

ANN L. DAHL, *Biologist / GIS Technician*



EDUCATION

Ph.D.	University of Washington, Seattle, Washington	1995	<i>Wildlife Sciences</i>
M.S.	New Mexico State University, Las Cruces, New Mexico	1991	<i>Wildlife Sciences</i>
B.S.	New Mexico State University, Las Cruces, New Mexico	1987	<i>Wildlife Ecology and Conservation</i>

PROFESSIONAL EXPERIENCE

2006-Present	<i>Biologist/GIS Technician</i> , Western EcoSystems Technology, Inc., Bismarck, North Dakota		
2005-2006	<i>GIS Technician</i> , Ducks Unlimited, Bismarck, North Dakota		
2005	<i>Biological Science Technician</i> , U.S. Fish & Wildlife Service, Bismarck, North Dakota		
2001-2005	<i>Physical Scientist</i> , U.S. Geological Survey, Water Resources Discipline, Bismarck, North Dakota		
1998-2001	<i>Ecologist</i> , Northern Prairie Wildlife Research Center, Jamestown, North Dakota		
1998	<i>Geospatial Analysis Technician</i> , North Dakota Game and Fish Department, Bismarck, North Dakota		

SPECIALTY AREAS

Wind Energy: Proficient in pre- and post-construction wind energy facility assessment including initial site visit and report, bird surveys, nest surveys, lek surveys, habitat mapping, and seasonal and final report writing. Provide GIS support for wind and pipeline projects as well as data entry into databases and QAQC of data. Compiled an Environmental Assessment for a wind project in Minnesota. Also analyzed Platte River whooping crane habitat use with GIS.

Wetlands: Conducted a study to determine wetland loss due to surface drainage in the Prairie Pothole Region of North and South Dakota. Populated a GIS database with data regarding presence or absence of a surface drainage ditch and a reduction in the area of the wetland. Provided GIS support for project examining the impact of wetland drainage and restoration on floodwater storage capacity in the Red River Basin of the North. Scanned and geographically referenced aerial photos pertaining to wetlands and soils, converting them to coverages to be used in a GIS. In addition to collecting pre-existing data, this work involved creating coverages from data tables and linking data to coverages. Responsible for development of a spatially explicit decision-support model to be used for prioritizing wetland restoration sites in the Great Plains. Pre-existing digital data were incorporated into a GIS using Arc/INFO and ArcView. Based on this geographical data, the model was constructed to assess potential sites in terms of the effect of wetland restoration on wetland functions and values.

Breeding Shorebirds: Surveyed breeding shorebirds in the Prairie Pothole Region of North and South Dakota and Montana during spring and summer. Determined presence and number of upland sandpiper, American avocet, marbled godwit, Wilson's phalarope, common snipe, and willet along survey routes and identified these species by sight and sound. Entered survey data and analyzed data using GIS.

Hydrologic Analyses: Frequently conducted hydrologic analyses using ESRI GIS software products. Commonly used data such as NED, NHD, NWI and products developed from them to delineate watershed basins, compute water flow direction and accumulation, determine watercourses, and determine elevational profiles. Processed, analyzed, and interpreted fieldwork as needed which entailed electro-shocking fish, collecting water samples from lakes and streams, stream flow data and invertebrate collection.

SELECTED PROFESSIONAL PUBLICATIONS

- Dahl, A. L.,** K. L. Baer, T. L. Shaffer, G. A. Sargeant, M. A. Johnson, and R. E. Reynolds. 1999. The relation of mallard nest numbers on constructed islands to upland habitat and mallard breeding pairs in North Dakota. North Dakota Game and Fish Department, Bismarck, North Dakota.
- Dahl, A. L.,** D. H. Johnson, L. D. Igl, K. L. Baer, T. L. Shaffer, M. A. Johnson, and R. E. Reynolds. 2003. American avocet nesting on constructed islands in North Dakota. *Prairie Naturalist* 35(2) 95-105.
- Dahl, A. L.,** T. L. Shaffer, K. L. Baer, R. E. Reynolds, M. A. Johnson, G. A. Sargeant. 2006. Determination of Mallard and Gadwall nesting on constructed islands in North Dakota. *Journal of Wildlife Management* 70:129-137.
- Niemuth, N. D., **A. L. Dahl,** M. E. Estey, and C. R. Loesch. 2007. Representation of Landcover Along Breeding Bird Survey Routes in the Northern Plains. *Journal of Wildlife Management* 71:2258-2265