

LEETOWN SCIENCE CENTER
FISCAL YEAR 2007 PUBLICATIONS LIST

07-001//AE

King TL, Switzer JF, Morrison CL, Eackles MS, Young CC, Lubinski BA, Cryan P. 2006. Comprehensive genetic analyses reveal evolutionary distinction of a mouse (*Zapus hudsonius preblei*) proposed for delisting from the US Endangered Species Act. *Molecular Ecology* 15(14):4331-59.
Notes: Article

07-002//GSM

Parker C, Bernard E. 2006. The science approach to the Smokies ATBI. *The George Wright Forum* 23(3):26-36.
Notes: Article

07-003//GSM

Langdon K, Parker C, Nichols B. 2006. Scientific findings, success stories, lessons learned, and an alliance of ATBIs. *The George Wright Forum* 23(3):52-60.
Notes: Article

07-004//AE

Brooks RP, Snyder C, Brinson MM. 2006. Structure and functioning of tributary watershed ecosystems in the eastern rivers and mountains network: conceptual models and vital signs monitoring. *Natural Resources Report* (National Park Service) NPS/NER/NRR--2006/009:88 pages.
Notes: Report

07-005//FH

Patterson M, Rogers C, Schill WB, Miller J. 2006. Coral bleaching and disease deliver "one - two punch" to coral reefs in the US Virgin Islands. *Fact Sheet//National Park Service//U. S. Geological Survey//U. S. Department of the Interior* October 2006:2.
Notes: Fact Sheet

07-006//SAL

Kindall JL, van Manen FT. 2007. Identifying habitat linkages for American black bears in North Carolina, USA. *Journal of Wildlife Management* 71(2):487-95.
Notes: Article

07-007//TF

Garcia de Leaniz C, Fleming IA, Einum S, Verspoor E, Jordan WC, Consuegra S, Aubin-Horth N, Lajus D, Letcher BH, Youngson AF and others. 2007. A critical review of adaptive genetic variation in Atlantic salmon: implications for conservation. *Biological Review* 82():173-211.
Notes: Article

07-008//NF

Peters AK, Jones ML, Honeyfield DC, Bence JR. 2007. Monitoring energetic status of Lake Michigan chinook salmon using water content as a predictor of whole-fish lipid content. *Journal of Great Lakes Research* 33():253-63.
Notes: Article

07-009//NF

Fitzsimons JD, Williston B, Williston G, Brown L, El-Shaarawi A, Vandenbyllaardt L, Honeyfield D, Tillitt D, Wolgamood M, Brown SB. 2007. Egg thiamine status of Lake Ontario Salmonines 1995-2004 with emphasis on Lake Trout. *Journal of Great Lakes Research* 33():93-103.
Notes: Article

07-010//TF

Godinho AL, Kynard B. 2006. Migration and spawning of radio-tagged zulega *Prochilodus argenteus* in a dammed Brazilian river. *Transactions of the American Fisheries Society* 135(3):811-24.
Notes: Article

07-011//TF

Lerner DT, Bjornsson BT, McCormick SD. 2007. Effects of aqueous exposure to polychlorinated biphenyls (Aroclor 1254) on physiology and behavior of smolt development of Atlantic salmon. *Aquatic Toxicology* 81(5):329-36.
Notes: Article

07-012//RT

Watten BJ, Lee PC, Sibrell PL, Timmons MB. 2007. Effects of temperature, hydraulic residence time and elevated P_{CO₂} on acid neutralization within a pulsed limestone bed reactor. *Water Research* 41():1207-14.
Notes: Article

07-013//AE

Carlsson J, Morrison CL, Reece KS. 2006. Wild and aquaculture populations of the eastern oyster compared using microsatellites. *Journal of Heredity* 97(6):595-8.
Notes: Article

07-014//AE

Smith DR, Michels SF. 2006. Seeing the elephant: Importance of spatial and temporal coverage in a large-scale volunteer-based program to monitor horseshoe crabs. *Fisheries* 31(10):485-91.
Notes: Article

07-015//TF

Zydlowski GB, Horton G , Dubreuil T, Letcher B, Casey S, Zydlowski J. 2006. Remote monitoring of fish in small streams: A unified approach using PIT tags. *Fisheries* 31(10):492-502.
Notes: Article

07-016//FH

Blazer VS, Fournie JW, Wolf JC, Wolfe MJ. 2007. Manual for the microscopic diagnosis of proliferative liver and skin lesions in the brown bullhead (*Ameiurus nebulosus*). U. S. Geological Survey//U. S. Environmental Protection Agency//Pennsylvania Sea Grant//.
Notes: Book

