

CURRICULUM VITAE: Kerry David Woods

Natural Sciences, Bennington College
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Education:

Cornell University, Ithaca, NY; Ph.D., Ecology, 1981. (Advisors: R. H. Whittaker, P. L. Marks).
Minor areas: Statistics, Soil Science.
Illinois College, Jacksonville, IL; B.S. *summa cum laude*, 1975. (Biology, Physics)

Awards and Fellowships:

Fulbright Senior Specialist Roster, 2013- (project award, Univ. Ljubljana, Slovenia, fall 2014)
Center Fellow, National Center for Ecological Analysis and Synthesis 2008-2009
Program Chair, National meetings, Ecological Society of America 2007
Manierre Research Award, Huron Mt. Wildlife Foundation 2000
Bullard Fellowship, Harvard University 1997
VT-EPSCoR -- NSF Sabbatical Fellowship 1997
Sigma Xi 1980
National Science Foundation Fellow 1975-1978
Phi Beta Kappa 1975

Professional Appointments:

Faculty, Bennington College 1986-
Director of Research, Huron Mt. Wildlife Foundation 2004 -
Visiting Professor, Univ. VT Field Naturalist M.S. Program, Jan 1995
Visiting Scientist, Landcare Research, Christchurch NZ, Fall 1993
Professor, Central European Univ., Grad. Program in Envir. Science, Budapest, summer 1991
Postdoctoral Associate (w/ D. Botkin) and Lecturer, Univ. California, Santa Barbara 1983-86
Assistant Professor of Biology, St. Olaf College 1982-1983
Instructor and Postdoctoral Associate (w/ M. B. Davis), University of Minnesota 1980-1982

Other Professional Contributions:

Founding member ForestREplot Consortium, Ghent, Belgium, 2014
Associate Editor, *Ecology* and *Ecological Monographs*, 2001-2011
Associate Editor, *Journal of Vegetation Science*, 2001 -
Founding Member, Editorial Board, *PeerJ*, 2012-
Professional Ethics Committee (Chair), Int'l Assoc. Veg. Sci, 2011- (framed Code of Ethics)
Chair, N. Amer. Section, Int'l Assoc. for Veg. Sci. 2009-2010
Advisory Board 'Issues in Ecology' (ESA 'white-paper' series), 2008-2011
Organizer, Ecological Society of America Section, Researchers at Undergrad Institutions, 2008
Program Committee, Ecological Society of America, 2004-2009 (Chair 2008-9)
Director of Research, Huron Mt. Wildlife Foundation, 2004-
NEON/GLACEO (upper midwest) Consortium 2004-2009
Scientific Advisory Committee, Edmund Niles Huyck Preserve and Research Station, 2000-
Accreditation Visiting Teams (8) for New England Assoc. Schools and Colleges, 1990-
Flora Advisory Committee to Vermont Endangered Species Committee, 1988-
Working Group, National Park Service, New England "Vital Signs", Acadia N.P. 2004

ad hoc Committee on Data Sharing and Archiving, Ecological Society of America, 1995-1999
Ecological Society of America Council Member 1994-2003, 2008-2009
Professional Ethics Committee, Ecological Society of America, 1991-2003; Chair, 1994-2003.
Small College Development Committee, VT-EPSCoR/NSF, 1988-1997
Board of Directors, Equinox Preservation Trust 1991-1997.
Co-Organizer, Vermont Field Biology Conferences, 1990-1993.
Science Advisory Group, Earth Observing System, NASA, 1985.
External reader, Ph.D. dissertations Universities of Toronto, Ottawa, Quebec-Montreal
Manuscript and grant proposal review for numerous journals and agencies
Organizer of featured Symposia at professional meetings (Ecol. Soc. Amer., Int'l. Assoc. Veg. Sci.)
College Service: many Committees, including Faculty Review, 18 yrs (Chair 4 yrs)

Professional Societies:

Ecological Society of America
British Ecological Society
International Association for Vegetation Science

Scholarly Publications:

