

5. Project Manager Qualifications; Gerald J. Niemi, a professor in the Department of Biology and senior research associate at the Natural Resources Research Institute, will lead the efforts for birds and herps. He has over 35 years of experience designing and implementing field projects on birds throughout Minnesota. He also served as one of the lead scientists for the original GEIS on forest harvesting and management and served on the roundtable that originally developed the forest management guidelines.

Education: Florida State University, Biology, PhD, 1983; University of Helsinki, Fulbright Scholar, Pre-doctoral, 1981; UMD, Biology, Zoology, BS, 1974; MS 1977

Appointments: Professor: Biology, UMD, 1993 to present. Senior Research Associate: NRRI, UMD, 2008-present. Director: Center for Water and the Environment (CWE), NRRI, UMD, 1989-2008. Department Chairman: Biology, UMD, 1997-1998. Graduate Faculty Appointments: Integrated Biological Sciences UMD, 2007-present; Biology 1987 to 2009 (program terminated); Chemical Toxicology, UM-TC, 1992 to present; Conservation Biology Program, UM-TC, 1996 to present.

Publications > 100 peer reviewed

Etterson MA, Niemi GJ, Danz NP. 2009. Estimating the effects of detection heterogeneity and overdispersion on trends estimated from avian point counts. *Ecological Applications* 19(8):2049-2066.

Mattsson BJ, Niemi GJ. 2008. Causes and consequences of distribution patterns in a migratory songbird across its geographic range. *Canadian Journal of Zoology* 86:314-328.

Danz NP, Bracie A, Niemi GJ. 2008. Breeding bird monitoring in western Great Lakes national forests 1991-2007. NRRI/TR-2008/1.1

Miller C, Niemi GJ, Hanowski JM, Regal RR. 2007. Breeding bird communities across an upland disturbance gradient in the western Lake Superior region. *Journal of Great Lakes Research* 33(3):305-318.

Hanowski JM, Danz NP, Howe RW, Niemi GJ, Regal RR. 2007. Consideration of geography and wetland geomorphic type in the development of Great Lakes coastal wetland bird indicators. *Ecohealth* 4:194-205.

Research Projects - 46 managed, >\$18 million

2007-2008 Co-PI and Team Lead for Wildlife portion, Co-Lead for Land and Aquatic Habitat Conservation, Minnesota Statewide Conservation and Preservation Plan. LCCMR. \$450,000 to U of Minnesota-Institute on the Environment; 2001-2006 Lead PI with 27 Co-PIs. Development of environmental indicators of condition, integrity, and sustainability in the Great Lakes basin. U.S. EPA-NASA STAR Grant Program, \$6,979,667. 1991-2003 Lead PI. Effects of changes in the forest ecosystem on the biodiversity of Minnesota's northern forest birds. Minnesota LCMR. \$2,112,473 in cooperation with MN Department of Natural Resources.

Organization Description: The Natural Resources Research Institute is a part of the University of Minnesota Duluth. Its mission is to promote private sector employment based on natural resources, in an environmentally sensitive manner. NRRI scientists have extensive experience in managing large, interdisciplinary projects whose objectives include the development of tools for environmental assessment and resource management.