07-017//FH

Ottinger CA, Jacobs JM . 2006. USGS/NOAA Workshop on *Mycobacteriosis* in striped bass, May 7-10 2006, Annapolis, Maryland. Scientific Investigations Report (U. S. Geological Survey)//NOAA Technical Memorandum NOS NCCOS// USGS/SIR--2006-5214//NOAA/TM--41:42 pages.
Notes: Report

07-018//AE

Elskus AA. 2007. Pilot study of sublethal effects on fish of pesticides currently used and proposed for use on Maine blueberries. Open File Report (U. S. Geological Survey) 2007-1110:10pp.
Notes: Report

07-019//FH

Yang X, Meier J, Chang L, Rowan M, Baumann PC. 2006. DNA damage and external lesions in brown bullheads (*Ameiurus nebulosus*) from contaminated habitats. Environmental Toxicology and Chemistry 25(11):3035-8.
Notes: article

07-020//FH

Ottinger CA, Brown JJ, Densmore CL, Starliper CE, Blazer VS, Weyers HS, Beauchamp KA, Rhodes MW, Kator H, Gauthier DT and others. 2007. Mycobacterial infections in striped bass from Delaware Bay. Journal of Aquatic Animal Health 19(2):99-108.
Notes: Article

07-021//TF

Horton GE, Dubreuil TL , Letcher BH. 2007. A model for estimating passive integrated transponder (PIT) tag antenna efficiencies for interval-specific emigration rates. Transactions of the American Fisheries Society 136(5):1165-76.
Notes: Article

07-022//TF

Hiroi J, McCormick SD. 2007. Variation in salinity tolerance, gill Na⁺/K⁺-ATPase, Na⁺/K⁺/2Cl⁻ cotransporter and mitochondria-rich cell distribution in three salmonids *Salvelinus namaycush*, *Salvelinus fontinalis* and *Salmo salar*. Journal of Experimental Biology 210():1015-24.
Notes: Article

07-023//TF

Lerner DT, Bjornsson BT, McCormick SD. 2007. Larval exposure to 4-Nonylphenol and 17 β -Estradiol affects physiological and behavioral development of seawater adaptation in Atlantic salmon smolts. Environmental Science and Technology 41():4479-85.
Notes: Article

07-024//TF

Lerner DT, Bjornsson BT, McCormick SD. 2007. Aqueous exposure to 4-nonylphenol and 17 β -Estradiol increases stress sensitivity and disrupts ion regulatory ability of juvenile Atlantic salmon . Environmental Toxicology and Chemistry 26(7):1433-40.
Notes: Article

07-025//NF

Fitzsimons JD, Jonas JL, Claramunt RM, Williston B, Williston G, Marsden JE, Ellrott BJ, Honeyfield DC. 2007. Influence of egg predation and physical disturbance on lake trout *Salvelinus namaycush* egg mortality and implications for life-history theory. *Journal of Fish Biology* 71(1):1-16.
Notes: Article

07-026//NF

Honeyfield DC, Vandergoot CS, Bettoli PW, Hinterkopp JP, Zajicek JL. 2007. Thiamine and fatty acid content of walleye tissue from three southern U. S. reservoirs. *Journal of Aquatic Animal Health* 19(2):84-93.
Notes: Article

07-027//FH

Densmore CL, Green DE. 2007. Diseases of Amphibians. *ILAR Journal* 48(3):235-54.
Notes: Article

07-028//NF

Ward R, Bowers K, Hensley R, Mobley B, Belouski E. 2007. Genetic variability in spotted seatrout (*Cynoscion nebulosus*), determined with microsatellite DNA markers. *Fishery Bulletin* 105(2):197-206.
Notes: Article

07-029//FH

Miller CV, Weyers HS, Blazer VS, Freeman ME. 2006. Chemical and Ecological Health of White Sucker (*Catostomus commersoni*) in Rock Creek Park, Washington, D. C., 2003-04. *Scientific Investigations Report* (U. S. Geological Survey) 2006-5140:37 pages.
Notes: Report

07-030//FH

Hinck JE, Blazer VS, Denslow ND, Echols KR , Gale RW, May TW, Clauch R, Wieser C, Anderson PJ, Coyle JJ and others. 2007. Biomonitoring of Environmental Status and Trends (BEST) Program: Environmental Contaminants, Health Indicators, and Reproductive Biomarkers in Fish from the Mobile, Apalachicola-Chattahoochee-Flint, Savannah, and Pee Dee River Basins. *Scientific Investigations Report* (U. S. Geological Survey) 2007-5176:114 pages.
Notes: Report

07-031//SAL

Telesco RL, Van Manen FT, Clark JD, Cartwright ME. 2007. Identifying sites for elk restoration in Arkansas. *Journal of Wildlife Management* 71(5):1393-403.
Notes: Article

