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Education:

B.A. (Biology) Carleton College, Northfield, Minnesota (1968)

Ph.D. (Ecology and Behavioral Biology) University of Minnesota (1975)

Military Service:

U.S. Army (1968-1970): Specialist in Preventive Medicine

Professional Faculty Experience:

2008 forward	<i>Professor Emeritus</i> of Biology, Ecology, and Climate Change
2008–2014	Maine State Climatologist (Honorary Position)
1990-2008	Professor of Biology, Ecology, and Climate Change Cooperating Professor of Wildlife Ecology
1988	Guest Professor, Department of Quaternary Geology, Lund University, Sweden (sabbatical leave from the University of Maine)
1979-1990	Assistant and Associate (1984) Professor of Botany and Quaternary Studies, University of Maine; Cooperating Assistant and Associate Professor of Wildlife

Professional Administrative Experience:

2006-2007	Associate Director, School of Biology and Ecology
1993-2002	Director, Institute for Quaternary and Climate Studies

(now **Climate Change Institute**)

1989-1993 Associate Director, Institute for Quaternary Studies

1984-1986 Director (*ad interim*), Center for Marine Studies.
Organized and led the development of a newly established program in marine sciences at the University of Maine. Responsibilities included creation of an interdisciplinary marine faculty unit, oversight of the Sea Grant College Program, and responsibility for the UM Darling Marine Center in Walpole, ME. Two years later, the Center for Marine Studies evolved into a new Department of Oceanography, and subsequently became the current School of Marine Sciences.

1977-1979 Professional Staff Member, U.S. Senate Committee on Environment and Public Works. Staff Director of the Subcommittee on Resource Protection, which had budgetary and policy jurisdiction over: environmental research and development in EPA; all federal fish and wildlife programs; noise-pollution control; the National Environmental Policy Act; recovery and disposal of solid and hazardous wastes (e.g., Superfund legislation).

1976-1977 AAAS Congressional Science Fellow, one of four chosen nationally.

National/International Editorial Activities:

Ecological Society of America, Editorial Board (*Ecology* and *Ecological Monographs*), 1988-1993

British Ecological Society, Editorial Board (*Journal of Ecology*), 1991-1993

Co-Editor of *Vegetation History and Archaeobotany*, published by Springer-International, 1989-1995.

Awards/Honors:

Barbara Hikel UM Retiree Award for 2013

(For contributions to the University of Maine and the State of Maine after formal retirement from the university.)

University of Maine Foundation – Abram W. Harris Award for 2005

(Co-awardee, for leadership in creating a “sea change” in support for research in Maine and at the University of Maine; this was the inaugural presentation of the award, which is named for former UM President A.W. Harris, whose leadership produced great advances in the university during the 1890s.)

University of Maine Foundation -- Leadership Award for 1994-2004

(As the person who most changed the University of Maine during the decade) In June 2004, on the 70th anniversary of the UM Foundation, a celebration was held to recognize one person for each of the seven decades of the Foundation's existence. Other honorees recognized at the ceremony were: **Harold Alfond** (1984-1994); **Alice R. Stewart** (1974-1984); **Vincent Hartgen** (1964-1974); **Mark Shibles** (1954-1964); **Raymond Fogler** (1944-1954); and **Stephen Wheatland** (1934-1944).

University of Maine's **1999 Presidential Achievement Award for Public Service** for generating major new support from the Maine Legislature for Research and Development

College of Natural Science, Forestry and Agriculture 1999 Public Service Achievement Award for generating public and legislative support from the Maine Legislature for Research and Development.

University of Maine **Alumni Association 1998 Black Bear Award** for Service to the University in generating substantial support from the Maine Legislature for Research and Development.

***Trapa natans* Fellow** (1988) Honor in Swedish Quaternary Paleobiology.

AAAS Congressional Science Fellow (1976-77)

Graduate Student Achievement Award (1975)
University of Minnesota, College of Biological Sciences (for special contributions to the college and the university).

Research Funding:

PI or Co-PI on nearly 30 grants totaling more than \$7 million.

Publications:

Jacobson, G.L. 2021. Tribute to Eric C Grimm (1951 – 2010). *Palynology* (in press)

Fernandez, I., S. Birkel, C. Schmitt, J. Simonson, B. Lyon, A. Pershing, E. Stancioff, G. Jacobson, and P. Mayewski. 2020. **Maine's Climate Future 2020 Update**. Orono, ME: University of Maine.

