at the Arctic LTER site, pp. 391-409. In: T. M. Powell and J. H. Steele (eds.), *Ecological Times Series*. Chapman and Hall, New York.
1993. Peterson, B. J., B. Fry, L. A. **Deegan**, and A. E. Hershey. The trophic significance of epilithic algal production in a fertilized tundra river ecosystem. *Limnology and Oceanography* 38(4):872-878.
1993. Peterson, B. J., L. A. **Deegan**, and 15 others. Biological responses of a tundra river to fertilization. *Ecology* 74(3):653-672.
1993. **Deegan**, L. A. Nutrient and energy transport between estuaries and coastal marine ecosystems by fish migration. *Canadian Journal of Fisheries and Aquatic Sciences* 50:74-79.
1992. Ayvazian, S. G., L. A. **Deegan**, and J. T. Finn. Comparison of habitat use by estuarine fish assemblages in the Acadian and Virginian zoogeographic provinces. *Estuaries* 15:368-383.
1992. **Deegan**, L. A., and B. J. Peterson. Whole-river fertilization stimulates fish production in an Arctic tundra river. *Canadian Journal of Fisheries and Aquatic Sciences* 49:1890-1901.

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- <sup>G</sup>1991. Saucerman, S., and L. A. **Deegan**. Lateral and cross-channel movement of young-of-the-year winter flounder (*Pseudopleuronectes americanus*) in Waquoit Bay, Massachusetts. *Estuaries* 4(4):440-446.
1991. **Deegan**, L. A. and J. T. Finn. Ongoing fisheries research in New England estuaries. *Jana* 2(1):19-20.
1990. **Deegan**, L. A. Effects of estuarine environmental conditions on population dynamics of young-of-the-year gulf menhaden. *Marine Ecology Progress Series* 68:195-205.
1990. **Deegan**, L. A., B. J. Peterson, and R. J. Portier. Stable isotopes and cellulase activity as evidence for detritus as a food source for juvenile gulf menhaden. *Estuaries* 13:14-19.
1989. **Deegan**, L. A., C. A. S. Hall, and A. Yanez-Arancibia. Estuarine Nekton, pp. 377-437. In: J. W. Day, Jr., M. Kemp, C. A. S. Hall and A. Yanez-Arancibia (eds.), *Estuarine Ecology*. Wiley Interscience, New York.
1987. **Deegan**, L. A., and B. A. Thompson. Growth rate and life history events of young-of-the-year gulf menhaden determined from otolith studies. *Transactions of the American Fisheries Society* 116:663-667.
1986. **Deegan**, L. A. Changes in body composition and morphology of young-of-the-year gulf menhaden, (*Brevoortia patronus*) Goode, in Fourleague Bay, Louisiana. *Journal of Fish Biology* 29:403-415.
1986. Neill, C., and L. A. **Deegan**. The effect of Mississippi River delta lobe development in determining the habitat composition, diversity, and productivity of Louisiana coastal wetlands. *American Midland Naturalist* 116(2):296-303.
1986. **Deegan**, L. A., J. W. Day, Jr., J. G. Gosselink, A. Yáñez-Arancibia, G. Soberon-Chavez, and P. Sanchez-Gil. Relationships among physical characteristics, vegetation distribution and fisheries yield in Gulf of Mexico estuaries, pp. 83-100. In: D. A. Wolfe (ed.), *Estuarine Variability*. Academic Press, New York.
1986. **Deegan**, L. A. Review of R. M. May (ed.), *Exploitation of Marine Communities*. *The Quarterly Review of Biology* 61:292.
1985. **Deegan**, L. A., and B. A. Thompson. The ecology of fish communities in the Mississippi River deltaic plain, pp. 35-56. **Invited chapter**. In: A. Yanez-Arancibia (ed.), *Fish Community Ecology in Estuaries and Coastal Lagoons: Towards an Ecosystem Integration*. UNAM-ICML Publishers.
1985. **Deegan**, L. A., and C. Neill. New life on the Mississippi. *Natural History* 94(6):60-71.
1984. **Deegan**, L. A., H. M. Kennedy, and C. Neill. Natural factors and human modifications contributing to marsh loss in Louisiana's Mississippi River Deltaic Plain. *Environmental Management* 8(6):519-528.
1984. **Deegan**, L. A. and J. W. Day, Jr. Estuarine fishery habitat requirements, pp. 315-336. In: B. J. Copeland, K. Hart, N. Davis, and S. Friday (eds.), *Research for managing the Nation's estuaries: Proceedings of a conference in Raleigh, North Carolina, March 13-15*. UNC Sea Grant Publication UNC-SG-84-08.
1983. Day, J. W. Jr., W. Johnson, C. Madden, B. Thompson, L. A. **Deegan**, W. Sikora, and J. Sikora. The development of an estuarine ecosystem in a coastal freshwater deltaic environment. *Atlantica* 5(2):129-131.

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1983. Thompson, B. A., and L. A. **Deegan**. The Atchafalaya River Delta: A new fish nursery with recommendations for management, pp. 217-239. In: F. Webb (ed.), Proceedings of the Tenth Conference on Wetlands Restoration and Creation. Hillsborough Community College, Tampa, FL.
1982. Thompson, B. A., and L. A. **Deegan**. Distribution of Ladyfish (*Elops saurus*) and Bonefish (*Albula vulpes*) leptocephali in Louisiana. *Bulletin of Marine Sciences* 32(4):936-939.
1982. Taylor, J. T., and L. A. **Deegan**. A rapid method for mass marking of amphibians. *Journal of Herpetology* 16(2):172-173.
1981. **Deegan**, L. A. Increased estuarine survival of juvenile coho salmon vaccinated against *Vibrio anguillarum*. *Transactions American Fisheries Society* 110:654-657.

#### NOTES associated with research experience for undergraduates program

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- <sup>U</sup>1999. Young, T., S. Komarow, L. A. **Deegan**, and R. Garritt. Population size and summer home range of the green crab, *Carcinus maenas*, in salt marsh tidal creeks. *Biological Bulletin* 197:297-299.
- <sup>U</sup>1999. Komarow, S., T. Young, L. A. **Deegan**, and R. Garritt. Influence of marsh flooding on the abundance and growth of *Fundulus heteroclitus* in salt marsh creeks. *Biological Bulletin* 197:299-300.
- <sup>U</sup>1998. Graham, S., J. Davis, L. A. **Deegan**, J. Cebrian, J. Hughes, and J. Hauxwell. The effect of eelgrass (*Zostera marina*) density on the feeding efficiency of mummichog (*Fundulus heteroclitus*). *Biological Bulletin* 195:241-243.
- <sup>U</sup>1998. Sweeney, J., L. A. **Deegan**, and R. Garritt. Population size and site fidelity of *Fundulus heteroclitus* in a macrotidal saltmarsh creek. *Biological Bulletin* 195:238-239.
- <sup>U</sup>1997. Javonillo, R., L. A. **Deegan**, K. Chiarvalle, and J. Hughes. The importance of access to salt-marsh surface to short-term growth of *Fundulus heteroclitus* in a New England salt marsh. *Biological Bulletin* 193:288-289. <sup>U</sup>1997. Chiaravalle, K., J. Hughes, R. Javonillo, and L. A. **Deegan**. Tidal river riffle habitats support high diversity and abundance of Gammaridean amphipods. *Biological Bulletin* 192:283-285.
- <sup>U</sup>1996. Chun, K., M. J. Weaver, and L. A. **Deegan**. Assessment of fish communities in New England embayments: Application of the estuarine biotic integrity index. *Biological Bulletin* 191(2):320-321.
- <sup>U</sup>1995. Preisser, M. C., and L. A. **Deegan**. Effect of changing plant morphology on invertebrate susceptibility to predation in eelgrass beds. *Biological Bulletin* 189:242-243.

#### WORKSHOPS OR SPECIAL SYMPOSIA

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2008. Future of the Ipswich River Watershed and fisheries. Ipswich Watershed Association. June 6, 2008.
2007. Status and future of River herring on the Atlantic seacoast. Providence, RI. Conservation Law Foundation. October, 2007.
2006. LBA meeting (Brasilia). "Integrating small watershed science in LBA." Organized initial and follow-up workshop (May 7-9, 2006) in Piracicaba.