07-032//SAL

Ratnayeke S, Van Manen FT, Padmalal UKGK. 2007. Home ranges and habitat use of sloth bears *Melursus ursinus inornatus* in Wasgomuwa National Park, Sri Lanka. *Wildlife Biology* 13(3):272-84.
Notes: Article

07-033//FH

Starliper CE. 2006. Imperiled freshwater mussels (*Unionidae*): disease prevention as part of the conservation efforts. Proceedings of the West Virginia Academy of Science 78(2):26-32.
Notes: Article

07-034//FH

Bebak JA, Welch TJ, Starliper CE, Baya AM, Garner MM. 2007. Improved husbandry to control an outbreak of rainbow trout fry syndrome caused by infection with *Flavobacterium psychrophilum*. Journal of the American Veterinary Medical Association 231(1):114-6.
Notes: Article

07-035//FH

Applegate JM, Baumann PC, Emery EB, Wooten MS. 2007. First steps in developing a multimetric macroinvertebrate index for the Ohio River. River Research and Applications 23():683-97.
Notes: Article

07-036//FH

Hinck JE, Blazer VS, Denslow NDEKR, Gross TS, May TW, Anderson PJ, Coyle JJ, Tillitt DE. 2007. Chemical contaminants, health indicators, and reproductive biomarker responses in fish from the Colorado River and its tributaries. Science of the Total Environment 378():376-402.
Notes: Article

07-037//TF

Mancera JM, McCormick SD. 2007. Role of prolactin, growth hormone, insulin-like growth factor I and cortisol in teleost osmoregulation [Pages 497-515]. in: Baldisserotto B, Mancera JM, Kapoor BG, editors. Fish Osmoregulation. New Delhi, India: Science Publishers, Inc..
Notes: Chapter

07-038//FH

Hinck JE, Blazer VS, Denslow ND, Myers MS, Gross TS, Tillitt DE. 2007. Biomarkers of contaminant exposure in northern pike (*Esox lucius*) from the Yukon River Basin, Alaska. Archives of Environmental Contamination and Toxicology 52():549-62.
Notes: Article

07-039//AE

Snyder CD, Johnson ZB. 2006. Macroinvertebrate assemblage recovery following a catastrophic flood and debris flows in an Appalachian mountain stream. Journal of the North American Benthological Society 25(4):825-40.
Notes: Article

07-040//AE

Switzer JF, Welsh SA, King TL. 2007. Microsatellite DNA primers for the candy darter, *Etheostoma osburni* and variegate darter, *Etheostoma variatum*, and cross -species amplification in other darters (Percidae). Molecular Ecology Notes OnlineEarlyArticle(): .
Notes: Article

07-041//AE

Koljonen ML, King TL, Nielsen EE. 2007. Genetic identification of individuals and populations [Pages 270-298]. in: Verspoor E, Stradmeyer L, Nielsen J, editors. The Atlantic Salmon Genetics, Conservation and Management. Oxford, UK: Blackwell Publishing Ltd.
Notes: Chapter

07-042//AE

King TL, Verspoor E, Spidle AP, Gross R, Phillips RB, Koljonen ML, Sanchez JA, Morrison CL. 2007. Biodiversity and Population Structure [Pages 117-166]. in: Verspoor E, Stradmeyer L, Nielsen J, editors. The Atlantic Salmon Genetics, Conservation and Management. Oxford, UK: Blackwell Publishing Ltd.
Notes: Chapter

07-043//NF

Ward R, Blandon IR, Gracia de Leon F, Robertson SJ, Landry AM, Anyanwu AO, Shenker JM, Figuerola M, Gesteira TC, Zerbi A and others. 2007. Studies in conservation genetics of Tarpon (*Megalops atlanticus*): microsatellite variation across the distribution of the species [Pages 131-145]. in: Ault JS, editor. Biology and Management of the World Tarpon and Bonefish Fisheries. Boca Raton, Florida: CRC Press.
Notes: Chapter

07-044//RT

Robinson GRJr, Sibrell PL, Boughton CJ, Yang LH. 2007. Influence of soil chemistry on metal and bioessential element concentrations in nymphal and adult periodical cicadas (*Magicicada* spp.). Science of the Total Environment 374 ():367-78.
Notes: Article

07-045//SAL

Hellgren EC, Bales SL, Gregory MS, Leslie DMJr, Clark JD. 2007. Testing a Mahalanobis distance model of black bear habitat use in the Quachita Mountains of Oklahoma. Journal of Wildlife Management 71(3):924-8.
Notes: Article

