

Curriculum Vitae

Alison H. Magill

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Education:

University of New Hampshire, Durham, NH. May 1996. M.S. in Natural Resources.

University of New Hampshire, Durham, NH. January 1985 - December 1987. B.S. in Soil Science.

University of California, Santa Barbara, CA. September 1982 – March 1983. Major: Geology.

Mount Hood Community College, Portland, OR. September 1980 – July 1982; March 1983 – June 1983.
Major: Botany.

Professional Experience:

Associate Director 2006 - present **Earth Systems Data Collaborative**

The Associate Director is responsible for outreach, communication and overall management of all projects undertaken by the Collaborative. The primary focus of the project is to engage community members in the process of developing web-based tools for use in natural resource and coastal management by improving access to environmental data. Specific responsibilities include: organization and implementation of user group workshops; preparation of progress reports, presentations, tutorials and outreach materials; development and maintenance of the Collaborative website; assistance with database management. Currently preparing for a workshop entitled Interactive Workshop for Environmental and Natural Resource Professionals to be held June 28, 2007.

NRESS Program Coordinator 2001 – 2006 **Natural Resources and Earth System Science Ph.D. Program, University of New Hampshire, Durham, NH**

The NRESS coordinator is responsible for oversight and operation of the entire program, which consists of 70 Ph.D. students and over 85 faculty members. These duties include advising Ph.D. students regarding program requirements; maintaining all student academic records; serving as the primary contact for potential students, responding to inquiries about the program and assisting them with the application process; receiving, compiling, summarizing and presenting applications materials for new admissions and making recommendations to the NRESS Executive Committee; fielding and answering questions from program faculty including faculty membership requests; identifying policies or procedures that need revision and implementing those changes; communicating with the Graduate School on behalf of current students and applicants; creating and maintaining program brochures and related materials; maintaining program webpage; developing orientation and training programs for new students and faculty; scheduling speakers and organizing the Environmental Sciences Seminar series; coordinating seminars and events with other departments.

Research Scientist II 2001 – 2006

Supervisor of Laboratory Research 1991 – 2001

Research Technician III 1989 - 1991

Complex Systems Research Center, University of New Hampshire, Durham, NH

The position at Complex Systems Research Center has evolved over time as indicated by changes in the job titles listed above. Initial work as Research Technician focused primarily in the field and laboratory, collecting and processing samples. Promoted to Lab Supervisor in 1991 and remained in that position for 10 years while pursuing and completing an M.S. Accepted an administrative position as program coordinator for the NRESS Ph.D. program in 2001 (see description above) in addition to a promotion to Research Scientist, retaining responsibility for oversight of laboratory and field operations for several different research projects within the Forest Ecosystems Research Group. Currently responsible for management of the Harvard Forest Chronic Nitrogen project at the Harvard Forest Long-term Ecological Research site in Central Massachusetts. Oversight includes maintaining research plots; overseeing annual sample collection, processing and laboratory analyses; summarizing, analyzing, reducing and graphing analytical data; compiling final results and writing papers for submission to peer-reviewed journals; creating, updating and maintaining project website and online data archive; coordinating field collections and monitoring work done by scientists from other institutions; writing grant proposals with principal investigators; participating in scientific meetings and data syntheses; supervising graduate and undergraduate students in the laboratory. Resigned from the NRESS position in 2006 to focus on scientific outreach and communication projects.

Project Details:

Workshop Coordinator

Climate Change and Variability Working Group of the Northeastern Ecosystem Research Cooperative

Organized two workshops at the Three Chimney's Inn: November 16, 2004 and November 1-2, 2005. Responsible for logistics of contacting attendees, maintaining attendee database, coordinating all meals and lodging, preparing informational materials, coordinating with venue management and distribution of materials post-meeting.

Project Manager

**NE Forests 2100: Understanding the Impacts of Climate Change on Northeastern Forests
September 2005 – July 2007**

Primary coordinator working in conjunction with a steering committee and a science writer to execute a three-phase project assessing climate change impacts on forest ecosystems in the Northeastern US and Eastern Canada. Project includes: 1) an end-user survey of professionals who use climate change information in their work; 2) a peer-reviewed journal article summarizing the state of climate change research in the region and; 3) an outreach document developed from the journal article based on the needs determined by the end-user survey. As project manager, responsible for many aspects of the overall project including: survey development, data collection and analysis (survey launched April 4, 2006); producing a French version of the survey, with assistance of a translator, for Canadian participants; co-chairing a section working group for the peer-reviewed journal article; coordinating working group meetings; developing and maintaining the project website (www.cvc.sr.unh.edu).

