LITERATURE CITED

Adams, B. K., and J. A. Hutchings. 2003. Microgeographic population structure of brook charr: a comparison of microsatellite and mark-recapture data. Journal of Fish Biology 62: 517–533.

Allendorf, F. W., and R. F. Leary. 1988. Conservation and distribution of genetic variation in a polytypic species, the cutthroat trout. Conservation Biology 2:170–184.

Angers, B., and L. Bernatchez. 1998. Combined use of SMM and non-SMM methods to infer fine structure and evolutionary history of closely related brook charr (*Salvelinus fontinalis,* Salmonidae) populations from microsatellites. Molecular Biology and Evolution 15:143–159.

Angers, B., L. Bernatchez, A. Angers, and L. Desgroseilliers. 1995. Specific microsatellite loci for brook charr reveal strong subdivision on a microgeographic scale. Journal of Fish Biology. 47: 177–185.

Angers, B., P. Magnan, A. Angers, and L. Desgroseillers. 1999. Canonical correspondence analysis for estimating spatial and environmental effects on microsatellite gene diversity in brook charr (*Salvelinus fontinalis*). Molecular Ecology 8:1043-1053.

Avise, J. C. 2004. Molecular markers, natural history, and evolution, 2nd edition. Sinauer Associates, Inc., Massachusetts.

Bernatchez, L., and C. C. Wilson, 1998. Comparative phylogeography of neartic and paleartic freshwater fishes. Molecular Ecology 7:431–452.

Briggs, J. C. 1986. Introduction to the zoogeography of North American fishes. Pages 1–16 *in* C. H. Hocutt and E. O. Wiley, editors. The zoogeography of North American fishes. John Wiley & Sons, Inc., New York.

Brown, B., and J. Epifanio. 2003. Nuclear DNA. Pages 101–123 *in* E. M. Hallermann, editor. Population genetics: principles and applications for fisheries scientists. American Fisheries Society, Bethesda, Maryland.

Castric, V., F. Bonney, and L. Bernatchez. 2001. Landscape structure and hierarchical genetic diversity in brook charr, *Salvelinus fontinalis*. Evolution 55:1016–1028.

Cavalli-Sforza, L. L., and A. W. F. Edwards. 1967. Phylogenetic analysis: models and estimation procedures. American Journal of Human Genetics 19:233–257.

Conservation Strategy Work Group. 2005. Conserving the eastern brook trout: An overview of status, threats, and trends. Report submitted to the Eastern Brook Trout Joint Venture, International Association of Fish and Wildlife Agencies, Washington, D.C.

Cornuet, J. M., S. Piry, G. Luikart, A. Estoup, and M. Solignac. 1999. New methods employing multilocus genotypes to select or exclude populations as origins of individuals. Genetics 153:1989–2000.
Available: http://www.montpellier.inra.fr/URLB/geneclass/geneclass.html. (June 2007).

Dalton, R. 2003. Physiographic provinces of New Jersey. New Jersey Geological Survey Information Circular, Trenton, New Jersey.

Danzmann. R. G., P. E. Ihssen, and P. D. N. Hébert. 1991. Genetic discrimination of wild and hatchery populations of brook charr, (*Salvelinus fontinalis*) in Ontario using mitochondrial DNA analysis. Journal of Fish Biology 39A: 69–77.

Danzmann, R. G., and P. E. Ihssen. 1995. A phylogeographic survey of brook charr, *Salvelinus fontinalis*, in Algonquin Park, Ontario, using mitochondrial DNA variation. Molecular Ecology 4: 681–697.

Danzmann, R. G., R. P. Morgan, M. W. Jones, L. Bernatchez, and P. E. Ihssen. 1998. A major sextet of mitochondrial DNA phylogenetic assemblages extant in eastern North American brook trout (*Salvelinus fontinalis*): distribution and postglacial dispersal patterns. Canadian Journal of Zoology 76:1300–1318.

DeWoody, J. A., and J. C. Avise. 2000. Microsatellite variation in marine, freshwater and anadromous fishes compared with other animals. Journal of Fish Biology 56: 461–473.

DeYoung, R. W., and R. L. Honeycutt. 2005. The molecular toolbox: genetic techniques in wildlife ecology and management. Journal of Wildlife Management 69:1362-1384.