- Fahey, R. T., A. T. Fotis, and K. D. Woods. 2014. Quantifying canopy complexity and effects on productivity and resilience in late-successional hemlock–hardwood forests. *Ecological Applications* 25:834–847.
- Woods, K. D. 2014. Multi-decade biomass dynamics in an old-growth hemlock-northern hardwood forest, Michigan, USA. *PeerJ* 2:e598.
- Woods, K. D. 2014. Problems with edges: tree lines as indicators of climate change (or not). *Applied Vegetation Science* 17:4–5.
- De Frenne, P., F. Rodriguez-Sanchez, D. A. Coomes, L. Baeten, G. Verstraeten, M. Vellend, M. Bernhardt-Romermann, C. D. Brown, J. Brunet, J. Cornelis, G. M. Decocq, H. Dierschke, O. Eriksson, F. S. Gilliam, R. Hedl, T. Heinken, M. Hermy, P. Hommel, M. A. Jenkins, D. L. Kelly, K. J. Kirby, F. J. G. Mitchell, T. Naaf, M. Newman, G. Peterken, P. Petrik, J. Schultz, G. Sonnier, H. Van Calster, D. M. Waller, G.-R. Walther, P. S. White, K. D. Woods, M. Wulf, B. J. Graae, and K. Verheyen. 2013. Microclimate moderates plant responses to macroclimate warming. *Proceedings of the National Academy of Sciences* 110:18561–18565.
- Woods, K.D., D.J. Hicks, J. Schultz. 2012. Losses in understory diversity over three decades in an old-growth cool-temperate forest in Michigan, USA. *Canadian Journal of Forest Research*, 42: 532-549.
- Woods, K.D. 2009. Multi-decade, spatially explicit population studies of canopy dynamics in Michigan old-growth forests. *Ecological Archives* E090-251-D1.
- Woods, K.D. (compiler) 2008. An all-taxa biodiversity inventory of the Huron Mountain Club. Version September 2008. Occasional papers of the Huron Mountain Wildlife Foundation, No. 5. [<http://www.hmwf.org/>]
- Woods, K.D. 2008. Living long by staying small; stem-layering as an adaptive life-history trait in shade-tolerant seedlings. *Canadian Journal of Forest Research*, 38:480-487.
- Bekker, R.M., van der Maarel, E., Bruelheide, H. & Woods, K. 2007. Long-term datasets: From descriptive to predictive data using eco-informatics. *Journal of Vegetation Science* 18:457-462. [Introduction to special issue on Ecoinformatics, including next paper.]
- Woods, K.D. 2007. Predictability, contingency, and convergence in late succession: slow systems and complex data-sets. *Journal of Vegetation Science* 18: 543-554
- Papaik, M.J., C.D. Canham, E.F. Latty, K.D. Woods. 2005. Effects of an introduced pathogen on resistance to natural disturbance: beech bark disease and windthrow. *Can. J. For.*

- Res.35:1382-1843.
- Woods, K.D. 2004. Intermediate disturbance in a late-successional hemlock-northern hardwood forest. *Journal of Ecology* 92:464-476.
- Woods, K.D. 2000. Dynamics of a late-successional hemlock-hardwood forest over three decades. *Ecology* 81:110-126.
- Woods, K.D. 2000. Long-term change and spatial pattern in a late-successional hemlock-northern hardwood forest. *Journal of Ecology* 88:267-282.
- Woods, K.D. 1996. Community response to plant invasion. Invited Chapter IN: J.O. Luken and J.W. Thieret (eds) *Assessment and Management of Plant Invasions*. Springer-Verlag.
- J. Jenkins, K. D. Woods. 1995. How to destroy high-diversity native wetlands: draw-downs and invasion by *Myriophyllum spicatum*. Tech. Reports, VT DEC (MS in prep for journal).
- Woods, K.D and C.V. Cogbill. 1994. Upland old-growth forests in the Adirondack Park, New York. *Natural Areas Journal* 14:241-258.
- Woods, K.D. 1993. Consequences for forest communities of invasion by *Lonicera tatarica* L.. *American Midland Naturalist* 130:62-74.
- Hall, F.G., K. Huemrich, D. Strebel, S. Goetz, K.D. Woods. 1992. Biophysical, morphological, canopy optical properties, productivity data from Superior N.F. NASA Tech. Mem. 104568
- Hall, F.G., D.B.Botkin, D.E. Strebel, K.D. Woods, S.J.Goetz. 1991. Large-scale patterns of forest succession as determined by remote sensing. *Ecology* 72:628-640.
- Woods, K.D., A. Feiveson, D.B. Botkin. 1991. Statistical error analysis for biomass density and leaf area estimation. *Can. Journal of Forest Research* 21:974-989.
- Davis, M.B., K.D. Woods, M. Schwartz. 1991. Detecting a species limit from pollen in sediments. *Journal of Biogeography* 18:653-668.
- Woods, K.D. and M.B. Davis. 1989. Paleoecology of range limits: beech in northern Michigan and Wisconsin. *Ecology* 70:681-696.
- Woods, K.D. 1988. Northern hardwood forests. *Journal New England Wild Flower Soc.*
- Davis, M., K.D.Woods, S.Webb, and R.Futyma. 1986. Dispersal versus climate: expansion of *Fagus* and *Tsuga* into the Upper Great Lakes region. *Vegetatio* 67:93-103.
- Botkin, D.B., T. Reynales, K.D. Woods. 1985. Adding spatial considerations to the JABOWA model of forest growth. IN Proceedings of XII Annual Symposium on Machine Processing of Remotely Sensed Data, LARS, Purdue.
- Woods, K.D. 1984. Patterns of tree replacement: canopy effects on understory pattern in hemlock-northern hardwood forests. *Vegetatio* 56:87-107. (Republished, 1985, IN Peet (ed), *Papers in Plant Ecology in Honor of R. H. Whittaker*).
- Woods, K.D. and R.H. Whittaker. 1981. Canopy-understory interaction and the internal dynamics of mature hardwood and hemlock-hardwood forests. IN West, Shugart, and Botkin (eds), *Forest Succession: Concepts and Applications*. Springer-Verlag.
- Woods, K.D. 1981. Interstand and Intra-stand Pattern in Hemlock-Northern Hardwood Forests. Ph.D. Thesis, Cornell, Univ.
- Woods, K.D. 1979. Reciprocal replacement and the maintenance of codominance in a beech-maple forest. *Oikos* 33:31-39.

