

**Peter T Wolter**

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**Education**

M.S., Forest Resources (remote sensing emphasis), University of New Hampshire, 1990  
B.S., Forestry, University of Wisconsin - Stevens Point, 1985

**Professional Experience**

*Research Fellow*, August 1991 to present. Natural Resources Research Institute, Center for Water and the Environment, University of Minnesota, Duluth, MN

*Research Scientist I*, February 1990 to August 1991, Institute for the Study of Earth, Oceans and Space, Complex Systems Research Center, University of New Hampshire, Durham, NH

*Research/Teaching Assistant*, August 1988 to February 1990, Department of Forest Resources, University of New Hampshire, Durham, NH

**Special Honors**

Served as a reviewer for the International Journal of Remote Sensing, Remote Sensing of Environment, Photogrammetric Engineering & Remote Sensing, and Landscape Ecology

**Relevant Publications**

Wolter, P.T., D.J. Mladenoff, G.E. Host, and T.R. Crow, 1995. Improved forest classification in the northern Lake States using multi-temporal Landsat imagery. *Photogrammetric Engineering and Remote Sensing*, 61(9):1129-1143.

Wolter, P.T., D.J. Mladenoff, G.E. Host, and T.R. Crow. Improved forest classification in the northern Lake States using multi-temporal Landsat imagery. (Abstract). Poster presented by P.T. Wolter at the 8th Annual U.S. Landscape Ecology Symposium, Oak Ridge, TN, March 1993.

Wolter, P.T. and D.J. Mladenoff. Improved forest cover classification of northeastern Minnesota using multi-temporal Landsat data and National Wetlands Inventory data. (Abstract). Poster presented by P.T. Wolter at the 10th Annual U.S. Landscape Ecology Symposium, Minneapolis, MN, 22-26 April, 1995.

Hanowski, J.M., P.T. Wolter, and G.J. Niemi, 1999. Effects of riparian buffers on landscape characteristics of northern forests, *Conservation Biology*, In Review.

White, M.A., D.J. Mladenoff, G.E. Host, P.T. Wolter and T.R. Crow. Analyzing regional landscape structure across ownership categories and ecological land units. (Abstract). Poster presented by M.A. White at the 8th Annual US Landscape Ecology Symposium, Oak Ridge, TN, March 1993.

Polzer, P., P.T. Wolter, D.J. Mladenoff, G.E. Host and M.A. White. Quantifying forest change dynamics using a MSS-NDVI composite for a northern Wisconsin landscape. (Abstract). Poster presented by P. Polzer and P.T. Wolter at the Ecosystem Management Strategies Conference for the Lake Superior Region, 16-19 May, 1994.

Host, G.E., M.A. White, P.L. Polzer and P.T. Wolter, 1997. Great Lakes assessment: Assessing landscape pattern and structure in Lake States forests. Proceedings of the 7th Annual Minnesota GIS/LIS Conference, St. Cloud, MN, October 1-3, 1997.

Wolter, P.T. and M.A. White, 2000. Forest change in northeast Minnesota 1990 to 1995. Landscape Ecology, in prep.

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## **RESEARCH INTERESTS**

GIS, GPS, remote sensing

## **CURRENT POSITION**

**Information Technology Professional and GIS Manager**, Natural Resources Research Institute, University of Minnesota, Duluth, Minnesota, 55811

## **PROFESSIONAL EXPERIENCE**

1992-1998 **Supervisory Applications Programmer**, Natural Resources Research Institute, Duluth, Minnesota.  
1990-1992 **Applications Programmer**, Natural Resources Research Institute, Duluth, MN  
1989-1990 **Principal Laboratory Technician**, Natural Resources Res. Inst., Duluth, MN  
1988-1989 **Laboratory Technician**, Natural Resources Research Institute, Duluth, MN  
1986-1988 **Laboratory Attendant**, Natural Resources Research Institute, Duluth, MN

## **EDUCATION**

B.A. (Geography) 1988, University of Minnesota, Duluth, Minnesota  
B.S. (Math) 1988, University of Minnesota, Duluth, Minnesota

## **GIS RELATED TRAINING**

ERDAS - Image Processing and GIS training session, September 1986  
ARC/INFO - GIS training course, April 1989  
GEO-EAS - Geostatistical software training course, October 1989

## **GRANTS**

National Science Foundation. 2000-2002. "A GPS-linked model helicopter system for stream imaging." \$174,910. Co-Principal Investigator.  
Sugarloaf Interpretive Center Association. 1995-97. "GIS analysis for Sugarloaf site assessment and interpretation." \$14,500. Co-Principal Investigator.  
Minnesota Technology, Incorporated. 1993-95. "Georeferenced aerial imaging system." \$72,500. Co-Principal Investigator.