Eckroat, L. R. 1971. Lens protein polymorphisms in hatchery and natural populations of brook trout, *Salvelinus fontinalis* (Mitchill). Transactions of the American Fisheries Society 100:527–536.

Eckroat, L. R. 1973. Allele frequency analysis of five soluble protein loci in brook trout, *Salvelinus fontinalis* (Mitchill). Transactions of the American Fisheries Society 102:335–340.

Excoffier, L., G. Laval, and S. Schneider. 2005. Arlequin ver. 3.0: An integrated software package for population genetics data analysis. Evolutionary Bioinformatics Online 1:47–50.

Felsenstein, J. 1992. PHYLIP (phylogeny inference package), version 3.5c, Seattle, Washington.
Available at http://evolution.genetics.washington.edu/phylip.html. (June 2007).

Ferguson, M. M. 1990. The genetic impact of introduced fishes on native species. Canadian Journal of Zoology 68:1053–1057.

Fowler, H. W. 1920. A list of the fishes of New Jersey. Proceedings of the Biological Society of Washington 33:139–170.

Frankham, R., J. D. Ballou, and D. A. Briscoe. 2002. Introduction to conservation genetics. Cambridge University Press, Cambridge, United Kingdom.

Galbreath, P. F., N. D. Adams, S. Z. Guffey, C. J. Moore, and J. L. West. 2001. Persistence of native southern Appalachian brook trout populations in the Pigeon River system, North Carolina. North American Journal of Fisheries Management 21:927–934.

Goudet, J. 1995. FSTAT (Version 1.2): a computer program to calculate F statistics. Journal of Heredity. 86:485–486.
Available: http://www2.unil.ch/popgen/softwares/fstat.htm. (June 2006).

Guffey, S. Z. 1998. A population genetics study of southern Appalachian brook trout. Doctoral dissertation. University of Tennessee, Knoxville, Tennessee.

Guo, S. W., and E. A. Thompson. 1992. Performing the exact test of Hardy-Weinberg proportions for multiple alleles. Biometrics 48:361–372.

Habera, J. W., and S. Moore. 2005. Managing southern Appalachian brook trout: a position statement. Fisheries 30(7):10–20.

Habera, J. W., and R. J. Strange. 1993. Wild trout resources and management in the southern Appalachian Mountains. Fisheries 18(1):6–13.

Hamilton, P. L., and L. M. Barno. 2005. New Jersey's coldwater fisheries management plan. New Jersey Division of Fish and Wildlife, Trenton, New Jersey.

Hall, M. R., Morgan, R. P., and R. G. Danzmann. 2002. Mitochondrial DNA analysis of mid-Atlantic populations of brook trout: the zone of contact for major historical lineages. Transactions of the American Fisheries Society 131:1140–1151.

Hayes, J. P., S. Z. Guffey, F. J. Kriegler, G. F. McCracken, and C. R. Parker. 1996. The genetic diversity of native, stocked, and hybrid populations of brook trout in the southern Appalachians. Conservation Biology, 10:1403–1412.

Hébert, C., R. Danzmann, M. Jones, and L. Bernatchez. 2000. Hydrogeography and population genetic structure in brook charr, (*Salvelinus fontinalis* Mitchill) from eastern Canada. Molecular Ecology 9:971–982.

Hudy, M., T. M. Thieling, N. Gillespie, and E. P. Smith. 2005 Distribution, status, and threats to brook trout within the eastern United States. Report submitted to the Eastern Brook Trout Joint Venture, International Association of Fish and Wildlife Agencies, Washington, D.C.

Jones, M. W., D. Clay, and R. G. Danzmann. 1996. Conservation genetics of brook trout (*Salvelinus fontinalis*): population structuring in Fundy National Park, New Brunswick, and eastern Canada. Canadian Journal of Fisheries and Aquatic Sciences 53:2776–2791.

Kalinowski, S. T. 2002. How many alleles per locus should be used to estimate genetic distances? Heredity 88:62–65.