Research Grants and Contracts (total since 1990, ca. \$500,000):

- "Linking disturbance history, canopy structure, and adaptive traits in late-successional community." (to be submitted NSF-LTREB Jan 2016, with R. Fahey, U.Conn., C. Webster, Michigan Tech.). 2016-2021
- "Long-term studies of permanent plots in Huron Mts.," Huron Mt. Wildlife Foundation, 2012-2014
- "Dynamics of Michigan old-growth forests," Hanes Fund, Michigan Botanical club, 2012
- "Infrastructure for program expansion at Ives Lake Field Station, Huron Mt. Wildlife Foundation". 2009-2011 (NSF-FSML).

- "Long-term dynamics in old-growth forests: ongoing permanent plot studies". A.J. Mellon Found. 1999-2006.
- "Continued permanent plot studies at the Dukes Experimental Forest." USDA Forest Service. 1999-2002
- "All-taxon Biological Inventory for the Huron Mountains". Huron Mt. Wildlife Foundation 2001-2004
- "Ecological classification of the Northern Taconics Region". USDA Forest Service. 1999-2001
- "Landscape modeling of forest pattern in the northern Taconic Mts." Merck Forest & Farm Fndn. 1997-1999
- "Permanent plot studies in old-growth hemlock-hardwood forests." NSF. 1993-1998.
- "Long-term studies of old-growth forests", Huron Mt. Wildlife Foundation. 1992-1994.
- "Permanent plot studies in old-growth forests, Dukes Experimental Forest." USDA Forest Service. 1992
- "Long-term studies of old-growth forests in the Adirondack Park." NY Nat. Heritage Prog. 1990.
- "Baseline population monitoring of *Asplenium montanum* in Pownal, Vermont." VT-ANR, 1989
- "Permanent plot studies in hemlock-northern hardwoods forests in Upper Michigan: Resampling and analysis", Mellon Foundation. 1989.
- "Pattern and consequences of biological invasions: Tatarian honeysuckle in northeastern forests". Vermont EPSCOR/NSF, 1989.
- "Response of *Myriophyllum spicatum* and native macrophytes to a winter draw-down." VT-ANR 1988-1989
- "Remote sensing studies of forest pattern and process." NASA-GSFC, 1987-1989.
- (with D.B. Botkin), "Estimation of total biomass for boreal forests of North America: a ground-sampling approach", Mellon Foundation, 1986-1988
- (with D.B. Botkin and F.G. Hall), "Remote Sensing of Key Vegetation Characteristics," NASA-Goddard Space Flight Center, 1985-1986.
- "Tree Replacement in Old-Growth Forests", McIntire-Stennis, 1977-1979.