<https://climatechange.umaine.edu/wpcontent/uploads/sites/439/2020/02/Maines-Climate-Future-2020-Update-3.pdf>

- Hultberg, T., P. Lagerås, L. Björkman, E. Sköld, G. L. Jacobson, P-O. Hedwall, & M. Lindbladh. (2017). The late-Holocene decline of *Tilia* in relation to climate and human activities – pollen evidence from 42 sites in Southern Sweden. *Journal of Biogeography* doi:10.1111/jbi.13016
- Dieffenbacher-Krall, A., Borns, H., Birkel, S., Langley, G., Cwynar, L., Doner, L., Dorion, C., Fastook, J., Jacobson, G., Nurse, A., Sayles, C. 2016. Younger Dryas Paleoenvironments and Ice Dynamics in Northern Maine: a Multi-Proxy, Case History. *Northeastern Naturalist* 23:67-87.
- Norton, S.A., G.L. Jacobson, J. Kopáček, and T. Navratil. 2015. A comparative study of long-term Hg and Pb sediment archives. *Environmental Chemistry*, dx.doi.org/10.1071/EN15114
- Fernandez, I.J., C.V. Schmitt, S.D. Birkel, E. Stancioff, A.J. Pershing, J.T. Kelley, J.A. Runge, G.L. Jacobson, and P.A. Mayewski. 2015. **Maine's Climate Future: 2015 Update**. Orono, ME: University of Maine. 24 pp
- Qiao-Yu Cui, M-J Gaillard, G. Lemdahl, S. Sugita, A. Greisman, G.L. Jacobson, and F. Olsson. 2013. The role of tree composition in Holocene fire history of the hemiboreal and southern boreal zones of southern Sweden, as revealed by the application of the Landscape Reconstruction Algorithm: Implications for biodiversity and climate-change issues. *The Holocene* 23:1747-1763.
- Novak, M., G.L. Jacobson, Jr., S, A. Norton, M. Stepanova, E, C. Grimm, I. Jackova, F. Buzek. 2013. Sulfur isotope evidence for changing input of continental and marine aerosols in a 60,000-year sediment core from Lake Tulane, central Florida, USA. *Chemical Geology* 349/350:110-116.
- Jacobson, G.L., S.A. Norton, E.C. Grimm, and T. Edgar. 2012. Changing climate and sea level alter Hg mobility at Lake Tulane, Florida, U.S. *Environmental Science and Technology* 46:11710-11717.
- Norton, S.A., R.H. Perry, J.E. Saros, G.L. Jacobson, I.J. Fernandez, J. Kopacek, T.A. Wilson, and M.D. SanClements. 2011. The controls on phosphorus availability in a Boreal lake ecosystem since deglaciation. *Journal of Paleolimnology* 46:107–122.
- Norton SA, Perry RH, Saros J, Jacobson GL Jr, Fernandez IJ, Kopaček J, SanClements M, Wilson TA, Pierret-Neboit MC, Lesser DF (2010) Early post-glacial and Holocene history of the Sargent Mountain Pond watershed, as seen from the bottom of Sargent Mountain Pond, Acadia

National Park, Maine: New England Intercollegiate Geological Conference, Orono, Maine. pp A4-1–A4-16

Jacobson, G.L., I.J. Fernandez, P.A. Mayewski, and C.V. Schmitt (eds). 2009. **Maine's Climate Future: An initial assessment**. Orono, ME: University of Maine.

<http://www.climatechange.umaine.edu/mainesclimatefuture/>

Jacobson, G.L., I.J. Fernandez, P.A. Mayewski, and C.V. Schmitt. 2009. Maine's Climate Yesterday, Today, and Tomorrow. 2009. *Maine Policy Review* 17:16-23.

Greenwood, M.S., C. O'Brien, J.D. Schatz, C.A. Diggings, M.E. Day, G.L. Jacobson, A.S. White, and R.G. Wagner. 2008. Is early life-cycle success a determinant of the abundance of red spruce and balsam fir? *Canadian Journal of Forest Research* 38:2295-2305.