King, T. L., J. F. Switzer, C. L. Morrison, M. S. Eackles, C. C. Young, B. A. Lubinski, and P. Cryan. 2006. Comprehensive genetic analyses reveal evolutionary distinction of a mouse (*Zapus oxyrinchus hudsonius prebleii*) proposed for delisting from the U.S. Endangered Species Act. Molecular Ecology 15:4331–4359.

King, T. L., and S. E. Jullian. 2000. Microsatellite DNA variation in brook trout (*Salvelinus fontinalis*) from Catoctin Mountain Park and select Maryland Rivers: a status report submitted to Catoctin Mountain Park, National Park Service. U.S. Geological Survey, Biological Resourcs Division, Leetown Science Center, Kearneysville, West Virginia.

King, T. L. 2006. Conservation genetics of brook trout (*Salvelinus fontinalis*): developing a roadmap to identify and restore native populations. U.S. Geological Survey, Biological Resourcs Division, Leetown Science Center, Kearneysville, West Virginia.

King, T. L., B. A. Lubinski, and A. P. Spidle. 2001. Microsatellite DNA variation in Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and cross-species amplification in the Acipenseridae. Conservation Genetics 2:103–119.

Kozfkay, J. R., J. C. Dillon, and D. J. Schill. 2006. Routine use of sterile fish in salmonid sport fisheries: are we there yet? Fisheries 31(8): 392–401.

Kriegler, F. J., G. F. McCracken, J. W. Habera, and R. J. Strange. 1995. Genetic characterization of Tennessee brook trout populations and associated management implications. North American Journal of Fisheries Management 15: 804–813.

Krueger, C. C., and B. May. 1991. Ecological and genetic effects of salmonid introductions in North America. Canadian Journal of Fisheries and Aquatic Sciences 48 (Supplement 1): 66–77.

Krueger, C. C., and B. W. Menzel. 1979. Effects of stocking on genetics of wild brook trout populations. Transactions of the American Fisheries Society 108: 277–287.

Lennon, R. E. 1967. Brook trout of the Great Smoky Mountains National Park. U.S. Fish and Wildlife Service Technical Paper 15.

MacCrimmon, H. R., and J. S. Campbell. 1969. World distribution of brook trout, *Salvelinus fontinalis*. Journal of the Fisheries Research Board of Canada 26:1699–1725.

May, B. 2003. Allozyme variation. Pages 23–36 *in* E. M. Hallermann, editor. Population genetics: principles and applications for fisheries scientists. American Fisheries Society, Bethesda, Maryland.

McCracken, G. F., C. R. Parker, and S. Z. Guffey. 1993. Genetic differentiation and hybridization between hatchery stock and native brook trout in the Great Smoky Mountains National Park. Transactions of the American Fisheries Society 122:533-542.

McGlade, J., and H. MacCrimmon. 1979. Taxonomic congruence in three populations of Quebec brook trout, *Salvelinus fontinalis* (Mitchill). Canadian Journal of Zoology 57:1998–2009.

Moritz, C., T. E. Dowling, and W. M. Brown. 1987. Evolution of animal mitochondrial DNA: relevance for population biology and systematics. Annual Review of Ecology and Systematics 18:269–292.

Nei, M. 1972. Genetic distance between populations. American Naturalist 106:283–292.

Nei, M. 1978. Estimation of average heterozygosity and genetic distance from a small number of individuals. Genetics 89:583–590.

Nielson, L. A. 1993. History of inland fisheries management in North America. Pages 3–33 *in* C. C. Kohler and W. A. Hubert, editors. Inland fisheries management in North America. American Fisheries Society, Bethesda, Maryland.

Paetkau, D., W. Calvert, I. Stirling, and C. Strobeck. 1995. Microsatellite analysis of population structure in Canadian polar bears. Molecular Ecology Notes 4:347–354.

Page, R.D.M. 1996. TREEVIEW: an application to display phylogenetic trees on personal computers. Computer Applications in the Biosciences 12:357–358. Available: http://taxonomy.zoology.gla.ac.uk/rod/treeview.html. (June 2007).

Parks, S. D. E. 2001. Trypanotolerance in West African cattle and the population genetic effects of selection. Ph.D. Thesis. University of Dublin. Available: http://animalgenomics.ucd.ie/sdepark/ms-toolkit. (June 2007).