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- 2006. LTER All Scientist Meeting, Sept. 2006, YMCA of the Rockies. Participated in Workshops to develop the next 10-yr plan for the NSF LTER program.
- 2002. Symposium on Effects of Fishing Activities on Benthic Habitats: Linking Geology, Biology, Socioeconomics, and Management. **Program Committee**, November 12-14, 2002. Tampa-St. Petersburg, FL.
- 2002. Biocomplexity in Estuarine Responses to Climate Change and Variability. April 7-10, 2002. Estuarine Research Federation Workshop. Marine Biological Laboratory, Woods Hole, MA. Helped develop NSF proposal for workshop.
- 2001. Society for Environmental Journalists Annual Conference, September 2001. Cape Cod Conference on Environmental Reporting. **Invited speaker** on nitrogen loading and impacts on aquatic communities. Led field trip for approximately 20 journalist to the Cape Cod National Seashore.
- 2000. **Deegan, L. A.** Lessons learned: the effects of nutrient enrichment on the support of nekton by seagrass and saltmarsh ecosystems. National Academy of Sciences, Washington, D. C. "A comparison of the effects of nutrient loading on seagrass and saltmarsh ecosystems," U. S. National Committee to the Scientific Committee on Oceanic Research (SCOR) symposium entitled "Nutrient Over-Enrichment in Coastal Waters: Global Patterns of Cause and Effect", October 11-13, 2000.
- 1999. Dahlem Workshop on Science and Integrated Coastal Management. December 12-17, 1999. Clubhaus of the Free University of Berlin, Germany. **Invited speaker**, "The use of models in integrated resource management in the coastal zone."
- 1999. Ecological Society of America, NOAA Marine Ecosystem Classification Workshop. October 25-29, 1999. Long Key Marine Station, Long Key, FL. Workshop **organizer** and **invited speaker**, "Important attributes of seagrass systems as essential marine fisheries habitat."
- 1999. Marine Experts Workshop, January 20, 1999. New England Aquarium's Conference Center, Boston, MA. The Nature Conservancy.
- 1998. **Deegan, L. A., J. E. Hughes, and R. A. Rountree.** Salt marsh ecosystem support of marine transient species, Concepts and Controversies in Tidal Marsh Ecology. April 1998, Vineland, NJ.
- 1997. Fish Production by Tidal Marshes, Salem Permit Program Workshop. November 25, 1997, Newark Airport Marriott Hotel, Newark, NJ. Sponsored by Public Service Electric and Gas Company.
- 1997. Interagency Florida Bay Science Program's Upper Trophic Level Workshop. Atlantic Oceanographic and Meteorological Laboratories, Miami, Florida, November 4 and 5, 1997. Workshop **Chair**.
- 1997. New England Sea Grant Programs, Regional Strategic Initiative Workshop on Research in Marsh-Estuarine Ecosystems: Directions and Priorities into the Next Millennium. May 15-17, 1997, Connecticut College, New London, Connecticut.
- 1996. **Deegan, L. A., and B. J. Peterson.** Tracing the fate of nitrogen in coastal water. Water and Watersheds Conference, Washington, DC.
- 1996. Sustainable Biosphere Initiative. Ecological Resource Monitoring: Change and Trend Detection. 1-3 May, 1996. National Wildlife Visitor Center, Patuxent Research Refuge, Laurel, MD. Sponsored by the American Statistical Association and the Ecological Society of America.
- 1996. Massachusetts Audubon Society/North Shore Conservation Advocacy. The Great Marsh Summit. 24 April 1996. **Invited Speaker**. Morning Session: Status and Framework for Protection. Status - Fisheries.

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1996. Massachusetts Audubon Society/Massachusetts Bays Program (MBP). Workshop “The Decline of Fisheries Resources in New England: Evaluating the Impact of Overfishing, Contamination, and Habitat Degradation. 26 March 1996. University of Massachusetts, Boston, MA. **Invited speaker** “Effect of habitat loss and degradation on fisheries.”
1996. Food Web Workshop. **Coordinator**. 2-5 February 1996. Land Margin Ecosystem Research (LMER) Meeting, Woods Hole, MA
1994. New England Fisheries Futures, New England Environmental Conference, Tufts University Medford, MA. March 26 and 27, 1994. **Invited speaker**.
1993. Food Web Structure and Function in Estuarine Ecosystems. **Coordinator**. Land Margin Ecosystem Research (LMER) Meeting, 19-20 October 1993, Portland Oregon.
1993. Inventory and Monitoring of Submerged Aquatic Resources at the Cape Cod National Seashore, 23-24 February 1993. University of Rhode Island Sea Grant and National Park Service.
1992. Benthic Pelagic Coupling Workshop, Land Margin Ecosystem Research Coordination Meeting. Poster session, 13-14 November 1992, Woods Hole, MA.
1991. Bioindicators of Estuarine Health Workshop to evaluate EPA EMAP. Virginian Province Demonstration Project, Maryland, 11-12 March 1991.
1991. Index of Biotic Integrity Workshop. National meeting of the American Fisheries Society, 9-13 September 1991, San Antonio, TX. **Invited speaker**.
1991. **Deegan, L. A.** The impact of macroalgae on fisheries production in eelgrass beds. Special Symposia on Seagrass Ecosystems. American Fisheries Society, San Antonio, TX, September 9-13. **Invited speaker**.
1990. Stable Isotope Workshop Long-Term Ecological Research, Marine Biological Laboratory, Woods Hole, MA, 28-30 September 1990.
1990. **Deegan, L. A., S. G. Ayvazian, and J. T. Finn.** Comparisons of habitat use by nekton in the Wells and Waquoit Estuarine Research Reserves. **Invited paper**. Special symposium on Estuarine Research Reserves, NEERS meeting, October, Portland, ME.
1988. **Deegan, L. A., S. Saucerman, and D. J. Basler.** Twenty year changes in estuarine fishes production in Waquoit Bay related to ecosystem structure and productivity. New England Estuarine Research Society, Special Symposium on Coastal Ponds, April, Woods Hole, MA. **Invited Speaker**. Pp. 57-58. In: A. E. Giblin (ed.), (1990), New England Salt Pond Data Book. Technical Report CRC-90-2 WHOI.
1987. **Deegan, L. A., and J. W. Day, Jr.** Coastal fishery habitat requirements. IREP Workshop on Recruitment in Tropical Demersal Communities (TRODERP) 21-25 April, 1986. IOC Workshop Report Series. **Invited paper**.
1987. Soberon-Chavez, G., A. Yanez-Arancibia, P. Sanchez-Gil, J. Day, Jr., and L. A. **Deegan**. Relaciones entre características físicas/biológicas y capturas pesqueras en ecosistemas costeros tropicales. IREP Workshop on Recruitment in Tropical Demersal Communities (TRODERP), 21-25 April, 1986. IOC Workshop Report Series.
1987. **Deegan, L. A., and B. A. Thompson.** Growth and recruitment of gulf menhaden in Fourleague Bay, LA. Special Recruitment Session. International Estuarine Research Federation, October, New Orleans, LA.

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1987. **Deegan**, L. A. and B. J. Peterson. Kuparuk River Fertilization IV: Increases in adult and larval arctic grayling growth. Invited session on Experimental Studies of Rivers. American Society of Limnology and Oceanography, Madison, WI.
1987. Stock Assessment Workshop, National Marine Fisheries Service, Northeast Fishery Center, Woods Hole, MA, March-2 April 1987.
1987. Stock Assessment Workshop, National Marine Fisheries Service, Northeast Fishery Center, Woods Hole, MA, 5-9 May 1986.
1986. Workshop on Recruitment in Tropical Coastal Demersal Communities. **Invited speaker**, Intergovernmental Oceanographic Commission (IOC) and UNESCO sponsored workshop at Instituto de Ciencias del Mar y Limnologia, Ciudad del Carmen, Campeche, Mexico, 21-25 April 1986.
1984. **Deegan**, L. A., and J. W. Day, Jr. Estuarine fishery habitat requirements, pp. 315-336. In: B. J. Copeland, K. Hart, N. Davis and S. Friday (eds.), Research for Managing the Nation's Estuaries: Proceedings of a Conference in Raleigh, North Carolina, March 13-15, 1984. Sponsored by the National Sea Grant Program and the National Marine Fisheries Service. UNC Sea Grant Publication UNC-SG-84-08.

CONFERENCE PRESENTATIONS

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2006. Deegan, Linda A., Christopher Neill, Reynaldo L. Victoria, Christie Hauptert, M. Victoria Ballester and Alex V. Krusche, Suzanne M. Thomas. Scaling changes in biogeochemistry of small streams to the landscape: Using  $^{15}\text{N}$  to Trace N Transformations and Transport Presentation at the 10th LBA-ECO Science Team Meeting, Brasilia, October 4-6, 2006
2005. Deegan, Linda A., Christopher Neill, Reynaldo L. Victoria, Christie Hauptert, M. Victoria Ballester and Alex V. Krusche, Suzanne M. Thomas. Key Connections in Amazon Stream Corridors: Using  $^{15}\text{N}$  to Trace N Transformations and Transport. Presentation at the 9th LBA-ECO Science Team Meeting, São Paulo, November 10-12, 2005.
2005. Bowen, J. L., B. C. Crump, L. A. **Deegan**, and J. E. Hobbie. Nitrogen enrichment of a New England salt marsh: Changes in bacterial production and microbial community composition. Oral Presentation, 2006 Fall ERF Meeting, Norfolk Marriott Waterside Hotel & Convention Center, Norfolk, VA, October 16-21, 2005.
2005. Picard, C. R., B. J. Peterson, C. S. Hopkinson, and L. A. **Deegan**. Nitrate and phosphate exchange in experimentally fertilized tidal creeks. Poster Presentation, 2006 Fall ERF Meeting, Norfolk Marriott Waterside Hotel & Convention Center, Norfolk, VA, October 16-21, 2005.
2005. Johnson, J. M., and L. **Deegan**. Whole Creek manipulations of nutrients and species composition alter nekton production in a New England high marsh ecosystem. Oral Presentation, 2006 Fall ERF Meeting, Norfolk Marriott Waterside Hotel & Convention Center, Norfolk, VA, October 16-21, 2005.
2005. **Deegan**, L. A., B. J. Peterson, C. Hopkinson, J. E. Hobbie, J. Vallino, J. Fleeger, S. Warren, C. Friedrichs, and A. Sheldon. TIDE: Evaluating the combined effects of increased nutrients and the loss of species on the sustainability of salt marsh ecosystems. Oral Presentation, 2006 Fall ERF Meeting, Norfolk Marriott Waterside Hotel & Convention Center, Norfolk, VA, October 16-21, 2005.
2004. **Deegan**, L. A., C. Neill, A. V. Krusche, M. V. Ballester, S. M. Thomas, R. L. Victoria, A. F. Gessner. Key Connections in Amazon Stream Corridors: Using  $^{15}\text{N}$  to Trace N Transformations and Transport. VI Congresso Ecologico do Brazil, Joint LBA Science III and the Brazilian Ecological Congress meeting in Brasilia in July. 25 - 31 2004.
2004. Soil Nitrogen Transformations and Soil Solution Fluxes Following Clearing of Amazonian Tropical Forest for Pasture. Neill, C., M. C. Piccolo, P. A. Steudler, L. A. **Deegan**, A. V. Krusche, S. M. Thomas, J. M. Melillo, D. C. Garcia-Montiel, M. V. Ballester, C. C. Cerri, R. L. Victoria and H. Elsenbeer. VI Congresso Ecologico do Brazil, Joint LBA Science III and the Brazilian Ecological Congress meeting in Brasilia in July. 25 - 31 2004.
2004. Stream size influences the biogeochemistry of nitrogen in pasture stream channels. Hauptert, C. L., L. A. **Deegan**, C. Neill, A. V. Krusche, R. L. Victoria, and M. V. R. Ballester. VI Congresso Ecologico do Brazil, Joint LBA Science III and the Brazilian Ecological Congress meeting in Brasilia in July. 25 - 31 2004.
2004. Sheldon, S. P., S. Twichell and L. A. **Deegan**. The effects of long-term nutrient addition on a salt marsh community. New England Estuarine Research Society (NEERS), Spring 2004 Meeting, March 7-9, 2004, Radisson Hotel, Burlington, Vermont.