Professional Affiliations:

-Member, Ecological Society of America, 1993 - 2005

-Councilor, Long-Term Studies Section, Ecological Society of America, 1994-1996

-Member, Soil Science Society of America, 2004 – 2005

Technical Skills:

Courses Completed since January 2006:

- Dreamweaver Level II
- Dreamweaver Level III
- Creating Web Pages II
- SQL Level I
- Access 2003 Level I
- CSS and XHTML (currently enrolled)

Proficient in MS Word, Excel, Access, Dreamweaver, Fireworks

Publications:

2006. McNulty, S.G, J. Boggs, J.Aber, L.Rustad, and A. Magill. Red spruce ecosystem changes after 14 years of chronic N fertilization. *Forest Ecology and Management* 219: 279-291.

2004. Aber, J.D. and A.H. Magill. Chronic Nitrogen Additions at the Harvard Forest: The first fifteen years of a nitrogen saturation experiment. *Forest Ecology and Management* 196:1-5.

2004. Bauer, G.A., F.A. Bazzaz, R. Minocha, S. Long, A. Magill, J. Aber and G.M. Berntson. Effects of chronic N additions on tissue chemistry, photosynthetic capacity, and carbon sequestration potential of a red pine (*Pinus resinosa* Ait.) stand in the NE United States. *Forest Ecology and Management* 196: 173-186.

2004. Magill, A.H., J.D. Aber, W.S. Currie, K.J. Nadelhoffer, M.E. Martin, W.H. McDowell, J.M. Melillo and P. Steudler. Ecosystem response to 15 years of chronic nitrogen additions at the Harvard Forest LTER, Massachusetts, USA. *Forest Ecology and Management* 196:7-28.

2004. McDowell, W.H., A. Magill, J.A. Aitkenhead-Peterson¹, John D. Aber², Jeffrey Merriam¹, Sujay Kaushal. Effects of chronic nitrogen amendment on dissolved organic matter and inorganic nitrogen in soil solution. *Forest Ecology and Management* 196:29-41.

2004. Micks, P., M.R. Downs, A.H. Magill, K.J. Nadelhoffer, and J.D. Aber. Decomposing litter as a sink for ¹⁵N-enriched additions to an oak forest and a red pine plantation. *Forest Ecology and Management* 196:71-87.

2004. Nadelhoffer, K.J., B.P. Colman, W.S. Currie, A.H. Magill and J.D. Aber. Decadal scale fates of ¹⁵N tracers added to oak and pine stands under ambient and elevated N inputs at the Harvard Forest (USA). *Forest Ecology and Management* 196:89-107.

2004. Venterea, R.T., P.M. Groffman, L.V. Verchot, A.H. Magill, J.D. Aber. Gross nitrogen process rates in temperate forest soils exhibiting symptoms of nitrogen saturation. *Forest Ecology and Management* 196:129-142.

2004. Aber, J., A. Magill, K. Nadelhoffer, J. Melillo, P. Steudler, J. Hendricks, R. Bowden, W. Currie, W. McDowell and G. Berntson. Exploring the Process of Nitrogen Saturation. In: D. Foster and J. Aber, editors. *Forests in Time: The Environmental Consequences of 1000 Years of Change in New England*. Yale University Press.

2004. Foster, D., S. Cooper-Ellis, A. Barker Plotkin, G. Carlton, R. Bowden, A. Magill and J. Aber. Simulating a Catastrophic Hurricane. In: D. Foster and J. Aber, editors. *Forests in Time: The Environmental Consequences of 1000 Years of Change in New England*. Yale University Press.

