

**LEETOWN SCIENCE CENTER
FISCAL YEAR 2005 PUBLICATION LIST
(OCTOBER 2004 -- SEPTEMBER 2005)**

05-001//TF

Kynard B, Mayberry K. 2004. USGS and USACE study dispersal of federally endangered pallid sturgeon. USGS-DoD Science Collaborator 2(1):4.
Notes: Article

05-002//TF

Zydlewski GB, Haro A, McCormick SD. 2005. Evidence for cumulative temperature as an initiating and terminating factor in downstream migratory behavior of Atlantic salmon (*Salmo salar*) smolts. Canadian Journal of Fisheries and Aquatic Sciences 62(1):68-75.
Notes: Article

05-003//RT

Watten BJ, Sibrell PL, Schwartz MF. 2004. Effect of acidity and elevated P_{co2} on acid neutralization within pulsed limestone bed reactors receiving coal mine drainage. Environmental Engineering Science 21(6):786-802.
Notes: Article

05-004//RT

Watten BJ, Sibrell PL, Montgomery GATSM. 2004. Modification of pure oxygen absorption equipment for concurrent stripping of carbon dioxide. Aquacultural Engineering 32(1):183-208.
Notes: Article

05-005//RT

Watten BJ. 2004. Method and apparatus for control of aquatic vertebrate and invertebrate invasive species. United States Patent 6821442.
Notes: Patent

05-006//FH

Gauthier DT, Vogelbein WK, Ottinger CA. 2004. Ultrastructure of *Mycobacterium marinum* granuloma in striped bass *Morone saxatilis*. Diseases of Aquatic Organisms 62(1/2):121-32.
Notes: Article

05-007//FH

Rhodes MW, Kator H, Kaattari I, Gauthier D, Vogelbein W, Ottinger CA. 2004. Isolation and characterization of mycobacteria from striped bass *Morone saxatilis* from the Chesapeake Bay. Diseases of Aquatic Organisms 61(1/2):41-51.
Notes: Article

05-008//AE

King TL, Julian SE. 2004. Conservation of microsatellite DNA flanking sequence across 13 Emydid genera assayed with novel bog turtle (*Glyptemys muhlenbergii*) loci . Conservation Genetics 5(5):719-25.
Notes: Article

05-009//RT

Summerfelt S, Watten BJ, guest editors. 2004. Aquacultural Engineering Special Issue 2003 AES Issues Forum Aquacultural Engineering; Volume 32 Issue 1).
Notes: Editors

05-010//NF

Sepulveda MS, Wiebe JJ, Honeyfield DC, Rauschenberger HR, Hinterkopf JP, Johnson WE, Gross TS. 2004. Organochlorine pesticides and thiamine in eggs of largemouth bass and American alligators and their relationship with early life-stage mortality. *Journal of Wildlife Diseases* 40(4):782-6.
Notes: Article

05-011//NF//AE

Ross RM, Redell LA, Bennett RM, Young JA. 2004. Mesohabitat use of threatened hemlock forests by breeding birds of the Delaware River Basin in Northeastern United States. *Natural Areas Journal* 24(4):307-15.
Notes: Article

05-012//NF

Lellis WA, Barrows FT, Hardy RW. 2004. Effects of phase-feeding dietary phosphorus on survival, growth, and processing characteristics of rainbow trout *Oncorhynchus mykiss*. *Aquaculture* 242(1-4):607-16.
Notes: Article

05-013//FH

Panek FM. 2005. Epizootics and disease of coral reef fish in the Tropical Western Atlantic and Gulf of Mexico. *Reviews in Fisheries Science* 13(1):1-21.
Notes: Article

05-014//TF

Marshall WS, Cozzi RRF, Pelis RM, McCormick SD. 2005. Cortisol receptor blockade and seawater adaptation in the euryhaline teleost *Fundulus heteroclitus*. *Journal of Experimental Zoology* 303A:132-42.
Notes: Article

05-015//FH

Murray JB, Schill WB, Wingard GL. 2004. Florida in a Tank--The role of experiments in ecosystem restoration. Fact Sheet//U. S. Geological Survey// 2004-3116:4 pages.
Notes: Fact Sheet

05-016//AE

Henderson AP, Spidle AP, King TL. 2004. Genetic diversity, kinship analysis, and broodstock management of captive Atlantic sturgeon for population restoration. *American Fisheries Society Symposium* 44:621-33.
Notes: Article