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2004. Freeman, C. J., H. Haas, S. Warren, L. A. **Deegan** and J. Logan. What makes mummichogs grow? The relationship between growth rates and gut contents of *Fundulus heteroclitus* held in enclosures along a salinity gradient in a New England salt march. New England Estuarine Research Society (NEERS), Spring 2004 Meeting, March 7-9, 2004, Radisson Hotel, Burlington, Vermont
2003. Using  $^{15}\text{N}$  to trace nitrogen transformations and organic matter turnover in an Amazonian rainforest stream. VI Congresso Ecologico do Brasil, 9-14 November, Fortaleza, Brazil. (C. Neill, L. A. Deegan, A. V. Krusche, M. V. Ballester, S. M. Thomas, R. L. Victoria, A. F. Gessner).
2003. Soil nitrogen transformations and soil solution fluxes following clearing of Amazonian tropical forest for pasture. Large-Scale Biosphere-Atmosphere Experiment in Amazonia Science Meeting, November 5-8, Fortaleza, Brazil. (C. Neill, M. C. Piccolo, P. A. Steudler, L. A. Deegan, A. V. Krusche, S. M. Thomas, J. M. Melillo, D. C. Garcia-Montiel, M. V. Ballester, C. C. Cerri, R. L. Victoria and H. Elsenbeer).
2003. Key connections in Amazon stream corridors: Using  $^{15}\text{N}$  to trace N transformations and transport. Large-Scale Biosphere-Atmosphere Experiment in Amazonia Science Meeting, November 5-8, Fortaleza, Brazil. (L. A. Deegan, C. Neill, M. V. Ballester, S. M. Thomas, A. V. Krusche)
2002. Haas, H., L. A. **Deegan**, and K. Rose. Building a simulation model to evaluate the effect of flooding frequency and duration on mummichog production in a New England salt marsh. New England Estuarine Research Society, Spring 2002 Meeting, May 9-11, 2002, Atlantic Oakes By-the-Sea, Bar Harbor, ME.
2002. Logan, J. M., L. A. **Deegan**, R. H. Garritt, and H. L. Haas. Evaluating the accuracy of forage fish abundance estimates in a New England salt marsh based upon seine sampling data. New England Estuarine Research Society, Spring 2002 Meeting, May 9-11, 2002, Atlantic Oakes By-the-Sea, Bar Harbor, ME.
2002. Cieri, M. D., B. Fry, L. **Deegan**, B. Peterson, J. Hughes, and C. Tobias. What a difference a year makes: using stable isotopes to track changes in an estuarine food web. New England Estuarine Research Society, Spring 2002 Meeting, May 9-11, 2002, Atlantic Oakes By-the-Sea, Bar Harbor, ME.
2001. Hughes, J. E., and L. A. **Deegan**. Application and adaptation of an index of biotic integrity based on estuarine fish communities. June 2001, American Fisheries Society, Southern New England Chapter, Hadley, MA.
2001. Hughes, J. E. and L. A. **Deegan**. Application of an index of biotic integrity based on the fish community of eelgrass habitats. February 2001, USEPA Boston, Eelgrass Conference, Boston, MA.
2001. Vallino, J., C. Tobias, M. Cieri, J. Hughes, B. Peterson, and L. A. **Deegan**. Using whole-system  $^{15}\text{N}$  tracer experiments to improve estuarine biogeochemistry models. 16<sup>th</sup> Biennial Conference of the Estuarine Research Federation, Fall Meeting, November 4-8, 2001, The Tradewinds Conference Center, St. Pete Beach, Florida.
2001. Peterson, B. J., R. M. Holmes, J. Hughes, C. Tobias, M. Cieri, L. A. **Deegan**, and B. Fry. A tracer analysis of the nitrogen cycle of two tidal rivers. 16<sup>th</sup> Biennial Conference of the Estuarine Research Federation, Fall Meeting, November 4-8, 2001, The Tradewinds Conference Center, St. Pete Beach, Florida.
2001. Tobias, C. R., M. Cieri, B. J. Peterson, L. A. **Deegan**, and J. Vallino. Estuarine processing of watershed nitrogen: system-scale insights from a whole estuary  $^{15}\text{N}$  enrichment. 16<sup>th</sup> Biennial

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- Conference of the Estuarine Research Federation, Fall Meeting, November 4-8, 2001, The Tradewinds Conference Center, St. Pete Beach, Florida.
2001. Cieri, M. B. Fry, L. A. **Deegan**, B. Peterson, and C. Tobias. Using stable isotopes to distinguish individual estuarine fish from functional aggregates: is individual variation the key? 16<sup>th</sup> Biennial Conference of the Estuarine Research Federation, Fall Meeting, November 4-8, 2001, The Tradewinds Conference Center, St. Pete Beach, Florida.
2001. **Deegan**, L. A., B. J. Peterson, M. Cieri, and J. Hughes. Using stable isotopic tracers to understand fish flexibility in habitat choice and food web connections. 16<sup>th</sup> Biennial Conference of the Estuarine Research Federation, Fall Meeting, November 4-8, 2001, The Tradewinds Conference Center, St. Pete Beach, Florida.
2001. Hughes, J., M. Cieri, K. Tholke, L. A. **Deegan**, and B. Peterson. Ecology and nutrition of *Nereis diversicolor* (Polychaeta: nereidae) in a New England Estuary. 16<sup>th</sup> Biennial Conference of the Estuarine Research Federation, Fall Meeting, November 4-8, 2001, The Tradewinds Conference Center, St. Pete Beach, Florida.
2000. Hughes, J. E., L. A. **Deegan**, and J. E. Costa. The relationship of water quality to fish community structure in southeastern New England estuaries. New England Estuarine Research Society, Fall Meeting, November 2-4, 2000, Spring House Hotel, Block Island, Rhode Island.
2000. Hughes, J., L. **Deegan**, J. Wyda, M. Weaver, and A. Wright. Loss of eelgrass habitat and effects on fish communities of southeastern Massachusetts. American Fisheries Society, Southern New England Chapter, Old Lyme, CT, June 2000.
1999. **Deegan**, L., J. Kremer, J. Hughes, J. Brawley, and T. Webler. Changing land use and estuaries (clue): modeling the links between land use and fish production. Estuarine Research Federation 15<sup>th</sup> Biennial International Conference, September 25-30, 1999, New Orleans, Louisiana.
1999. Hughes, J. E., L. A. **Deegan**, J. Champagne, and S. Valentini. Population dynamics and feeding ecology of oligohaline benthivorous fishes in a New England estuary. Estuarine Research Federation 15<sup>th</sup> Biennial International Conference, September 25-30, 1999, New Orleans, Louisiana.
1999. Kremer, J., J. Brawley, S. Nixon, M. Brush, L. A. **Deegan**, J. Hughes, and I. Valiela. Exploring transferability in an estuarine ecological model. Estuarine Research Federation 15<sup>th</sup> Biennial International Conference, September 25-30, 1999, New Orleans, Louisiana.
1999. Vallino, J. J., B. J. Peterson, L. A. **Deegan**, R. M. Holmes, and J. E. Hughes. Use of a <sup>15</sup>N enrichment experiment for the development and calibration of an estuarine biogeochemistry model. Estuarine Research Federation 15<sup>th</sup> Biennial International Conference, September 25-30, 1999, New Orleans, Louisiana.
1999. Neill, C., L. A. **Deegan**, S. Thomas, M. C. Piccolo, D. Garcia-Montiel, and C. C. Cerri. Links between deforestation, soil nutrient cycling and water chemistry in small Amazonian streams. North American Benthological Society, 47<sup>th</sup> Annual Meeting, May 25-28, 1999, Duluth, Minnesota.
1999. Thomas, S. A., L. A. **Deegan**, C. Neill, A. Krusche, and R. Victoria. Changes to water chemistry across the forest to pasture transition in small Amazonian streams. North American Benthological Society, 47<sup>th</sup> Annual Meeting, May 25-28, 1999, Duluth, Minnesota.
1999. Slavic, K., B. J. Peterson, L. A. **Deegan**, A. E. Hershey, W. B. Bowden, and M. C. Miller. Biological responses to long-term fertilization of the Kuparuk River, Alaska. North American Benthological Society, 47<sup>th</sup> Annual Meeting, May 25-28, 1999, Duluth, Minnesota.