2004. Melillo, J.M., P. A. Steudler, J.D. Aber, K. Newkirk, H.Lux, F.P. Bowles, C. Catricala, A. Magill, T. Ahrens and S. Morrisseau. Soil Warming – A Major Consequence of Global Change In: D. Foster and J. Aber, editors. *Forests in Time: The Environmental Consequences of 1000 Years of Change in New England*. Yale University Press.
2003. Aber, J. D., C.L. Goodale, S.V. Ollinger, M.L. Smith, A.H. Magill, M.E. Martin, R.A. Hallett, J.L. Stoddard. Is nitrogen deposition altering the nitrogen status of Northeastern forests? *Bioscience* 53(4)
2003. Venterea, R.T, P.M. Groffman, L.V. Verchot, A.H. Magill, J.D. Aber and P.A. Steudler. Nitrogen oxide gas emissions from temperate forest soils receiving long-term nitrogen inputs. *Global Change Biology* 9:1-12.
2002. Mellilo, J.M., P.A. Steudler, J.D. Aber, K. Newkirk, H. Lux, F.P. Bowles, C. Catricala, A. Magill, T. Ahrens, S. Morrisseau. Soil warming and carbon–cycle feedbacks to the climate system. *Science* 298:2173-2176.
2001. Agren, G.I., E. Bosatta and A.H. Magill. Combining theory and experiment to understand effects of inorganic nitrogen on litter decomposition. *Oecologia* 128:94-98.
2000. Magill, A.H. and J.D. Aber. Dissolved organic carbon and nitrogen relationships in forest litter as affected by nitrogen deposition. *Soil Biology and Biochemistry* 32(5): 603-613
2000. Magill, A.H. and J.D. Aber. Variation in soil net mineralization rates with dissolved organic carbon additions. *Soil Biology and Biochemistry* 32(5): 597-601
2000. Magill A.H., J. D. Aber, G. M. Berntson., W. H. McDowell, K. J. Nadelhoffer, J. M. Melillo and P. Steudler. Long-term nitrogen additions and nitrogen saturation in two temperate forests. *Ecosystems* 3(3):238-253.
2000. Minocha, R., S. Long, A. Magill, J. Aber and W. McDowell. Foliar polyamine and inorganic ion content in relation to soil and soil solution chemistry in two fertilized forest stands at the Harvard Forest, Massachusetts. *Plant and Soil* 222:119-137
1999. Nadelhoffer, K.J., M.R. Downs, B. Fry, A.H. Magill and J.D. Aber. Controls on N retention and exports in a fertilized forested watershed. *Environmental Monitoring and Assessment* 55:187-210
1998. Aber, J.D., W.H. McDowell, K.J. Nadelhoffer, A. Magill, G. Berntson, M. Kamakea, S.G. McNulty, W. Currie, L. Rustad and I Fernandez. Nitrogen saturation in temperate forest ecosystems: Hypothesis revisited. *Bioscience* 48(11): 921-934
1998. Magill, A.H. and J.D. Aber. Long-term effects of experimental nitrogen additions on foliar litter decay and humus formation in forest ecosystems. *Plant and Soil* 203: 301-311
1997. Magill, A.H, J.D. Aber, J.J. Hendricks, R.D. Bowden, J.M. Melillo and P. Steudler. Biogeochemical response of forest ecosystems to simulated chronic nitrogen deposition. *Ecological Applications*, 7(2);402-415.
1996. Currie, W.S., J.D. Aber, W.H. McDowell, R.D. Boone and A.H. Magill. Vertical transport of dissolved organic C and N under long-term N amendments in pine and hardwood forests. *Biogeochemistry*, 35:471-505.
1996. Magill, A.H., M.R. Downs, K.J. Nadelhoffer, R.A. Hallett and J.D. Aber. Forest ecosystem response to four years of chronic nitrate and sulfate additions at Bear Brooks Watershed, Maine, USA. *Forest Ecology and Management*, 84:29-37.

1995. Aber, J.D., A.H. Magill, S.G. McNulty, R.D. Boone, K.J. Nadelhoffer, M.R. Downs and R.A. Hallett. Forest biogeochemistry and primary production altered by nitrogen saturation. *Water, Air and Soil Pollution*, 85:1665-1670.

1995. Nadelhoffer, K.J., M.R. Downs, B. Fry, J.D. Aber, A. H. Magill and J. M. Melillo. The fate of ¹⁵N-labelled nitrate additions to a northern hardwood forest in eastern Maine, USA. *Oecologia* 103: 292-301.