05-017//FH

Beauchamp KA, Kelley GO, Nehring RB, Hedrick RP. 2005. The severity of whirling disease among wild trout corresponds to the differences in genetic composition of *Tubifex Tubifex* populations in central Colorado. *Journal of Parasitology* 91(1):53-60.
Notes: Article

05-018//TF

Jackson LF, McCormick SD, Madsen SS, Swanson P, Sullivan CV. 2005. Osmoregulatory effects of hypophysectomy and homologous prolactin replacement in hybrid striped bass. *Comparative Biochemistry and Physiology, Part B* 140:211-8.
Notes: Article

05-019//FH

Hinck JE, Bartish TM, Blazer VS, Denslow ND, Gross TS, Myers MS, Anderson PJ, Orazio CE, Tillitt DE. 2004. Biomonitoring of Environmental Status and Trends (BEST) Program: Environmental contaminants and their effects on fish in the Yukon River Basin. Scientific Investigations Report (U. S. Geological Survey) USGS/SIR--2004-5285:87 pages.
Notes: Report

05-020//SAL

Dobey S, Masters DV, Scheick BK, Clark JD, Peltonk MR, Sunquist ME. 2005. Ecology of Florida black bears in the Okefenokee-Osceola ecosystem. *Wildlife Monographs* (The Wildlife Society, Inc.) No.158:41 pages.
Notes: Report

05-021//NF

Honeyfield DC, Brown SB, Fitzsimons JD, Tillitt DE. 2005. Early mortality syndrome in Great Lakes salmonines. *Journal of Aquatic Animal Health* 17(1):1-3.
Notes: Article

05-022//NF

Honeyfield DC, Hinterkopf JP, Fitzsimons JD, Tillitt DE, Zajicek JL, Brown SB. 2005. Development of thiamine deficiencies and early mortality syndrome in lake trout by feeding experimental and feral fish diets containing thiaminase. *Journal of Aquatic Animal Health* 17(1):4-12.
Notes: Article

05-023//NF

Tillitt DE, Zajicek JL, Brown SB, Brown LR, Fitzsimons JD, Honeyfield DC, Holey ME, Wright GM. 2005. Thiamine and thiaminase status in forage fish of salmonines from Lake Michigan. *Journal of Aquatic Animal Health* 17(1):13-25.
Notes: Article

05-024//NF

Fitzsimons JD, Williston B, Zajicek JL, Tillitt DE, Brown SB, Brown LR, Honeyfield DC, Warner DM, Rudstam LG, Pearsall W. 2005. Thiamine content and thiaminase activity of ten freshwater stocks and one marine stock of alewives. *Journal of Aquatic Animal Health* 17(1):26-35.
Notes: Article

05-025//NF

Brown SB, Arts MT, Brown LR, Brown M, Moore K, Villella M, Fitzsimons JD, Honeyfield DC, Tillitt DE, Zajicek JL and others. 2005. Can diet-dependent factors help explain fish--to-fish variation in thiamine-dependent early mortality syndrome? *Journal of Aquatic Animal Health* 17(1):36-47.
Notes: Article

05-026//NF

Fitzsimons JD, Williston B, Amcoff P, Balk L, Pecor C, Ketola HG, Hinterkopf JP, Honeyfield DC. 2005. The effect of thiamine injection on upstream migration, survival, and thiamine status of putative thiamine-deficient coho salmon. *Journal of Aquatic Animal Health* 17(1):48-58.
Notes: Article

05-027//NF

Brown SB, Honeyfield DC, Hnath JG, Wolgamood M, Marcquenski SV, Fitzsimons JD, Tillitt DE. 2005. Thiamine status in adult salmonines in the Great Lakes. *Journal of Aquatic Animal Health* 17(1):59-64.
Notes: Article

05-028//NF

Wolgamood M, Hnath JG, Brown SB, Moore K, Marcquenski SV, Honeyfield DC, Hinterkopf JP, Fitzsimons JD, Tillitt DE. 2005. Temporal and spatial variation of early mortality syndrome in salmonids from Lakes Michigan and Huron. *Journal of Aquatic Animal Health* 17(1):65-76.
Notes: Article