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1999. **Deegan**, L. A., C. Neill, S. Thomas, R. Victoria, and C. Cerri. Nutrient uptake experiments in small Amazonian streams. North American Benthological Society, 47<sup>th</sup> Annual Meeting, May 25-28, 1999, Duluth, Minnesota.
1999. Buzby, K. M., and L. A. **Deegan**. Interannual site fidelity in arctic grayling. North American Benthological Society, 47<sup>th</sup> Annual Meeting, May 25-28, 1999, Duluth, Minnesota.
1998. Hughes, J. E., L. A. **Deegan**, J. Wyda, and G. Breed. Recent, rapid declines of eelgrass in southeastern Massachusetts estuaries, and effects on fish abundance and diversity. New England Estuarine Research Society, Fall Meeting, October 22-24, 1998, Quality Inn, Falmouth, MA.
1996. **Deegan**, L. A., J. E. Hughes, B. J. Peterson, and R. M. Holmes. Food web support of higher trophic levels in the oligohaline zone of the Plum Island Sound Estuary, MA. Estuarine Research Federation (ERF) National Meeting, 12-16 October, Rhode Island Convention Center, Providence, RI.
- <sup>R</sup>1996. Distler, M., J. E. Hughes, L. A. **Deegan**, B. J. Peterson, and R. M. Holmes. <sup>15</sup>N enrichment of phytoplankton in the oligohaline zone of the Plum Island Sound Estuary. Estuarine Research Federation (ERF) National Meeting, 12-16 October, Rhode Island Convention Center, Providence, RI.
1996. Holmes, R. M., B. J. Peterson, B. Fry, L. A. **Deegan**, and J. E. Hughes. Nitrogen cycling in the oligohaline zone of the Plum Island Sound Estuary, MA. Estuarine Research Federation (ERF) National Meeting, 12-16 October, Rhode Island Convention Center, Providence, RI.
1996. Hughes, J. E., L. A. **Deegan**, and R. M. Holmes. Benthic-pelagic coupling in the oligohaline zone of the Plum Island Sound Estuary, MA. Estuarine Research Federation (ERF) National Meeting. 12-16 October. Rhode Island Convention Center, Providence, RI.
1996. **Deegan**, L. A., M. J. Weaver. From a fishes perspective: the effects of eutrophication in eelgrass ecosystems. New England Estuarine Research Society (NEERS) Spring 1996 Meeting, 2-4 May. Institute of Ecosystem Studies, Millbrook, New York and Vassar College, Poughkeepsie, New York.
1995. **Deegan**, L. A., J. T. Finn, C. S. Hopkinson, A. E. Giblin, B. J. Peterson, B. Fry, and J. E. Hobbie. Flow model analysis of the effects of organic matter - nutrient interactions on estuarine trophic dynamics. ESCA/ERF Proceedings, 12-16 November, Corpus Christi, TX.
1995. **Deegan**, L. A., and R. Garritt. Carbon, nitrogen and sulfur isotopes as tracers of organic matter flow in the Plum Island Sound Estuary, Massachusetts. Estuarine Research Federation (ERF) National Meeting, 12-16 November, Corpus Christi, TX.
1993. **Deegan**, L. A. Changes in fish communities and food webs caused by invasion of macroalgae. Estuarine Research Federation (ERF) National Meeting, 14-18 November, Hilton Head, SC.
1993. **Deegan**, L. A. Development of an estuarine biotic integrity index. Estuarine Research Federation (ERF) National Meeting, 14-18 November, Hilton Head, SC.
1992. **Deegan**, L. A. Controls on secondary productivity in Waquoit Bay, LMER Poster presentation, November 13-14, LMER Workshop, Woods Hole, MA.
1992. **Deegan**, L. A., J. Finn, C. S. Hopkinson, A. E. Giblin, B. J. Peterson, B. Fry, and J. Hobbie. Flow model analysis of the effects of organic matter-nutrient interactions on estuarine trophic dynamics. In: Changes in fluxes in estuaries: implications from science to management. Joint ECSA/ERF Conference, September 14-18, 1992, Plymouth, England.

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1991. **Deegan**, L. A. and S. Saucerman. Factors affecting growth and production of YOY winter flounder. Winter Flounder Workshop, December 3, 1991, National Marine Fisheries Service, Mystic, CT.
1991. **Deegan**, L. A. The impact of macroalgae on fisheries production in eelgrass beds. Estuarine Research Federation, November 10-14, San Francisco, CA.
1991. **Deegan**, L. A. Can an Index of Biotic Integrity work in estuaries? Estuarine Research Federation, November 10-14, San Francisco, CA.
1991. **Deegan**, L. A., and J. T. Finn. Preliminary assessment of an IBI in northeastern estuaries. New England Estuarine Research Society, May 1-4, Nova Scotia, Canada.
1990. Geyer, H., L. A. **Deegan**, J. T. Finn, and S. G. Ayvazian. The effects of macroalgae on the abundance of eelgrass (*Zostera marina*) in the Waquoit Bay estuary. General Scientific Meetings, Marine Biological Laboratory, Woods Hole, MA. *Biological Bulletin* 179(2):223.
- <sup>R</sup>1990. Billard, R., L. Lynch, L. A. **Deegan**, J. T. Finn, and S. G. Ayvazian. Feeding and predation rates of young-of-the-year winter flounder, (*Pseudopleuronectes americanus*), and blue crabs, (*Callinectes sapidus*), in an eelgrass bed in Waquoit Bay, MA. General Scientific Meetings, Marine Biological Laboratory, Woods Hole, MA *Biological Bulletin* 79(2):222.
- <sup>R</sup>1990. O'Brien, K., L. A. **Deegan**, J. T. Finn and S. G. Ayvazian. The effects of macroalgae on the abundance and diversity of free-swimming invertebrates in eelgrass beds of Waquoit Bay, MA. General Scientific Meetings, Marine Biological Laboratory, Woods Hole, MA. *Biological Bulletin* 179(2):223.
- <sup>R</sup> 1990. Rand, R., L. A. **Deegan**, J. T. Finn, and S. G. Ayvazian. Influence of macroalgae in eelgrass beds on finfish abundance and dissolved oxygen in Waquoit Bay, MA. General Scientific Meetings, Marine Biological Laboratory, Woods Hole, MA. *Biological Bulletin* 179(2):223.
- <sup>R</sup>1990. Bailey, R. and L. A. **Deegan**. Food habitats of winter flounder in Waquoit Bay, MA. October NEERS meeting, Portland, ME.
- <sup>R</sup>1990. Beatty, K., J. T. Finn, and L. A. **Deegan**. Influence of variability of physical parameters on the biotic community. NEERS meeting, October, Portland, ME.
1990. Ayvazian, S. G., L. A. **Deegan**, and J. T. Finn. Habitat use by estuarine fish assemblages across two biogeographic regions. 70<sup>th</sup> Annual ASIH meeting, Charleston, SC.
1989. **Deegan**, L. A., S. G. Ayvazian, J. T. Finn, and S. Murphy. Comparison of habitat use by nekton across two biogeographic regions. Tenth International Estuarine Research Federation Meeting, October 8-12, Baltimore, MD.
1989. Saucerman, S., and L. A. **Deegan**. Growth and production of winter flounder in Waquoit Bay, MA. Tenth International Estuarine Research Federation Meeting, October 8-12, Baltimore, MD.
1989. Murphy, S., and L. A. **Deegan**. Access and use of high marsh habitats by fish in Wells, ME. Tenth International Estuarine Research Federation Meeting, October 8-12, Baltimore, MD.
1997. Comparison of sources of organic matter in estuarine food webs: is nitrogen a better indicator than carbon of the importance of organic matter sources? Estuarine and Coastal Shelf Science Association. The Tagus Estuary and Adjoining Coastlines, Faculdade de Ciencias, Universidade de Lisboa, Portugal, June 25-27, 1997.
1987. Peterson, G. J., B. Fry, L. A. **Deegan**, and A. Hershey. Nitrogen and carbon stable isotopes trace riverine organic matter flow. North American Benthological Society, Orono, ME.