07-046//RT

Robinson GRJr, Larkins P, Boughton CJ, Reed BW, Sibrell PL. 2007. Assessment of contamination from arsenical pesticide use on orchards in the Great Valley region, Virginia and West Virginia, USA. Journal of Environmental Quality 36():654-63.
Notes: Article

07-047//AE

Smith DR. 2007. Effect of horseshoe crab spawning density on nest disturbance and exhumation of eggs: a simulation study. Estuaries and Coasts 30(2):287-95.
Notes: Article

07-048//AE

Sweka JA, Smith DR, Millard MJ. 2007. An age-structured population model for horseshoe crabs in the Delaware Bay area to assess harvest and egg availability for shorebirds. Estuaries and Coasts 30(2):277-86.
Notes: Article

07-049//AE

Welsh SA, Smith DR, Laney RW, Tipton RC. 2007. Tag-based estimates of annual fishing mortality of a mixed Atlantic coastal stock of striped bass. *Transactions of the American Fisheries Society* 136(1):34-42.
Notes: Article

07-050//AE

Jackson NL, Smith DR, Tiyarattanachai R, Nordstrom KF. 2007. Evaluation of a small beach nourishment project to enhance habitat suitability for horseshoe crabs. *Geomorphology* 89:172-85.
Notes: Article

07-051//AE

Nordstrom KF, Jackson NL, Smith DR, Weber RG. 2006. Transport of horseshoe crab eggs by waves and swash on an estuarine beach: implications for foraging shorebirds. *Estuarine, Coastal and Shelf Science* 70:438-48.
Notes: Article

07-052//RT

Miller AW, Sibrell PL, Wildeman TR. 2007. Comparison of sludge characteristics between lime and limestone/lime treatment of acid mine drainage. in. Joint Conference of the 24th Annual Meetings of the American Society of Mining and Reclamation; 2007 Jun 2-2007 Jun 7; Gillette, Wyoming.
Notes: Conference Paper

07-053//RT

Sibrell PL, Wildeman TR, Deaton M, Reisman DJ. 2007. Treatment of metal-mine effluents by limestone neutralization and calcite co-precipitation. in. Joint Conference of the 24th Annual Meetings of the American Society of Mining and Reclamation; 2007 Jun 2-2007 Jun 7; Gillette, Wyoming.
Notes: Conference Paper

07-054//RT

Sibrell PL, Chambers MA, Deaguero AL, Wildeman TR, Reisman DJ. 2007. An innovative carbonate coprecipitation process for the removal of zinc and manganese from mining impacted waters. *Environmental Engineering Science* 24(7):881-95.
Notes: Article

07-055//AE

Roberts H, Carney R, Kupchik M, Fisher C, Nelson K, Becker E, Goehring L, Lessard-Pilon S, Teleneski GBB, Brooks J and others. 2007. ALVIN explores the deep Northern Gulf of Mexico slope. *EOS, Transactions, American Geophysical Union* 88(35):341-2.
Notes: Article

07-056//AE

Hare MP, Allen SKJr, Bloomer P, Camara MD, Carnegie RB, Murfree J, Luckenbach M, Meritt D, Morrison C, Paynter K and others. 2006. A genetic test recruitment enhancement in Chesapeake Bay oysters, *Crassostrea virginica*, after population supplementation with a disease tolerant strain. *Conservation Genetics* 7():717-34.
Notes: Article

07-057//NF

Cole JC. 2007. Predicting flow and temperature regimes at three *Alasmidonta heterodon* locations in the Delaware River [M. S. Thesis]. Frostburg, Maryland: Frostburg State University. 172 pages.
Notes: Masters Thesis

07-058//FH

Mathes MV, O'Brien TL, Strickler KM, Hardy JJ, Schill WB, Lukasik J, Scott TM, Bailey DE, Fenger TW. 2007. Presumptive sources of fecal contamination in four tributaries to the New River Gorge National River, West Virginia 2004. Open File Report (U. S. Geological Survey) 2007-1107:28pp.
Notes: Report

07-059//NF

Ross RM, Johnson JH, McCullough RD. 2006. Diet composition and fish consumption of double-crested cormorants from the Pigeon and Snake Island colonies of Eastern Lake Ontario in 2006 [Pages 1-11]. in. New York State Department of Environmental Conservation 2006 Annual Report/NYSDEC Lake Ontario Annual Report 2006Volume Section 16. New York State Department of Environmental Conservation Division of Fish, Wildlife and Marine Resources.
Notes: Report

07-060//AE

McCormick P, Campbell SG. 2007. Evaluating the potential for watershed restoration to reduce nutrient loading to Upper Klamath Lake, Oregon. Open File Report (U. S. Geological Survey) 2007-1168:31pp.
Notes: Report