

## CURRICULUM VITAE

William A. Patterson III  
Forestry Faculty  
University of Massachusetts  
Amherst 01003

November, 2000

**Title: specialization; appointment basis.**

Professor; Forest Ecology, Fire Management; 9-month basis.

**Education: degree, school, major, attended, degree date.**

B.S., University of Maine, Botany, 1963-67, 1967  
M.S., University of Minnesota, Forestry, 1967-69, 1969  
Ph.D., University of Minnesota, Forestry, 1972-78, 1978

**Societies/Awards.**

Alpha Zeta  
Gamma Sigma Delta (Agriculture)  
Phi Kappa Phi  
Xi Sigma Pi (Forestry)  
Sigma Xi (Research)  
Charles Bullard Fellow, Harvard University (1984-85)  
Visiting Scientist, CSIRO, Canberra, Australia (1991)  
President's Stewardship Award, The Nature Conservancy (1991)  
Conservation Award, New England Wild Flower Society (1992)

**Non-academic Professional and Research Experience.**

US National Park Service, Research Ecologist (part time), 1988-present.  
US Forest Service, Project Leader, Research Forester, June-August 1979,  
1/4 year.  
State of Minnesota, terrestrial ecosystem analyst, Research Scientist,  
1976-78, 2 years.

**Date of Appointment:** September, 1978

**Percent of Annual Work Time:**

Teaching	50%	(5% Extension)
Research	25%	
Service	25%	(15% Extension)

**Off-Campus Consulting:**

Invited Instructor:

The Nature Conservancy - Ecological Prescribed Burning Workshops; 1988,  
1990, 1992, 1995  
National Advanced Resource Training Center - Fire In Ecosystem Management;  
1991, 1992, 1994-2000

National Advanced Resource Training Center - Rx-540: Advanced Fire Effects; 1997,1999,2001.

U.S. National Park Service - Prescribed Burn Boss Course; 1991, 1992, 1997

Consultant to the Army National Guard, Camp Edwards, Massachusetts for fire management planning and prescribed burn implementation (1983-87).

Consultant to So. Weymouth Naval Air Station on prescribed burn implementation (1997).

Consultant to a variety of public agencies and private groups on prescribed fire use and wildland fire management - 1983 to present.

**Publications (since 1990):**

Aizen, M. A. and W. A. Patterson III. 1990. Acorn size and geographical range in the North American oaks. *Journal of Biogeography* 17:327-332.

Patterson, W. A. III and D. R. Foster. 1990. Tabernacle Pines - The Rest of the Story. *Journal of Forestry* 88(12):23-25.

Garman, S. L., W. A. Patterson III, and J. T. Finn. 1991. Fire management planning in Acadia National Park using a geographic information system. *Proceedings of the 1986 Conference on Science in the National Parks*, Volume 8:41-55.

Motzkin, G. and W. A. Patterson III. 1991. Vegetation patterns and basic morphometry of a New England moat bog. *Rhodora* 93:307-321.

Aizen, M. A. and W. A. Patterson III. 1992. Do big acorns matter? - a reply to R.J. Jensen. *Journal of Biogeography* 19:581-582.

Motzkin, G., W. A. Patterson III and N. E. R. Drake. 1993. Fire history and vegetation dynamics of a *Chamaecypris thyoides* wetland on Cape Cod, Massachusetts. *Journal of Ecology* 81:391-402.

Woodcock, H., W. A. Patterson III and K. M. Davies, Jr. 1993. The relationship between site factors and White Ash (*Fraxinus americana*) decline in Massachusetts. *Forest Ecology and Management* 60:271-290.

Bachand, R. R. and W. A. Patterson III. 1994. Identifying upland-to-wetland transitions in the Cape Cod National Seashore: A multivariate approach to long-term monitoring. pp. 383-295 in William E. Brown and Stephen D. Viers, Jr. (editors). *Partners in Stewardship: Proceedings of the Seventh Conference on Research and Resource Management in Parks and on Public Lands*. Hancock, Michigan: The George Wright Society. 479 pp.