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1985. **Deegan**, L. A. Estuarine-dependent migration as a mechanism for energy and nutrient flux from estuaries. International Estuarine Research Federation Meeting, July 28-Aug. 2, Durham, NH.
1984. **Deegan**, L. A. The role of gulf menhaden migration in nutrient and energy flows in a Louisiana estuary. Ecological Society of America (ESA), August 6-9, Fort Collins, CO. *Bulletin of the Ecological Society of America* 65(2):274.
1984. **Deegan**, L. A. Cyclical succession in wetlands of the Mississippi River deltaic plain, Louisiana, ESA, Aug. 6-9, Fort Collins, CO. *Bulletin of the Ecological Society of America* 65(2):67.
1984. Thompson, B. A., G. R. Fitzhugh and L. A. **Deegan**. The influence of frontal passages on migration patterns of fish and macroinvertebrates in Louisiana tidal pass. Gulf Estuarine Research Society, May 17-19, Dauphin Island Sea Lab., AL.
1984. Thompson, B. A., W. W. Foreman, and L. A. **Deegan**. Fishes of Louisiana's Mississippi River deltaic plain estuaries. April 12-13, Knoxville, TN. Association of Southern Biologists (ASB) *Bulletin* 31(2):86.
1983. **Deegan**, L. A., and B. A. Thompson. Migration of juvenile gulf menhaden in relation to food sources. Migration Symposium: Mechanisms and Adaptive Significance, November 1-3, Port Aransas, TX.
1983. **Deegan**, L. A. Coastal biotic provinces of the Gulf of Mexico. Seventh Biennial International Estuarine Research Conference, Oct. 22-26, Virginia Beach, VA. *Estuaries* 6(3):263.
1983. **Deegan**, L. A., and B. A. Thompson. Dynamics of lipid storage and feeding modes of juvenile gulf menhaden. ESA, August 7-11, Grand Forks, ND. *Bulletin of the Ecological Society of America* 64(2):187.
1983. Thompson, B. A., and L. A. **Deegan**. A comparison of the fish community structure of Lake Ponchartrain and Atchafalaya Bay. Louisiana Chapter American Fisheries Society, Workshop on Contemporary Research in Louisiana, Aug. 12, Baton Rouge, LA.
1983. Thompson, B. A., and L. A. **Deegan**. The Atchafalaya Delta fish fauna: estuarine sense and nonsense. Special ASB Symposium, April 13-16, Lafayette, LA. *Association of Southeastern Biologists Bulletin* (2):86.
1982. **Deegan**, L. A., and B. A. Thompson. Dynamics of the fish assemblage of Fourleague Bay, a river dominated estuary. American Society of Limnology and Oceanography, June 14-17, Raleigh, NC.
1982. **Deegan**, L. A., W. B. Johnson, J. G. Gosselink and J. W. Day, Jr. Comparisons of sources and timing of primary productivity with implications for fisheries in five Gulf of Mexico estuaries. International Symposium on Utilization of Coastal Ecosystems: Planning, pollution, and productivity. October, Rio Grande do Sul, Brazil.
1982. Thompson, B. A., and L. A. **Deegan**. Fish community dynamics of the Atchafalaya-Fourleague Bay system, American Society of Ichthyologists and Herpetologists, October, Dekalb, IN.
1981. Thompson, B. A., and L. A. **Deegan**. Temporal analysis of the fish community structure in Bayou St. John, Lake Pontchartrain, Louisiana. *Association of Southeastern Biologists Bulletin* 28(2):57.
1978. **Deegan**, L. A., and R. Smith. Increased survival of *Vibrio* vaccinated salmon. New England Estuarine Research Society, New Brunswick, Canada.
1978. **Deegan**, L. A. Growth and survival of coho salmon in Great Bay, New Hampshire. UNH/UMO Joint Marine Resources conference, Bigelow Marine Lab, ME.

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1977. **Deegan**, L. A., and E. Ruber. Growth, production, and metabolism of the mummichog, (*Fundulus heteroclitus*), in a New England salt marsh. New England Estuarine Research Society, Durham, NH.

#### SEMINARS AND LECTURES

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2006. Disappearing Streams: The Hidden Casualty of Deforestation in the Amazon. Marine Biological Laboratory, Woods Hole, Ma. Friday Night Lecture Series. August 11, 2006.
2005. Ipswich Rotary Club. ' Sustainable living in coastal watersheds", November 17, 2005.
- 2005 Deforestation of Amazon forest impacts ecology of small streams. Hauptert, C. L., L. A. Deegan, C. Neill, S. Thomas, A. V. Krusche, R.L. Victoria, and M. V. R. Ballester. Woods Hole Research Center, Woods Hole, MA.
- 2005 Stream size influences the biogeochemistry of nitrogen in pasture stream channels. Hauptert, C. L., L. A. Deegan, C. Neill, A. V. Krusche, R. L. Victoria, and M. V. R. Ballester. The Ecosystems Center Seminar Series, Marine Biological Laboratory, Woods Hole, MA, March, 2005.
2000. Universidade de Lisboa, Lisboa, Portugal. "A comparison of the effects of nutrient loading on seagrass and saltmarsh ecosystems," Instituto de Oceanografia, Universidade de Lisboa, Portugal. November 5-10, 2000.
2000. Cape Cod Academy, Osterville, MA. "Watersheds at Bay: Impacts of Land Use on Coastal Water Quality," Association for the Preservation of Cape Cod, Three Bays Preservation, Inc., the Cape Cod Commission, and the Center for Marine Science and Technology. "Changes in the watershed: making the link between houses and fishes." May 6, 2000.
1999. University of Connecticut, Storrs, CT. "Changing land use and estuaries (CLUE): modeling the links between land use and fish production." March 12, 1999.
1998. Connecticut College, New London, CT. "Changing land use and estuaries (CLUE): modeling the links between land use and fish production." December 3, 1998.
1996. Environmental Protection Agency, Narragansett, RI. "Coastal eutrophication: from a fish's perspective." April, 1996.
1996. Institute of Ecosystem Studies, Millbrook, NY. "From a fish's perspective: the effects of eutrophication on seagrass ecosystems." February, 1996.
1993. Conte Anadromous Fish Research Center, U. S. Fish and Wildlife Service, Turners Falls, MA. "Whole river fertilization stimulates arctic grayling production." April 1993.
1991. Department of Environmental Sciences, University of Virginia. "The influence of coastal development in fisheries production: The effects of macroalgae on fish and decapod crustaceans." Invited by the graduate students for 2 days of seminars and discussions, October 1991.
1989. University of Massachusetts, Amherst, MA. "Effects of coastal development on fish in Waquoit Bay." February 1989.
1989. National Marine Fisheries Service, Woods Hole, MA. "Whole river fertilization stimulates arctic grayling production." November 1989.
1988. Five-College Faculty Symposium, Amherst College, Amherst, MA. "Changes in estuarine fish production in Waquoit Bay, MA." 1988.
1987. University of Rhode Island, Department of Zoology and Graduate School of Oceanography. "Whole river fertilization of an arctic stream." March 1987.

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1987. Northeastern University, Marine Biology Seminar Series, Marine Science and Maritime Studies Center, Nahant, MA. "The role of juvenile menhaden in estuarine ecology." May 1987.
1986. Five-College Ecology Seminar, Department of Zoology, University of Massachusetts. "The response of arctic grayling to nutrient enrichment." April 1986.
1986. Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA. "The role of gulf menhaden in estuarine nutrient cycling." October 1986.
1985. Suffolk University, Beacon Hill, Boston, MA. "Louisiana wetlands - why are we losing them?" November 1985.

## NON-REFEREED REPORTS

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2000. Allee, R. J., D. Brown, L. A. **Deegan**, M. Dethier, R. G. Ford, T. F. Hourigan, J. Maragos, C. Schoch, K. Sealey, R. Twilley, M. P. Weinstein, and M. Yoklavich. Marine and Estuarine Ecosystem and Habitat Classification. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. NOAA Technical Memorandum NMFS-FSPO-43. July 2000.  
<http://www.nmfs.noaa.gov/habitat/watershed/index.htm>.
1999. Boynton, E., and L. A. **Deegan**. Establishing the food web links between estuaries and nearshore fisheries of New England. Final report to the Saltonstall-Kennedy Program. SK Grant #NA76FD0106.
- 1995-1999. Boesch, D. F., N. E. Armstrong, J. E. Cloern, L. A. **Deegan**, R. D. Perkins, and S. L. Williams. Florida Bay Science Conference. Report of the Florida Bay Science Review Panel. Submitted to the Program Management Committee, Florida Bay Research Program, ~20 pp. per year.
1992. **Deegan**, L. A., J. T. Finn, S. G. Ayvazian, and C. Ryder. The application of the Index of Biotic Integrity to Massachusetts estuaries. Final Report to Massachusetts Dept. of Environmental Protection, 64 pp.
1992. **Deegan**, L. A., J. T. Finn, S. G. Ayvazian, and C. Ryder. The application of the Index of Biotic Integrity to Massachusetts estuaries. Data Report to Massachusetts Dept. of Environmental Protection, 584 pp.
1991. **Deegan**, L. A., J. T. Finn, H. E. Geyer, and S. G. Ayvazian. The influence of macroalgae on fisheries production. Final report to NOAA for Grant NA90AA-H-CZ187, 35 pp.
1991. **Deegan**, L. A., J. T. Finn, and S. G. Ayvazian. Comparison of young-of-the-year nekton growth and survival in seagrass beds and marshes. Final report to NOAA for Grant NA88AA-D-CZ006, 43 pp.
1991. **Deegan**, L., J. Finn, S. Murphy, and S. G. Ayvazian. Are critical habitats determined by life history strategies or habitat availabilities? Final report to NOAA for Grant NA88AA-D-CZ005, 105 pp.
1990. **Deegan**, L., J. T. Finn, S. G. Ayvazian, R. Berry, D. Kinzey, and C. Ryder. Application of the Index of Biotic Integrity to Massachusetts Estuaries. Year II Report to Massachusetts Dept. of Environmental Protection, 64 pp.
1990. **Deegan**, L. A., and F. Serchuk. Growth and reproduction dynamics of the Iceland Scallop (*Chalymus islandica*) off Cape Cod, MA. Final Report to Woods Hole Oceanographic Sea Grant, 76 pp.