Kahl, J.S., S. J. Nelson, I. Fernandez, T. Haines, S. Norton, G. B. Wiersma, G. Jacobson Jr., A. Amirbahman, K. Johnson, M. Schaulffler, L. Rustad, K. Tonnessen, R. Lent, M. Bank, J. Elvir, J. Eckhoff, H. Caron, P. Ruck, J. Parker, J. Campbell, D. Manski, R. Breen, K. Sheehan and A. Grygo. 2007. Watershed nitrogen and mercury geochemical fluxes integrate landscape factors in long-term research watersheds at Acadia National Park, Maine, USA. *Environmental Monitoring and Assessment* 126:9-25

Schaulffler, M., S.J. Nelson, J.S. Kahl, G.L. Jacobson, T.A. Haines, W.A. Patterson and K.B. Johnson. 2007. Paleoecological assessment of watershed history in PRIMENet watersheds at Acadia National Park, USA. *Environmental Monitoring and Assessment* 126:39-53.

Huang, Y., B. Shuman, Y. Wang, T. Webb III, E.C. Grimm, and G.L. Jacobson. 2006. Climatic and environmental controls on the variation of C3 and C4 plant abundances in central Florida for the past 62,000 years. *Paleogeography, Paleoclimatology, Paleoecology* 237: 428-435.

Jacobson, G.L. 2006. Past and future forest responses to climate change in New England. *New England Society of American Foresters, News Quarterly* 67(4):9-11.

Grimm, E.C., W.A. Watts, G.L. Jacobson, B.C.S. Hansen, H. Almquist, and A.C. Dieffenbacher-Krall. 2006. Evidence for warm wet Heinrich events in Florida. *Quaternary Science Reviews* 25: 2197-2211.

Grimm, E.C. and G.L. Jacobson Jr. 2004. Late Quaternary vegetation history of the eastern United States. pp. 381-402 In Gillespie, A.R., S.C. Porter, and B.F. Atwater (eds.) *The Quaternary Period in the United States*. Elsevier, Boston.

Borns, H.W., Jr., L.A. Doner, C.C. Dorion, G.L. Jacobson Jr., M.R. Kaplan, K.J. Kreutz, T.V. Lowell, W.B. Thompson, and T.K. Weddle. 2004. The deglaciation of Maine, U.S.A. pp. 89-109 *in* Ehlers, J. & Gibbard, P.L. (eds) *Quaternary Glaciations - Extent and Chronology, Part II: North America*. Elsevier, Amsterdam.

Kahl, J.S., I. Fernandez, S.A. Norton, G.B. Wiersma, and G.L. Jacobson Jr. (Principal Investigators). 2003. Establishing paired gauged watersheds at Acadia National Park for long-term research on acidic deposition, nitrogen saturation, forest health, and mercury biogeochemistry (1998-2002). Final Integrated Report for National Parks Service, U.S. Department of the Interior.

Kahl, J.S., I. Fernandez, S.A. Norton, G.B. Wiersma, G.L. Jacobson, D. Manski, T. Haines, L. Rustad, C. Roman, and R. Lent. 2003. Introduction: Inferring regional patterns and responses in N and Hg biogeochemistry using two sets of gauged paired-watersheds. Pp. 1-16, *in* Kahl et al., Establishing paired gauged watersheds at Acadia National Park for long-term research on acidic deposition, nitrogen saturation, forest health, and mercury biogeochemistry (1998-2002). Final Integrated Report for National Parks Service, U.S. Department of the Interior.

Schauffler, M, S.J. Nelson, K.B. Johnson, J.S. Kahl, and G.L. Jacobson Jr. 2003. Paleoecological assessment of forest-disturbance in upper Hadlock Brook and upper Cadillac Brook watersheds. Pp. 16-35 *in* Kahl et al., Establishing paired gauged watersheds at Acadia National Park for long-term research on acidic deposition, nitrogen saturation, forest health, and mercury biogeochemistry (1998-2002). Final Integrated Report for National Parks Service, U.S. Department of the Interior.

Lindbladh, M., G.L. Jacobson Jr., and M. Schauffler. 2003. The postglacial history of three *Picea* species in New England, USA. *Quaternary Research* 59:61-69.

Lindbladh, M., R. O'Connor, and G.L. Jacobson, Jr 2002. Morphometric analysis of pollen grains for paleoecological studies: classification of *Picea* from eastern North America. *American Journal of Botany* 89: 1459-1467.

Schauffler, M. and G.L. Jacobson Jr. 2002. Persistence of coastal spruce refugia during the Holocene in northern New England, USA, detected by stand-scale pollen stratigraphies. *Journal of Ecology* 90:235-250.
[This paper was recognized in a special essay by Peter Moore, "Climate Records Spruced Up" in the News and Views section of Nature, 9 May 2002.]