## **SELECTED PUBLICATIONS and CD-ROMs**

Richards, C., and J. Bonde. 1999. Mapping Lake Trout Spawning Habitat along Minnesota's North Shore. NRRI Technical Report NRRI/TR-99-01. Natural Resources Research Institute, Duluth, MN.  
Yin, K., X. Li, J. Bonde, C. Richards, and G. Cholwek. 1998. Lake bed classification using acoustic data. Applied Mathematics and Computer Science 8(4):841-864.  
Bonde, J., G. Cholwek, X. Li, C. Richards, and K. Yin. 1998. Processing remote sensing data to categorize lake bed surficial substrates. pp. 2742-2743. In Proceedings of the American Control Conference. American Automatic Control Council, Evanston, IL.

- Johnston, C.A., J. Bonde, and C.A. Sersland. 1997. The development of a GPS-linked airborne video system for the construction of georeferenced GIS databases. pp. 313-322. In Proceedings of the ASPRS/ACSM/RTI/AUTO-CARTO Annual Conference. American Society for Photogrammetry and Remote Sensing, Bethesda, MD.
- Johnston, C.A., C.A. Sersland, J. Bonde, D. Pomroy-Petry, and P. Meysembourg. 1996. Constructing detailed vegetation databases from field data and airborne videography. In Proceedings, Third International Conference/Workshop on Integrating GIS and Environmental Modeling, Santa Fe, NM, January 21-26, 1996. National Center for Geographic Information and Analysis, Santa Barbara, CA. [http://www.ncgia.ucsb.edu/conf/SANTA\\_FE\\_CD-ROM/main.html](http://www.ncgia.ucsb.edu/conf/SANTA_FE_CD-ROM/main.html).
- Sersland, C.A., C.A. Johnston, and J. Bonde. 1995. Assessing wetland vegetation with GPS-linked color video image mosaics. pp. 53-62. In Proceedings of the 15th Biennial Workshop on Color Photography and Videography in Resource Assessment. American Society for Photogrammetry and Remote Sensing, Bethesda, MD.
- Johnston, C.A., J. Salés, J. Bonde, T. Aunan, and R. Raby. 1994. Erosion hazard of Minnesota's Lake Superior shoreline. Minnesota Sea Grant Research Bulletin 44. University of Minnesota, Duluth.
- Salés, J., B. Allen, M. Broschart, J. Bonde, P. Meysembourg, and C. Johnston. 1993. Sixty years of beaver pond building at Voyageurs National Park. p. 9. In ARC/INFO Maps 1992. Environmental Systems Research Institute. Redlands, CA.
- Johnston, C.A., and J.P. Bonde. 1989. Quantitative analysis of ecotones using a geographic information system. *Photogrammetric Engineering & Remote Sensing* 55:1643-1647.
- Johnston, C.A., N.E. Detenbeck, J.P. Bonde, and G.J. Niemi. 1988. Geographic information systems for cumulative impact assessment. *Photogrammetric Engineering & Remote Sensing* 54:1609-1615.

## **PRESENTATIONS**

- Bonde, J.P., and C. Richards. 1997. Mapping the bottom of Lake Superior for lake trout spawning. 7th Annual Conference of the Minnesota GIS/LIS Consortium. St. Cloud, MN.
- Bonde, J.P., P. Meysembourg, and J. Salés. 1996. Creating 3D flybys of GIS data with inexpensive PC software. 6th Annual Conference of the Minnesota GIS/LIS Consortium. St. Louis Park, MN.
- Bonde, J.P., C.A. Johnston, and P. Berger. 1995. Using GPS to georeference aerial video imagery (poster). 10th Annual U.S. Landscape Ecology Symposium. Minneapolis, MN.
- Bonde, J.P., C.A. Johnston, and P. Berger. 1994. Using GPS to speed the process of creating GIS databases from aerial video imagery (poster). 5th Annual Conference of the Minnesota GIS/LIS Consortium. Minneapolis, MN.
- Bonde, J.P., C.A. Johnston, P. Berger, and D. Updegraff. 1993. GPS-Linked airborne video system for georeferencing GIS databases of natural areas (poster). GIS/LIS '93. Minneapolis, MN.