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1988. Finn, J. T., and L. A. **Deegan**. An evaluation of remote sensing data for use and application in watershed land use and water quality investigations, 1987-1988. Final Report to Mass. Dept. of Environmental Protection, 112 pp.
1984. **Deegan**, L. A. Abundance, size, growth and mortality of juvenile gulf menhaden in Fourleague Bay, Louisiana. Final Report to Coastal and Marine Fisheries Program, 23 pp.
1984. Thompson, B. A., G. R. Fitzhugh, and L. A. **Deegan**. The influence of frontal passages on migration patterns of fish and macroinvertebrates in a Louisiana tidal pass. Final Report to Coastal and Marine Fisheries Program # 84-8, 35 pp.
1983. Thompson, B. A., and L. A. **Deegan**. The Atchafalya River Delta: a 'new' fishery nursery, with recommendations for management. Final Report to Coastal and Marine Fisheries Program 83-06, 23 pp.
1983. **Deegan**, L. A., J. W. Day, Jr., J. G. Gosselink, and A. Yanez-Arancibia. Relationships of vegetation to climate, river discharge and geomorphology in sixty-four Gulf of Mexico estuaries. Final report to Office of Marine Pollution, 63 pp.
1983. **Deegan**, L. A., W. B. Johnson, J. W. Day, Jr., J. G. Gosselink, and A. Yanez-Arancibia. Relationships between primary productivity and physical characteristics in eight Gulf of Mexico estuaries. Final report to Man and the Biosphere Program, 57 pp.
1980. Day, J. W., Jr., R. Costanza and L. A. **Deegan**. The use of the systems approach for quantifying environmental impacts. U.S. Fish and Wildlife Service, 30 pp.
1980. Stone, J. H., and L. A. **Deegan**. Preliminary modeling of the Lake Pontchartrain ecosystem by computer simulations, pp. 1-20. In: J. H. Stone (ed.), Environmental Analysis of Lake Pontchartrain, Louisiana, its Wetland Resources, LSU. Contract for U. S. Army Engineer District, New Orleans.
1975. **Deegan**, L. A. Length mass regression on additional Winter Park Lake fish. Ecological Studies on Central Florida Lakes 7:92-93.
1975. **Deegan**, L. A. Analysis of fish population distribution in Lake Virginia and Lake Mizell for summer, 1974. Ecological Studies on Central Florida Lakes 7:84-91.
1975. **Deegan**, L. A. Analysis of species composition, occurrence, and diversity of the fish populations in selected Florida lakes. Ecological Studies on Central Florida Lakes 7:74-83.
1975. **Deegan**, L. A. Checklist of fishes in the Winter Park lake chain. Ecological Studies on Central Florida Lakes 7:71-73.
1973. **Deegan**, L. A. Age structure, length mass regressions and oxygen bomb calorimetry of lake forage fishes. Ecological Studies on Central Florida Lakes 6:5-15.

## HONORS

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- 1984 Murray F. Buell Award Finalist, Ecological Society of America.
- 1983-1984 Rockefeller Scholarship, Governor's Special Commission on Education, LA.
- 1983 Lipsey Memorial Scholarship, Outstanding Marine Science Student.
- 1983 American Assoc. of University Women, LSU Chapter, Outstanding Graduate Student.
- 1979 Noyes Foundation Scholarship for Study in Ecology at MBL.
- 1979 Univ. New Hampshire Marine Program Scholarship for Study in Ecology at MBL.
- 1976 Inducted into Sigma Xi and Phi Sigma at Northeastern University.
- 1976 Phi Sigma Award for Excellence in Undergraduate Research.

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- 1976 Departmental Honors for Undergraduate Research.  
1974 Sigma Xi Grant-in-aid.  
1973-1974 Grant-in-aid for Academic Scholarship.  
1972-1976 Dean's Honor List.

## EDUCATIONAL ACTIVITIES

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### Web Page

2002. TIDE- Describes ongoing large-scale experiment to understand the effects of nutrient enrichment and species change on coastal saltmarshes. <http://ecosystems.mbl.edu/Tide/>  
2000. Changing Land Use and Estuaries (CLUE). designed to describe the connections between land-use in the uplands and changes in the adjacent coastal eelgrass ecosystems due to increased nitrogen flows. <http://ecosystems.mbl.edu/Research/Clue/Web page>

### Videos and radio shows

2008. Pulse of the Planet, National Public Radio. Three-part series featuring work on Arctic grayling in the Kuparuk River. Content described the impact of climate change on rivers and fish.  
2001. Coastal Eutrophication. Developed by the Cape Cod Commission, this video describes the connections between changes in land use, nitrogen flows and the resultant effects on coastal ecosystems.  
2000. MBL Highlights. Produced by the local television station to highlight research being conducted at MBL in which the local community might have an interest. My segment emphasized the links between upland development and loss of fish habitat and fishes.  
1996. Arctic Research video – produced by NSF for distribution to Native American high schools in Alaska. One segment was on the work on the Kuparuk River and fish production.

### Post-doctoral fellows under my direction

- Suzanne Ayvazian, 1988-1990.  
Jeffrey Hughes, 1996 – 2002.  
Melissa Weaver, 1996 – 1998.  
Matthew Cieri, 1999 – 2001.  
Heather Haas, 2002 – 2004.  
Karen Buzby, 1998 – 2002.  
Jonathan Benstead, 2002 – 2006.  
Jennifer Bowen , 2003- 2007.

### Graduate Student Thesis Director - Department of Natural Resource Conservation and Management, University of Massachusetts at Amherst

1996. Heidi Golden, M.S., Ecology of young-of-the-year arctic grayling.  
1993. Cheryl Ryder, M.S., Application of the estuarine Index of Biotic Integrity to Buttermilk Bay.  
1991. Sean Murphy, M.S., The ecology of estuarine fishes in southern Maine high marshes.  
1990. Suesan Saucerman, M.S., Movement, distribution and productivity of post-metamorphic winter flounder in different habitat types in Waquoit Bay, MA.

### Graduate Student Committee Member

Linda A. Deegan

- 2007 Joe Smith, Ph.D. Candidate. Natural Resource Conservation and Management, University of Massachusetts
- 2007 Ylva Olsen, Ph.D. Candidate, Boston University Marine Program
- 2007 Sophia Fox. Ph.D., Boston University Marine Program.
- 2007 Sarah Pautze M.S., Natural Resource Conservation and Management, University of Massachusetts
2003. Kristen Ferry, M.S., Natural Resource Conservation and Management, University of Massachusetts.
2000. Joam P. Salgado, Ph.D. Instituto de Oceanographica, Universidade de Lisboa, Lisboa, Portugal.
1990. Robin Berry, M.S., Forestry and Wildlife, University of Massachusetts.
1988. Jay McMenemy, M.S., Forestry and Wildlife, University of Massachusetts.
1988. Paul Cezilwitz, M.S., Forestry and Wildlife, University of Massachusetts.
1987. Chris Webber, M.S., Forestry and Wildlife, University of Massachusetts.
1987. Joshua Philibert, M.S., Botany, University of Massachusetts.
1987. Mark Fregeau, Ph.D., Zoology, University of Massachusetts.

Undergraduate Project Advisor – (Italics indicates project was basis for senior thesis of student)

1. *John Chick, University of Massachusetts. (1988). Lipid storage of adult arctic grayling.*
2. Rosemary Bailey, University of Massachusetts. (1991). Young-of-the-year winter flounder feeding.
3. Karen Beatty, University of Massachusetts. (1992). Salt marsh creek variability.
4. *Gretchen Gettle, MBL/Boston University Marine Program. (1993). Age of adult arctic grayling.*
5. *John Harrison, Brown University. (1995). Young-of-the-year arctic grayling metabolism. Office of Polar Programs.*
6. Mathew Preisser, Bucknell University. (1995). Influence of physical structure on predation of fish on invertebrates. OCE 93-00490 (REU Site Award to Boston University Marine Program).
7. *Amos Wright, Amherst College. (1995). Abundance and growth of young-of-year arctic grayling in the Kuparuk River, Alaska. REU supplement to NSF-DEB-9211775 (ARC LTER).*
8. Gabriel Seifert, University of Kiel, Germany. (1996). Nutrient flux caused by winter flounder disturbance.
9. Mike Buchalski, Michigan State University. (1996). Comparison of traditional gut content analyses to isotopic tracer determinations of food webs supporting young-of-year fish in Plum Island Sound, MA. DEB-9407829 (Ecosystem scale<sup>15</sup>N tracer).
10. Kehau Chen, Brigham Young Univ. (1996). Comparison of long-term and year-to-year changes in fish populations in response to eutrophication of Waquoit and Buttermilk Bays. REU supplement to NSF/EPA -R 824767-01-0 (Tracing the fate of nitrogen inputs from watersheds to estuaries).
11. Matt Distler, Amherst College. (1996). The importance of phytoplankton to the oligohaline food web: An isotopic tracer test in Plum Island Sound, MA. WHMSC / 5 College Program Internship.
12. Katina Chiavarella, Coastal Carolina University. (1997). Tidal river riffle habitats support high diversity, abundance, and growth of gammaridean amphipods.
13. Rob Javonillo, Boston University. (1997). The influence of marsh access on mummichog growth. NSF REU.
14. *Cate O'Keefe, Hampshire College. (1997). Effects of nutrient loading on population densities of Arctic grayling young-of-the-year in two arctic Rivers. Office of Polar Programs.*
15. Jessica Davis, Bucknell University. (1998). Feeding efficiency of fish in mixed eelgrass/algae communities. NSF REU.