Peakall, R., and P.E. Smouse. 2006. GENALEX 6: genetic analysis in Excel. Population genetic software for teaching and research. Molecular Ecology Notes 6, 288–295. Available: http://www.anu.edu.au/BoZo/GenAlEx/genalex_download.php. (June 2007).

Perkins, D. L., C. C. Krueger, and B. May. 1993. Heritage brook trout in northeastern USA: genetic variability within and among populations. Transactions of the American Fisheries Society 122:515–532.

Perry, G. M. L., T. L. King, J. St.-Cyr, M. Valcourt, and L. Bernatchez. 2005. Isolation and cross-familial amplification of 41 microsatellites for the brook char (*Salvelinus fontinalis*). Molecular Ecology Notes 5:346–351.

Petit, R.J., A. E. Mousadik, and O. Pons. 1998. Identifying populations for conservation on the basis of genetic makers. Conservation Biology 12:844–855.

Quattro, J. M., R. P. Morgan II, and R. W. Chapman. 1990. Mitochondrial DNA variability in brook trout populations from western Maryland. Pages 470–474 *in* N. C. Parker, A. E. Giorgi, R. C. Heidinger, D. B. Jester, Jr., E. D. Prince, and G. A. Winans, editors. Fish-marking techniques. American Fisheries Society, Symposium 7, Bethesda, Maryland.

Raymond, M., and F. Rousset. 1995. GENEPOP (version 1.2): population genetics software for exact tests and ecumenicism. Journal of Heredity 86:248–249. Available: http://genepop.curtin.edu.au. (June 2007).

Raleigh, R. F. 1982. Habitat suitability index models: brook trout. United States Department of Interior, Fish and Wildlife Service, Washington, D. C.

Rice, W. R. 1989. Analyzing tables of statistical tests. Evolution 43:223–225.

Rogers, S. M., and R. A. Curry. 2004. Genetic population structure of brook trout inhabiting a large river watershed. Transactions of the American Fisheries Society 133:1138–1149.

Ryman, N. 1981. Conservation of genetic resources: experiences from the brown trout (*Salmo trutta*). Ecological Bulletin (Stockholm) 34:61-74.

Schmitt, C. J., A. D. Lemly, and P. V. Winger. 1993. Habitat suitability index model for brook trout in streams of the southern Blue Ridge Province: Surrogate variables, model evaluation, and suggested improvements. Biological report 18. United States Department of Interior, Fish and Wildlife Service, Washington, D. C.

Scott, W. B., and E. J. Crossman. 1973. Freshwater Fishes of Canada. Bulletin 184. Fisheries Research Board of Canada, Ottawa, Canada.

Selkoe, K. A., and R. J. Toonen. 2006. Microsatellites for ecologists: a practical guide to using and evaluating microsatellite markers. Ecology Letters 9:615–629.

Shaklee, J. B., and K. P. Currens. 2003. Genetic stock identification and risk assessment. Pages 291–328 *in* E. M. Hallermann, editor. Population genetics: principles and applications for fisheries scientists. American Fisheries Society, Bethesda, Maryland.

Sokal, R. R., and F. J. Rohlf. 1994. Biometry: the principles and practice of statistics in biological research, 3rd edition. Freeman, New York.

Stoneking, M., D. J. Wagner, and A. C. Hildebrand. 1981. Genetic evidence suggesting subspecific differences between northern and southern populations of brook trout (*Salvelinus fontinalis).* Copeia 1981:810–819.

Swofford, D. L., and R. B. Selander. 1981. BIOSYS–1: a Fortran program for the comprehensive analysis of electrophoretic data in population genetics and systematics. Journal of Heredity 72:282–283.

Witte, R. W. 1998. Glacial sediment and the ice age in New Jersey. New Jersey Geological Survey Information Circular, Trenton, New Jersey. Available: http://state.nj.us/dep/njgs/enviroed/infocirc/glacial.pdf. (June 2007).

Wright, S. 1969. Evolution and the genetics of populations, Vol. 3, The theory of gene frequencies. University of Chicago Press, Chicago, Illinois.

Wright, J. E., and L. M. Atherton. 1970. Polymorphisms for LDH and transferrin loci in brook trout populations. Transactions of the American Fisheries Society 99:179–192.