Dunwiddie, P. W., W. A. Patterson III and R. E. Zaremba. 1995. Evaluating changes in vegetation from permanent plots: An example from sandplain grasslands in Massachusetts. pp. 245-250 in *Ecosystem Monitoring and Protected Areas* edited by T.B. Herman, S. Bondrup-Nielsen, J.H. Martin Willison, & N.W.P. Munro. Science and Management of Protected Areas Association, Wolfville, Nova Scotia.

Aizen, M. A. and W. A. Patterson III. 1995. Leaf phenology and herbivory along a topographically determined temperature gradient: a test spatial test of

the phenological window hypothesis. *Journal of Vegetation Science* 6:543-550

Woodcook, H., K. M. Davies, Jr. and W. A. Patterson III. 1997. Ash decline in Massachusetts: Stand risk assessment using site factors. *Northern Journal of Applied Forestry* 14(1): 10-15.

Clark, J. S. and W. A. Patterson III. 1997. Background and local charcoal in sediments: Scales of fire evidence in the paleorecord. pp. 23-48 in J.S. Clark, H. Cachier, J.G. Goldammer, and B. Stocks (eds.) *Sediment Records of Biomass Burning and Global Change*. NATO ASI series. Series I, Global Environmental Change; no. 51. Springer-Verlag, Berlin.

Bradbury, J. P., G. Dubay, J. G. Goldammer, and W. A. Patterson III. 1997. Report of the working discussion groups. pp. 463-482 in J.S. Clark, H. Cachier, J.G. Goldammer, and B. Stocks (eds.) *Sediment Records of Biomass Burning and Global Change*. NATO ASI series. Series I, Global Environmental Change; no. 51. Springer-Verlag, Berlin.

Dunwiddie, P.W., W.A. Patterson III, J.L. Rudnicki, and R.e. Zaremba. 1997. Vegetation management in coastal grasslands on Nantucket Island, Massachusetts: Effects of burning and mowing from 1982-1993. pp. 85-98 in P.D. Vickery and P.W. Dunwiddie (eds.) *Grasslands of northeastern North America: ecology and conservation of native and agricultural landscapes*. Massachusetts Audubon Society, Lincoln, MA.

Rudnicki, J.L., W.A. Patterson III, and R.P. Cook. 1997. Experimental use of prescribed fire for managing grassland bird habitat at Floyd Bennett Field. pp. 99-118 in P.D. Vickery and P.W. Dunwiddie (eds.) *Grasslands of northeastern North America: ecology and conservation of native and agricultural landscapes*. Massachusetts Audubon Society, Lincoln, MA.

Stevens, A. and W.A. Patterson III. 1998. Millennium-long fire and vegetation histories of pocosins in southeastern Virginia. *Natural Heritage Technical Report #98-17*. Virginia Department of Conservation and Recreation, Division of Natural Heritage. Richmond, VA. 35 pp.

Motzkin, G., W.A. Patterson III, and D.R. Foster. 1999. A regional-historical perspective on uncommon plant communities: Pitch pine-scrub oak in the Connecticut Valley, Massachusetts. *Ecosystems* 2:255-273.

Copenheaver, C.A., A.S. White and W.A. Patterson III. 2000. Determinants of vegetation development within a southern Maine pitch pine-scrub oak ecosystem. *Journal of the Torrey Botanical Society* 127(1):19-23.

#### **Projects and Grants (since 1990):**

Massachusetts Natural Heritage Program. "Inventory of Priority Natural Community Types in the Connecticut River Valley." \$8,500. 1991 - 1992.

National Park Service. "Response of Cape Cod National Seashore Ecosystems to Long-Term Fire Suppression." \$90,000. (with P. Dunwiddie) 1991 - 1994.

National Park Service. "Assessment of Prescribed Fire in Grassland Habitat Restoration at Floyd Bennett Field, Brooklyn, NY, Gateway NRA." \$36,000. 1992 - 1993.

Maine Chapter. The Nature Conservancy. "Fire History and Fire Management at the Waterboro Barrens." \$6,000. 1992 - 1994.

Massachusetts Natural Heritage Program. "Pine Barrens of the Connecticut River Valley" \$2,000. 1993 - 1994.