05-029//NF

Wright GM, Brown SB, Brown LR, Moore K, Villella M, Zajicek JL , Tillitt DE, Fitzsimons JD, Honeyfield DC. 2005. Effect of sample handling on thiamine and thiaminolytic activity in alewife. *Journal of Aquatic Animal Health* 17(1):77-81.
Notes: Article

05-030//NF

Zajicek JL, Tillitt DE , Honeyfield DC, Brown SB, Fitzsimons JD. 2005. A method for measuring total thiaminase activity in fish tissues. *Journal of Aquatic Animal Health* 17(1):82-94.
Notes: Article

05-031//NF

Zajicek JL, Tillitt DE , Brown SB, Brown LR , Honeyfield DC, Fitzsimons JD. 2005. A rapid solid-phase extraction fluorometric method for thiamine and riboflavin in salmonid eggs. *Journal of Aquatic Animal Health* 17(1):95-105.
Notes: Article

05-032//NF

Brown SB, Brown LR, Brown M, Moore K, Vilella M, Fitzsimons JD, Williston B, Honeyfield DC, Hinterkopf JP, Tillitt DE and others. 2005. Effectiveness of egg immersion in aqueous solutions of thiamine and thiamine analogs for reducing early mortality syndrome. *Journal of Aquatic Animal Health* 17(1):106-12.
Notes: Article

05-033//NF

Brown SB, Fitzsimons JD, Honeyfield DC, Tillitt DE. 2005. Implications of thiamine deficiency in Great Lakes salmonines. *Journal of Aquatic Animal Health* 17(1):113-24.
Notes: Article

05-034//FH//TF

Iwanowicz LR, Lerner DT, Blazer VS, McCormick SD. 2005. Aqueous exposure to Aroclor 1254 modulates the mitogenic response of Atlantic salmon anterior kidney T-cells: indications of short-and long-term immunomodulation. *Aquatic Toxicology* 72(4):305-14.
Notes: Article

05-035//NF

Wright G, Honeyfield DC, Brown SB. 2005. Fish Health. Special Publication Great Lakes Fishery Commission 05-01:81-5.
Notes: Article

05-036//TF

Castro-Santos T. 2005. Optimal swim speeds for traversing velocity barriers: an analysis of volitional high-speed swimming behavior of migratory fishes. *Journal of Experimental Biology* 208():421-32.
Notes: Article

05-037//AE

Smith DR. 2005. C.N. Schuster, Jr., Barlow, R. B., H. J., and Brockman, H. J. editors. *The American Horseshoe Crab*. 2004. Harvard University Press, Cambridge, Massachusetts. 427 pages. *BioScience* 55 (2):5-7.
Notes: Book Review

05-038//AE

Brousseau LJ, Sclafani M, Smith DR, Carter DB. 2004. Acoustic-tracking and radio-tracking of horseshoe crabs to assess spawning behavior and subtidal habitat use in Delaware Bay. *North American Journal of Fisheries Management* 24(4):1376-84.
Notes: Article

05-039//TF

Carlson SM, Hendry AP, Letcher BH. 2004. Natural selection acting on body size, growth rate and compensatory growth: an empirical test in a wild trout population. *Evolutionary Ecology Research* 6():955-73.
Notes: Article

05-040//TF

Letcher BH, Dubreuil T, O'Donnell MJ, Obedzinski M, Griswold K, Nislow KH. 2004. Long-term consequences of variation in timing and manner of fry introduction on juvenile Atlantic salmon (*Salmo salar*) growth, survival, and life-history expression. Canadian Journal of Fisheries and Aquatic Sciences 61(12):2288-301.
Notes: Article

05-041//TF

Obedzinski M, Letcher BH. 2004. Variation in freshwater growth and development among five New England Atlantic salmon (*Salmo salar*) populations reared in a common environment. Canadian Journal of Fisheries and Aquatic Sciences 61(12):2314-28.
Notes: Article

05-042//SAL

Clark JD. 2004. Oak-black bear relationships in southeastern uplands [Pages 116-119]. in: Spetich MA, Editor. Upland Oak Ecology Symposium: History, current conditions, and sustainability. Fayetteville, Arkansas: United States Department of Agriculture, Forest Service, Southern Research Station. General Technical Report ; SRS-73).
Notes: Article

05-043//AE

Smith DR, Brown JA, Lo NCH. 2004. Application of adaptive sampling to biological populations [Pages 77-122]. in: Thompson WL, editor. Sampling rare or elusive species: concepts, designs and techniques for estimating population parameters. Washington, D. C.: Island Press.
Notes: Chapter