1993. Aber, J.D., A.H. Magill, R. Boone, J.M. Melillo, P. Steudler, and R. Bowden. Plant and soil responses to chronic nitrogen additions at the Harvard Forest, Massachusetts. *Ecological Applications*, 3(1):156-166.

Presentations:

Magill, A., J. Aber, W. McDowell, M. Martin, W. Currie and K. Nadelhoffer. 2004. Ecosystem Response to 15 years of Chronic Nitrogen Additions at the Harvard Forest LTER. (Poster). Ecological Society of America Meeting, Portland, OR.

Magill, A., J. Aber, W. Currie and K. Nadelhoffer. 2003. Ecosystem Response to 15 years of Chronic Nitrogen Additions at the Harvard Forest LTER. (Poster). Long-Term Ecological Research Program, All Scientists Meeting, Seattle, WA.

Magill, A., J. Aber, W. McDowell and K. Nadelhoffer. 2001. Long-term nitrogen additions and nitrogen saturation in two temperate forests at the Harvard Forest, Massachusetts, USA. (Poster) Nitrogen 2001 Conference,

Magill A.H., J.D. Aber, G.M. Berntson, W.H. McDowell and K.J. Nadelhoffer. 2000. Long-term nitrogen additions and nitrogen saturation in two temperate forests at the Harvard Forest LTER Site. (Poster). Long-Term Ecological Research Program, All Scientists Meeting, Snowbird, UT.

Magill, A.H., J.D. Aber, R. Minocha, W. McDowell and W. Currie. 1999. Above- and below- ground indicators of nitrogen saturation in two N fertilized stands. Ecological Society of America Annual Meeting, Spokane, WA.

Magill, A.H. and J.D. Aber. 1998. Long-term effects of nitrogen deposition on two temperate forest stands. (Poster) Ecological Society of America Annual Meeting, Baltimore, MD.

Magill, A.H. and J.D. Aber. 1996. Effect of nitrogen inputs on DOC content of leachate from fresh leaf litter. (Poster) Ecological Society of America Annual Meeting, Providence RI.

Magill, A.H. and J.D. Aber. 1995. Response of two forest ecosystems to long-term nitrogen deposition. Ecological Society of America Annual Meeting, Snowbird UT.

Magill, A.H., J.D. Aber, W.H. McDowell and N.R. Kinner. 1995. Dissolved organic carbon and nitrogen relationships in decomposing tree litter. (Poster). Soil Ecology Society Meeting, Fort Collins, CO.

Magill, A.H. and J.D. Aber. 1994. Plant and soil responses to six years of chronic nitrogen additions at the Harvard Forest, Massachusetts. Ecological Society of America Annual Meeting, Knoxville, TN.

Magill, A.H. and J.D. Aber. 1994. Plant and soil response of red pine and mixed hardwood stands to chronic nitrogen additions. Fifth Annual Harvard Forest Ecology Symposium, Petersham, MA.

Magill, A.H. and J.D. Aber. 1993. Effects of chronic nitrogen additions on soil mineralization and nitrification rates and dissolved organic carbon availability. (Poster). Long-Term Ecological Research Program, All Scientists Meeting, Estes Park, CO.

Magill, A.H. and J.D. Aber. 1993. Effects of nitrogen additions on carbon availability in decomposing Northeastern tree litter. (Poster). Ecological Society of America Annual Meeting, Madison WI.

Magill, A.H. and J.D. Aber. 1992. Effects of chronic nitrogen additions on litter decomposition processes. Third Annual Harvard Forest Ecology Symposium, Petersham, MA.

Magill, A.H., J.D. Aber, R.D. Boone, J.M. Melillo and P. Steudler. 1991. Effects of three years of chronic N additions to red pine and mixed hardwoods at the Harvard Forest. Second Annual Harvard Forest Ecology Symposium, Petersham, MA.

Magill, A.H., J.D. Aber, J.M. Melillo, P. Steudler, R.D. Boone and R.D. Bowden. 1990. Effects of chronic nitrogen additions to forest ecosystems at the Harvard Forest. (Poster). Long-Term Ecological Research Program, All Scientists Meeting, Estes Park, CO.