Albany Pine Bush Commission. "Analysis of Landscape-level Plot Data; Albany Pine Bush, 1990-1993." \$11,000. 1993 - 1995.

George Washington National Forest. "1000-year Fire History for Two GWNF Sites." \$9,000. 1993 - 1995.

National Park Service. "Fire Management Plan for Assateague Island National Seashore." \$5400. 1993 - 1994.

The Nature Conservancy/Mellon Foundation. "Fire Behavior, Fire Ecology and Site Relations in Northeastern Barrens Ecosystems." \$193,503. (with A. White) 1994-1997.

National Park Service. "Ten-year Reassessment of Vegetation and Fuels at Acadia National Park." \$20,000. 1994-1995.

The Nature Conservancy/Virginia Division of Natural Heritage. "1000-year Reconstructions of Pocosin Fire and Vegetation History." \$16,250. 1994-1995.

The Nature Conservancy. "Comparative Fire and Land-Use Histories of Northeastern Pine Barrens." \$5,000. 1994-1995.

National Science Foundation. "The Paleoecology of Coastal Sandplain Grasslands on the Island of Martha's Vineyard, Massachusetts." \$3,656. 1994-1995.

Massachusetts Department of Environmental Management. "Fuel Hazard Assessment for Southeastern Massachusetts Pitch Pine Scrub Oak Barrens Vegetation." \$18,000. 1996.

National Park Service. "Acadia National Park Prescribed Fire Implementation." \$12,000. 1996-1997.

Massachusetts Division of Fisheries, Wildlife and Environmental Law Enforcement. "Pitch Pine/Scrub Oak Restoration Project." \$46,860. (with C. Griffin). 1997.

U.S. Fish and Wildlife Service. "Fire History and Effects Evaluation for New Jersey National Wildlife Refuges." \$3,565. 1997.

National Park Service. "Fire Management Mapping and Fuel Model Behavior Prediction - Cape Cod National Seashore." \$18,750. 1997.

Massachusetts Division of Fisheries, Wildlife and Environmental Law Enforcement. "1998 Vegetation Restoration Work." \$18,645. 1998.

The Nature Conservancy/Massachusetts Field Office. "Preliminary Fire and Vegetation History for the Hyannis Ponds Area, Massachusetts." \$1,000. 1998.

The Nature Conservancy/New Hampshire Chapter Office. "Fuel Load Measurement and Custom Fuel Model Development - Ossipee, NH and Waterboro, ME." \$5,700. 1998.

U.S. Forest Service. "Fire Management Planning and Natural Community Restoration on Martha's Vinyard, MA." \$52,000. 1998-1999.

U.S. Forest Service - White Mountain National Forest. "Fire History for New England National Forests." \$15,824. 1998-99.

Massachusetts Army National Guard. "Fire History, Fire Management Plans, and Digital Forest Cover Map for Camp Edwards training Site, Bourne, Massachusetts." \$51,000. 1998-199.

The Nature Conservancy. "Vegetation and Pollen Analysis for the Schenob Brook Wetlands." \$31,000. 1998-2000.

The Nature Conservancy. "Vegetation and Fire History for the Sussex Swamp (NJ) Wetland." with Charles Ruffner. \$4,400. 1998-1999.

Massachusetts Division of Fisheries, Wildlife and Environmental Law Enforcement. "Montague, Crane, and Mary Dunn Pond Projects." \$23,000. 2000.

National Geographic. "Relationship of changes in northeastern forest composition to prehistoric land-use." \$13,349. 2000-2001. (with A. Sluyter, Penn State, and C. Ruffner, So Illinois Univ.)

Joint Fire Science Program. "Fire Management Options to Control Woody Invasive Plants In the Northeastern and mid-Atlantic States." \$431,433. 2000-2003.

National Park Service. "Historic Landscapes of the Boston Harbor Islands." \$40,000. 2000-2002.

Wampanoag Tribe of Gay Head. "Fire Management Plan for Wampanoag Tribal Lands at Aquina." \$8,475. 2000-2001.