05-044//AE

Salehi MM, Smith DR. 2005. Two-stage sequential sampling: a neighborhood-free adaptive sampling procedure. Journal of Agricultural, Biological, and Environmental Statistics 10(1):84-103.
Notes: Article

05-045//TF

Luo Q, Ban M, Ando H, Kitahashi T, Bhandari RK, McCormick SD, Urano A. 2005. Distinct effects of 4-nonylphenol and estrogen-17 β on expression of estrogen receptor α gene in smolting sockeye salmon. Comparative Biochemistry and Physiology, Part C 140():123-30.
Notes: Article

05-046//AE

Villella RF, Smith DR. 2005. Two-phase sampling to estimate river-wide populations of freshwater mussels. Journal of North American Benthological Society 24(2):357-68.
Notes: Article

05-047//SAL//AE

Thompson LM, van Manen FT, King TL. 2005. Geostatistical analysis of allele presence patterns among American black bears in eastern North Carolina. Ursus 16(1):59-69.
Notes: Article

05-048//FH

Cipriano RC, Holt RA. 2005. *Flavobacterium psychrophilum*, cause of Bacterial Cold-Water Disease and Rainbow Trout Fry Syndrome. U.S. Geological Survey, Fish Disease Leaflet 86:44 pages.
Reprint: www.lsc.usgs.gov
Notes: Article//Electronic

05-049//FH

Cipriano RC, Shchelkunov IS, Faisal M, editors. 2005. Health and Diseases of Aquatic Organisms: Bilateral Perspectives//Proceedings of the Second Bilateral Conference between Russia and the United States. Shepherdstown, West Virginia: Living Oceans Foundation, Michigan State University.
Notes: Book

05-050//FH

Blazer VS, Bondad-Reantaso MG, Callinan RB, Chinabut S, Hatai K, Lilley JH, Mohan CV. 2005. *Aphanomyces invadans* (=A. *piscicida*): A serious pathogen of estuarine and freshwater fishes [Pages 24-41]. in: Cipriano RC, Shchelkunov IS, Faisal M, editors. Health and Diseases of Aquatic Organisms: Bilateral Perspectives//Proceedings of the Second Bilateral Conference between Russia and the United States. Michigan State University, East Lansing, Michigan: Living Oceans Foundation.
Notes: Chapter

05-051//FH

Cipriano RC. 2005. Atlantic salmon restoration in New England with reference to emergent disease concerns among the endangered Gulf of Maine population segment [Pages 89-106]. in: Cipriano RC, Shchelkunov IS, Faisal M, editors. Health and Diseases of Aquatic Organisms: Bilateral Perspectives//Proceedings of the Second Bilateral Conference between Russia and the United States. Michigan State University, East Lansing, Michigan: Living Oceans Foundation.
Notes: Chapter

05-052//FH

Densmore CL. 2005. Whirling disease in the United States: A shifting perspective for the 21st century [Pages 107-121]. in : Cipriano RC, Shchelkunov IS, Faisal M, editors. Health and Diseases of Aquatic Organisms: Bilateral Perspectives//Proceedings of the Second Bilateral Conference between Russia and the United States. Michigan State University, East Lansing, Michigan: Living Oceans Foundation.
Notes: Chapter

05-053//NF

Honeyfield DC, Beltman D, Holey M, Edsall C. 2005. Investigation of Thiamine and PCB association with early life stage fry mortality in Lake Trout from Northwestern Lake Michigan in 1996-1998 [Pages 182-194]. in: Cipriano RC, Shchelkunov IS, Faisal M, editors. Health and Diseases of Aquatic Organisms: Bilateral Perspectives//Proceedings of the Second Bilateral Conference between Russia and the United States. Michigan State University, East Lansing, Michigan: Living Oceans Foundation.
Notes: Chapter

05-054//FH

Ottinger CA, Blazer VS, Densmore CL, Gauthier DT, Kator H, Panek FM, Rhodes MW, Vogelbein W. 2005. Mycobacteriosis in Chesapeake Bay striped bass (*Morone saxatilis*) [Pages 238-247]. in: Cipriano RC, Shchelkunov IS, Faisal M, editors. Health and Diseases of Aquatic Organisms: Bilateral Perspectives//Proceedings of the Second Bilateral Conference between Russia and the United States. Michigan State University, East Lansing, Michigan: Living Oceans Foundation.
Notes: Chapter