Examples of Invited Professional/Research Talks (from > 60):

- Quaternary history of invasion; range expansion of forest trees. SCOPE Conference on Ecology of Biological Invasion, Asilomar, 1984.
- Measurement of Biological Production Using Remote Sensing. CERMA and Remote Sensing Society Conference on Resource Management, Washington, D.C., 1985.
- Studying Earth's Vegetation from Space. NY State Museum, Natural History Surv., 1989.
- Balance, extremism, and certainty; communication failures between scientists and the media. "Freedom Forum", Science and the Media, Columbia Univ. School of Journalism, 1992
- Big trees, old-growth, and forest primeval: Stability and change in ancient forests. Huron Mt. Wildlife Foundation, MI, 1993, 1994
- Long-term studies in Upper Michigan's old-growth forests. Clear Lake Conf., Hiawatha National Forest, Clear Lake MI, 1995.
- The imagined forest: stability and change in the forest primeval. III. Natural History Survey, 1999
- Ecological consequences of invasive shrubs in native forests. Bar Harbor Workshop on Invasive Species, Univ. of Maine., 2000
- Between gap-phase and catastrophe: Intermediate disturbance in old-growth forests. (2003-2006: University of North Carolina, Harvard University, Ottawa University, Univ. Albany, GREFI-UQAM Montreal, etc.)
- Why seedlings are important; life-history adaptations in early tree growth. Harvard Forest, 2005, Swarthmore College 2006
- Ecological insights and analytical challenges: processing and visualizing multiple measurements from permanent plots. IAVS Symposium, Plenary Session, Lisbon, Portugal, July 2005
- Predictability and contingency in late-successional landscapes. Invited paper, Annual meeting Ecological Society of America, Montreal, 2005

Seedling regeneration, shade-tolerance, deer browse, and patch dynamics in late-successional forests: a synthetic view. SUNY Coll. Envir. Science and Forestry, Syracuse, NY 2006.
Historical contingency in old-growth forests: Implications for community patterns in the face of environmental change. Invited paper, Annual meeting Ecological Society of America, Pittsburgh, 2010
'Heritage' data-sets offer important insights into forest dynamics and response to environmental change. Forestry Dept., Univ. of Ljubljana, Slovenia, 2014
Retrospective permanent-plot data offer deeper understanding of late-successional forest dynamics. Annual Symposium, International Association for Vegetation Science, Brno, Czech Republic, 2015
New models for old growth from long-term studies in eastern deciduous forests. Invited paper, Annual meeting, Ecological Society of America, Baltimore 2015

Teaching Experience:

Bennington College: wide array of courses in field biol. ecology, evolution, environmental studies
University of Vermont: Graduate field course in Ecological Field Methods and Desert Ecology
Central European University: Graduate Seminar in Environmental Science and Policy.
Univ. Calif.-Santa Barbara. St. Olaf College, various undergrad and grad ecology courses

Selected Undergraduate Research Theses (from >30):

Starkloff, N. Bird communities in anthropogenic hill forest habitats in Sri Lanka.
Kendrick, J. Ecosystem metabolism and carbon dynamics of forest soils.
Brese, D.. Understorey response to tip-up mounds in a large blowdown in old-growth forest.
Bender-deMoll, M. Land-use history and forest pattern in White Creek, NY
Visser, D. Ecological patterns in sugar-bush management in Bennington Co., VT
Bogonovich, M. Investigations of Rapoport's Rule in ranges of North American plants.
Lawlor, J. Fine-scale vegetation pattern in a Maine coastal bog.
Visser, D. Ecological patterns in sugar-bush management in Bennington Co., VT
Ravenscroft, C. Microhabitat influences on seedling growth.
LoDolce, R. Foraging strategies and specialization by individual workers in ant colonies.
Fridley, J. Effects of different cropping systems on seed banks and weed communities.
Bennett, SL. Resource allocation and maternal inheritance in mustards.
Wallace-Senft, DA.. Ecology of shrubby honeysuckle invasion in northeastern forests.
Wallace-Senft, DA. Maple syrup production on Bennington College campus.
Brockmann, JB. Effects of canopy trees on seedling community in a beech-maple forest.
Stinson, KA. Succession following catastrophic windthrow in a northern hardwood forest.
Chapin, JJ. The politics of wolf reintroduction programs in the United States.
Scheer, NS. Science in the political arena: systemic influences on environmental policy
Vlachoutsikou, A.. Monk seals of Zakynthos, Greece; field studies and conservation.