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16. Suzanne Graham, University of California. (1998). Threshold effects of eelgrass structure on feeding efficiency in fishes. NSF REU.
17. Jennifer Sweeney, Hiram College. (1998). Population size and site fidelity of *Fundulus heteroclitus* in a macrotidal salt marsh creek.
18. Talia Young, Swarthmore College. (1999). Population size and summer home range of *Carcinus maenus* in salt marsh tidal creeks. PIE LTER
19. Sharon Komarow, Stanford University. (1999). The influence of flooding on the abundance and growth of *Fundulus heteroclitus* in salt marsh creeks. PIE LTER
20. Lynn Stankiewicz, Clark University. (1999). *Growth of juvenile grayling in small arctic streams.* ARC LTER
21. Dirk Fleischer, University of Kiel, Germany. (1999). Species composition of a phytoplankton bloom in the Rowley River, MA.
22. Jamie Haines, Connecticut College. (2000). *Food choice convergence of benthic and pelagic fishes along an estuarine geomorphological gradient*
23. Kara Sergeant, Dickinson College. (2000). Bivalve grazing pressure on primary producers in a New England estuary.
24. Amelia Wolf, Colorado College. (2000). Dissolved inorganic nitrogen uptake kinetics and relative preference indices for estuarine primary producers.
25. Julie Horowitz, Hampshire College. (2001) *Stable Isotopic Analysis of food webs in hayed and reference salt marshes.*
26. Sarah Twitchell, Middlebury College, Vermont. (2002). *The effect of nutrient enrichment on salt marsh food webs.*

Linda A. Deegan

Course Instructor

WFBIO 696 - Animals in Ecosystems; 1987.  
WFBIO 672 - Dynamics of Exploited Fish Populations; 1985, 1987.  
WFBIO 571 - Ecology of Marine Fisheries; 1986-1988.  
WFBIO 597 - Independent Study for Undergraduate Students; 1986-1988.  
WFBIO 197 - Fauna of New England; 1987, 1988.

Course Lecturer

MBL, Ecosystems Center, Aquatic Ecology; 1997-2001.  
NAREST 100 - Conservation of Natural Resources; 1985-1987.  
WFBIO 563 - Ecology and Management of Wetland Wildlife; 1986.  
WFBIO 577 - Introduction to Systems Ecology; 1985.  
Hampshire College - Geology and Ecology of New England; 1986.  
WFBIO 577 - Modeling in Fish and Wildlife; 1987.  
Smith College - Marine Ecology; 1987.  
Hampshire College - Aquatic Biology; 1988.

My Graduate Program funding history

1984-1985	Marine Fisheries Fellowship, Coastal Fisheries Institute, Louisiana State University.
1983	Graduate Research Assistant, Department of Marine Sciences, Louisiana State University.
1981-1982	Research Associate III, Center for Wetland Resources, Louisiana State University.
1979-1980	Graduate Research Assistant, Department of Marine Sciences, Louisiana State University.
1978-1979	Teaching Assistant, Zoology Department, University of New Hampshire.
1977-1978	Research Assistant, Zoology Department, University of New Hampshire.

REQUESTS TO REVIEW

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National Review Panels

NSF LTER Renewal Panel. National Science Foundation. April 2002.  
Coastal Ocean Program. Multiple stressors in Coastal ecosystems Panel. April 2002. Declined due to schedule conflict.  
NRC Panel, Review of the Army Corps. Of Engineers. April 2002. Declined due to schedule conflict.  
NMFS MARFIN Panel, St. Petersburg, Fla. April 2002. Declined due to schedule conflict.  
NMFS Bluefish Ecology Panel, New Jersey. April 2002. Declined due to schedule conflict.  
USDA NRI Managed Ecosystems panel. 2002. Declined due to schedule conflict.  
NSF Biocomplexity Coupled human natural systems. 2002. Declined due to schedule conflict.  
NRC, Panel Review of "The effects of mobile bottom gear on benthic ecosystems. 2000-2002.  
NSF Biocomplexity Panel Human Dominated Ecosystems. 2000.  
NSF LTER Renewal Advisory Panel. National Science Foundation. 1996.  
Florida Bay Science Review Panel. 1995-1999. Evaluate the quality, relevance and progress of the scientific investigations of the Florida Bay ecosystem and the factors which affect the ecosystem, and to report these evaluations and make recommendations for improvement to the Program Management Committee.  
NSF Dissertation Improvement Panel. 1998.

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EPA General Research Program Panel. 1998.

NMFS MARFIN Panel. 1993.

National Award Judging Committees

Estuarine Research Federation Awards Committee (2003, 2005)

ARCUS Award for Arctic Research Excellence (1998, 2000).

American Institute of Fisheries Research Biologists, Best Student Paper Award. Thompson Award Committee (1999, 2001).

Manuscripts and Technical Reports:

Science

Nature

Transactions of the American Fisheries Society

Ecology

Ecological Applications

Marine Ecology - Progress Series

Estuarine and Coastal Shelf Science

US EPA Bays Program

Fisheries Bulletin

Journal of Fish Biology

Marine Biology

Massachusetts Coastal Zone Management

Massachusetts Water Quality Management

Grant proposals:

National Science Foundation

US EPA

NY, NH, NJ, MA, RI Sea Grant

Water Pollution Control

NOAA Ocean Exploration Program

Hudson River Foundation

National Undersea Research Program

NOAA Estuarine Research Reserve

NOAA Coastal Habitat Program

SERVICE TO PROFESSIONAL MEETINGS AND JOURNALS

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1986-1987. Organized two chapter meetings of Southern New England Chapter of the American Fisheries Society; approximately 60-80 participants at each meeting.

1988. American Fisheries Society, September National Meeting, Providence, Rhode Island. Coordinated fund raising efforts for SNEC.

1986-1988 Marine Fisheries Newsletter, Northeastern Correspondent. Marine Fisheries Section of the American Fisheries Society.

1987. Invited to organize session at the American Fisheries Society National Meeting "Managing Tomorrow's Fisheries." Declined because of schedule conflict.

1988. Organized annual meeting of the New England Estuarine Research Society in Holyoke, MA; approximately 120 participants.

1989. Organized joint meeting of the New England Estuarine Research Society and the Southern New England Chapter of the American Fisheries Society in Bridgeport, CT.

1992. Organized a session "Importance of changing fluxes in estuaries to fisheries" as part of "Changes in fluxes in estuaries: Implications from science to management." Joint ECSA/ERF Conference, September 14-18, Plymouth, England.

1993. Organized the fall meeting of the New England Estuarine Research Society in Falmouth, MA.

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2001 – 2003. Member, Program Committee, Estuarine Research Federation Biennial meeting, Seattle, WA.

2002-. Member, Editorial Board for Ecological Applications

2002 Session Chair, Sixth Biennial LIS/NEERS Research Conference, October 24-26, 2002, University of Connecticut, Groton, CT

## COMMITTEES

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### Outside Marine Biological Laboratory

Plum Island Sound Minibays Project Technical Advisory Committee. Massachusetts Audubon Society. 1992-present. Meets quarterly to review progress on research.

Buzzards Bay Project Technical Advisory Committee, The Buzzards Bay Project, U. S. Environmental Protection Agency. 1989-1993. Meets several times a year to review proposals, evaluate research and monitoring.

Pilgrim Power Plant Technical Advisory Committee, Massachusetts Division of Water Pollution Control. 1985-1989. Meets three times a year to advise on research and monitoring plans for power plant impact on fisheries.

Waquoit Bay National Estuarine Research Reserve, National Oceanographic and Atmospheric Administration and Coastal Zone research laboratory and public information and education center. Reviewed proposals.

### Marine Biological Laboratory

Fellowship Committee, 2000 – present

Chair, MBL Forum of Year-Round Scientists, 1996-97

Marine Resources Committee, 1992-1998.

The Ecosystems Center/Boston University Marine Program Seminar, 1992.

MBL Corporation Member, 1991-present.

Facilities Committee, The Ecosystems Center, 1991-1992.

Organizer of The Ecosystems Center seminar series, 1991-1992.

Administrative Affairs Committee, The Ecosystems Center, 1989-present.

Involved MBL Science Writers in summer field research at Waquoit Bay.

MBL Diving Program, certified diver.

### University of Massachusetts

Department of Natural Resource Conservation and Management:

Curriculum Committee, Chairperson 1985-1988; Member 1985.

Recruitment Committee, Member, 1985-1987.

Awards Committee, 1986-1987.

Banquet Committee, 1987.

College of Food and Natural Resources:

Curriculum Committee, Chairperson, 1987-1988; Member 1986-1987.

Biotechnology Working Group, Chairperson.

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Wetland Ecosystem Research Group, Chairperson, 1987-1989. Initiated an interdisciplinary research group. Held organizational meeting, developed and distributed research interest questionnaire, developed brochure.