05-055//FH

Starliper CE. 2005. Pathogen and disease issues associated with captive-reared, imperiled freshwater mussels [Pages 296-302]. in: Cipriano RC, Shchelkunov IS, Faisal M, editors. Health and Diseases of Aquatic Organisms: Bilateral Perspectives//Proceedings of the Second Bilateral Conference between Russia and the United States. Michigan State University, East Lansing, Michigan: Living Oceans Foundation.
Notes: Chapter

05-056//FH

Cipriano RC. 2005. Intraovum infection caused by *Flavobacterium psychrophilum* among eggs from captive Atlantic salmon broodfish. *Journal of Aquatic Animal Health* 17(3):275-83.
Notes: Article

05-057//NF

Cordes JF, Perkins DL, Kincaid HL, May B. 2005. Genetic analysis of fish genomes and populations: allozyme variation within and among Atlantic salmon from downeast rivers of Maine. *Journal of Fish Biology* 67(Supplement A):104-17.
Notes: Article

05-058//NF

Ketola HG, Chiotti TL, Rathman RS, Fitzsimons JD, Honeyfield DC, Van Dusen PJ, Lewis GE. 2005. Thiamine status of Cayuga Lake rainbow trout and its influence on spawning migration. *North American Journal of Fisheries Management* 25(4):1281-7.
Notes: Article

05-059//AE

King TL, Eackles MS, Henderson AP, Bocetti CI, Currie D, Wunderle JMJr. 2005. Microsatellite DNA markers for delineating population structure and kinship among the endangered Kirtland's warbler (*Dendroica kirtlandii*). *Molecular Ecology Notes* 5(3):569-71.
Notes: Article

05-060//AE

Callahan CR, Henderson AP, Eackles MS, King TL. 2005. Microsatellite DNA markers for the study of population structure and dynamics in nutria (*Myocastor coypus*). *Molecular Ecology Notes* 5(1):124-6.
Notes: Article

05-061//NF

van snik Gray E, Ross RM, Bennett RM. 2005. Bioassessment of fish communities of the Upper Delaware River. *Northeastern Naturalist* 12(2):203-16.
Notes: Article

05-062//NF

Ross RM, Johnson JH, Adams CM. 2005. Use of fish-otolith-length regressions to infer size of double-crested cormorant prey fish from recovered otoliths in Lake Ontario. *Northeastern Naturalist* 12(2):133-40.
Notes: Article

05-063//NF

Johnson JH, Ross RM, Farquhar JF. 2004. The effects of egg oiling on fish consumption by double-crested cormorants on Little Galloo Island, Lake Ontario, in 2004 [Pages 1-7]. in. New York State Department of Environmental Conservation 2004 Annual Report//NYSDEC Lake Ontario Annual Report 2004 Volume Section 15. New York State Department of Environmental Conservation Division of Fish, Wildlife and Marine Resources.
Notes: Report

05-064//NF

Johnson JH, Ross RM, McCullough RD, Farquhar JF. 2004. Diet composition and fish consumption of double-crested cormorants from the Little Galloo Island colony of eastern Lake Ontario in 2004 [Pages 1-10]. in. New York State Department of Environmental Conservation 2004 Annual Report//NYSDEC Lake Ontario Annual Report 2004 Volume Section 14. New York State Department of Environmental Conservation Division of Fish, Wildlife and Marine Resources.
Notes: Report

05-065//NF

Ross RM, Johnson JH, McCullough RD, Edmonds B. 2004. Diet composition and fish consumption of double-crested cormorants from the Pigeon and Snake Island colonies of eastern Lake Ontario in 2004 [Pages 1-11]. in. New York State Department of Environmental Conservation 2004 Annual Report//NYSDEC Lake Ontario Annual Report 2004 Volume Section 16. New York State Department of Environmental Conservation Division of Fish, Wildlife and Marine Resources.
Notes: Report

05-066//FH

Starliper CE. 2005. Quarantine of *Aeromonas salmonicida*-harboring ebonyshell mussels (*Fusconaia Ebena*) prevents transmission of the pathogen to brook trout (*Salvelinus fontinalis*). *Journal of Shellfish Research* 24(2):573-8.
Notes: Article