Marine and Coastal Sciences Program, 1988. Steering Committee; Member 1986-1989

Linda A. Deegan

FUNDING HISTORY  
Investigator.

bold numbers indicate grants on which I was Principal

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1. Sigma Xi National Grant-in-aid of Research. Population ecology of gulf menhaden. 1982. \$750. L.A. Deegan.
2. Department of Marine Sciences, Louisiana State University. Population ecology of gulf menhaden. 1983. \$1,500. L. A. Deegan.
3. Coastal Fisheries Institute, Louisiana State University. Age, growth and survivorship of age-0 gulf menhaden. 1/84-6/85. \$15,500. L. A. Deegan.
4. Massachusetts Division of Marine Fisheries. Growth and production of winter flounder in Waquoit Bay, MA. 9/86-6/89. \$22,500. L. A. Deegan.
5. Massachusetts Department of Environmental Quality Engineering, Division of Water Pollution Control. An evaluation of remote sensing data for use in watershed land use and water quality investigation. J. T. Finn and L. A. Deegan.. 6/87-12/88. \$49,165.
6. National Science Foundation, College Science Instrumentation Program. An equipment package for a Five College Marine Sciences Program. With P. Peckol, L. A. Deegan, C. D'Avanzo, J. Reid, M. Leicke. 5/87-5/89. \$63,200.
7. National Geographic Society. Ecological limits on arctic grayling growth and reproduction. 6/87-5/89. L. A. Deegan and B. J. Peterson. \$20,000.
8. National Sea Grant Program through the Woods Hole Oceanographic Institution. Growth dynamics of the Iceland scallop. L. A. Deegan and F. Serchuck (NMFS, Woods Hole). 6/87-6/89. \$30,700.
9. National Science Foundation, Division of Polar Programs. Continuation of the Kuparuk river and Toolik Lake fertilization experiments. With J. E. Hobbie, B. J. Peterson, W. B. Bowden, L. A. Deegan, A. Hershey, G. Kipphut, M. McDonald, M. Miller, W. J. O'Brien. 6/87-8/87. \$100,000.
10. National Science Foundation. An LTER program for the Arctic. With J. E. Hobbie, B. J. Peterson, W. B. Bowden, L. A. Deegan, A. Hershey, G. Kipphut, M. McDonald, M. Miller, W. J. O'Brien. 9/87-8/92. \$2,250,000.
11. National Oceanic and Atmospheric Administration, Estuarine Programs Office. Comparison of young-of-the-year nekton growth and survivorship in seagrass beds and marshes. (Waquoit Bay, MA). L. A. Deegan and J. T. Finn. 4/88-4/90. \$61,500.
12. National Oceanic and Atmospheric Administration, Estuarine Programs Office. Are critical habitats determined by life-history strategies or habitat availability? (Waquoit Bay, MA and Wells, ME). With J. Finn. 4/88-4/90. \$60,500.
13. National Science Foundation, Division of Polar Programs. Changes in arctic freshwaters. With J. E. Hobbie, B. J. Peterson, B. Bowden, L. A. Deegan, A. Hershey, G. Kipphut, M. McDonald, M. Miller, W. J. O'Brien. 3/88-3/91. \$1,430,225.
14. Massachusetts Department of Environmental Quality Engineering, Division of Water Pollution Control. Application of the index of biotic integrity to Massachusetts estuaries. L. A. Deegan and J. Finn. 2/88-9/91. \$116,732.
15. Massachusetts Division of Marine Fisheries. Determinants of commercial and recreational fishes nursery areas in Waquoit Bay. 7/89-6/90. \$15,000. L. A. Deegan.

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16. National Oceanic and Atmospheric Administration, Estuarine Programs Office. Effects of macroalgae on fish production in Waquoit Bay. L. A. Deegan and J. T. Finn. 4/90-4/91. \$39,999.
17. National Science Foundation. Development of automated instrumentation for the measurement of dissolved organic nitrogen in seawater, freshwater and soil solutions. With B. J. Peterson, L. A. Deegan, J. E. Hobbie and C. S. Hopkinson. 5/91-4/92. \$118,046.
18. National Science Foundation. Freshwater systems. With J. E. Hobbie, B. J. Peterson, W. B. Bowden, L. A. Deegan, A. Hershey, G. Kipphut, M. McDonald, M. Miller, W. J. O'Brien. 8/91-1/96. \$2,631,117.
19. National Oceanic and Atmospheric Administration, Estuarine Reserve Program. Effect of macroalgae manipulation on the fish community in an eelgrass habitat. L. A. Deegan., J. Finn and S. G. Ayvazian 7/92-6/93. \$49,962.
20. The Cox Foundation. Managing coastal ecosystems: understanding the link between upland management and fisheries declines. L. A. Deegan. 4/94-3/96. \$75,000.
21. National Science Foundation, Division of Polar Programs. The Arctic LTER project: Terrestrial and freshwater research on ecological controls. With J. E. Hobbie, B. J. Peterson, W. B. Bowden, L. A. Deegan, A. Hershey, G. Kipphut, M. McDonald, M. Miller, W. J. O'Brien. 9/92-8/98. \$3,907,500.
22. National Science Foundation. Plum Island Sound comparative ecosystem study (PISCES): Effects of land use and organic matter-nutrient interactions on estuarine trophic dynamics. With C. Hopkinson, L. A. Deegan, A. Giblin, J. Hobbie and J. Finn. 10/92-2/97. \$2,000,000. NSF-OCE-9214461.
23. Environmental Protection Agency. Testing the Estuarine Biotic Integrity Index across biogeographic regions. L. A. Deegan, R. Smolowicz, J. Bounacors. 10/94-9/97. \$406,557. CR-823606-01-0.
24. National Science Foundation. Controls of Structure and function of aquatic ecosystems in the Arctic. With J. E. Hobbie, B. J. Peterson, L. A. Deegan, E. Rastetter. 6/94-5/97. \$2,726,000. NSF-OPP-9400722.
25. National Science Foundation. Research experience for undergraduates in coastal bays of New England. With I. Valiela, A. E. Giblin, L. A. Deegan, C. Rietsma, C. D'Avanzo. 1996-1997. \$300,000.
26. Environmental Protection Agency. Tracing the fate of nitrogen inputs from watersheds to estuaries. L. A. Deegan, B.J. Peterson and B. Fry. 1/96-12/97. \$232,323. EPA CR-824767-01-0.
27. National Science Foundation. Links between soil nutrient and surface water biogeochemistry following deforestation for pasture agriculture in Amazonia. L. A. Deegan and C. Neill. 9/96-8/98. \$290,000. NSF-EAR-9630278.
28. National Science Foundation. Field station and marine laboratory program (FSML): ecosystems research equipment for the Marine Biological Laboratory. 9/96-9/99. J. Burris, L. A. Deegan, B. J. Peterson. NSF-BIR-9602540.
29. A. W. Mellon Foundation. Scaling of land-atmosphere and land-water linkages: a whole ecosystem approach. 6/96-5/99. With all Ecosystem Center PIs. \$750,000.
30. Environmental Protection Agency, Water and Watersheds Program. Social and ecological transferability of integrated ecological assessment models. L. A. Deegan, J. Kremer and T. Webler. 10/97-9/2001. \$851,000. CR-825757-01-0.

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31. National Oceanic and Atmospheric Administration, Saltonstall-Kennedy Funds. Establishing the food web links between estuaries and near shore fisheries in New England. L. A. Deegan and E. Boynton. 4/97–3/99. \$94,000. NOAA NA 76FD106.
32. National Science Foundation. Key connections in Arctic aquatic landscapes. J. Hobbie, L. A. Deegan, A. Giblin, and B. Peterson. 5/1/97-6/30/02. \$2,989,784. NSF-OPP-9615949.
33. National Aeronautics and Space Administration. Linking soil biogeochemistry to surface water chemistry in small drainage basins of the Amazon. L. A. Deegan and C. Neill. 7/1/98-12/31/02. \$603,267.
34. National Science Foundation. LTER Plum Island Sound Comparative Ecosystem Study (PISCES): Effects of changing land cover, climate and sea level on estuarine trophic dynamics. C. Hopkinson, L. A. Deegan, A. Giblin, J. Hobbie, B. J. Peterson, and J. Vallino. 7/1/98-6/30/04. \$3,789,998. NSF-OCE-9726921.
35. National Science Foundation. Ecosystem controls on the biogeochemical processing of watershed-derived nitrogen in tidal rivers. B. J. Peterson, L. A. Deegan and J. Vallino. 3/1/99-2/28/02. \$813,000.
36. National Aeronautics and Space Administration, Office of Protected Habitats. Biodiversity in coastal marine ecosystems: evaluation of biodiversity in submerged aquatic vegetation habitats. L. A. Deegan. 4/99 – 5/00. \$24,500. NOAA/NMFS-40AANF803410.
37. A.W. Mellon. The fate of nitrogen deposited on forest ecosystems: a comparative study using repeated <sup>15</sup>N tracer additions. With all Ecosystem Center PIs. 9/28/99-12/31/02. \$900,000.
38. National Science Foundation. Aquatic ecosystem responses to changes in the environment of an Arctic drainage basin. J. Hobbie, B. J. Peterson, L. A. Deegan, A. Giblin, and J. Vallino. 6/20/00-2/28/05. \$3,999,991.
39. National Science Foundation. Trophic cascades and interacting control processes in a detritus-based aquatic ecosystem. L. A. Deegan, J. Hobbie, C. Hopkinson, B. Peterson, and J. Vallino, S. Warren, J. Fleeger, C. Friedrichs. 10/1/02-9/30/06. \$2,700,000
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41. National Oceanic and Atmospheric Administration. Career 2004: Integrated Training in Coastal Science and Management. L. A. Deegan. 7/1/04-3/31/05. \$23,715
42. National Aeronautics and Space Administration. Quantifying and Scaling Land-Water Connections and River-Channel Biogeochemistry in Amazon River Networks. L. A. Deegan, C. Neill, R. Victoria, A. Krusche, V. Balester. 01/01/06- 12/31/07. \$210,000.