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- Jacobson, G.L. Jr. 2001. Past and Future Forest Responses to Climate Change in Northern New England. Pp. 226-227 in New England Governors and Eastern Canadian Premiers Workshop on Climate Change: New Directions for the Northeast. Fredericton, NB.
- Moreno, P.I., G.L. Jacobson Jr., T.V. Lowell, and G.H. Denton. 2001. Late-glacial cooling revealed by pollen records from the Chilean Lake District (41°S). *Nature* 409:804-808.
- Jacobson, G.L. Jr. 2000. Post-glacial changes in vegetation and climate in northern New England. *Rhodora* 102:246-247.
- DeHayes, D.H., G.L. Jacobson Jr., P.G. Schaberg, B. Bongarten, L. Iverson, and A.C. Dieffenbacher-Krall. 2000. Forest responses to changing climate: Lessons from the past and uncertainty for the future. pp. 495-540 in Mickler, R.A., R.A. Birdsey, and J. Hom, (Eds.) *Responses of Northern U.S. Forests to Environmental Change*. Springer.
- Moreno, P.I., T.V. Lowell, G.H. Denton, G.L. Jacobson, Jr., and B.G. Andersen: 1999. Abrupt changes in vegetation and climate during the last glacial maximum and last termination in the Chilean lake district: A case study from Canal de la Puntilla (41°S). *Geografiska Annaler* 81: 285-312.
- Schauffler, M. and G.L. Jacobson Jr. 1998. Paleoecology of coastal and interior *Picea* (spruce) stands in Maine. Research summary and management recommendation. Technical Report NPS/BSO-BNR/NRTR/00-1. U.S. Department of Interior, National Park Service.
- Lawrence, M.W. and G.L. Jacobson Jr. 1997. Jumpstart 2000 – the Maine Economic Improvement Strategy: A targeted investment in research and development. *Maine Policy Review* 6:35-43.
- Jacobson, G.L. Jr.: 1997. Ancient permanent plots provide a critical time perspective in Conservation biology. *Natural Areas Report* 8(3):2-3.
- Pugh, A.L., IV, S.A. Norton, M. Schauffler, G.L. Jacobson Jr., J.S. Kahl, W.F. Brutsaert, and C.F. Mason: 1996. Interaction between peat and salt-contaminated runoff in Alton Bog, Maine, USA. *Journal of Hydrology* 182:83-104.
- Schauffler, M., G.L. Jacobson Jr., A.L. Pugh IV, and S.A. Norton: 1996. Influence of vegetational structure on capture of salt and nutrient aerosols in a Maine peatland. *Ecological Applications*, 6:263-268.

- Jacobson, G.L. Jr. and A. Dieffenbacher-Krall: 1995. White pine and climate change: Insights from the past. *Journal of Forestry* 93:39-42.
- Jacobson, G.L. Jr.: 1993. The Last Deglaciation. Review of Bard, E. and W.S. Broecker (eds.). The Last Deglaciation: Absolute and Radiocarbon Chronologies. NATO ASI Series, Springer-Verlag, Berlin Heidelberg. *Radiocarbon* 35:341.
- Grimm, E.C., G.L. Jacobson Jr., W.A. Watts, B.C.S. Hansen, and K.A. Maasch: 1993. A 50,000 year record of climate oscillations from Florida and its temporal correlation with the Heinrich events. *Science* 261:198-200.
- Grimm, E.C. and G.L. Jacobson Jr.: 1992. Fossil-pollen evidence for abrupt climatic Change during the past 14,000 years in eastern North America. *Climate dynamics* 6:179-184.
- Anderson, R.S., G.L. Jacobson Jr., R.B. Davis, and R. Stuckenrath: 1992. Gould Pond, Maine: late-glacial transition from marine to upland environments. *Boreas* 21:359-371.
- Jacobson, G.L. Jr.: 1992. A 7000-Year History of White Pine. Pp. 19-26 In R.A. Stine and M.J. Baughman (Eds.) White Pine Symposium Proceedings. Conference in Duluth, MN in September 1992. Univ. of Minnesota, St. Paul, MN.
- Jacobson, G.L. Jr.: 1992. After the Ice Age. Review of Pielou, E.D. 1991. *After the Ice Age: the return of life to glaciated North America*. University of Chicago Press. *Ecology* 73:715.
- Kelley, J.T., H. Almquist-Jacobson, G.L. Jacobson Jr., R. Gehrels, and Z. Schneider: 1992. The geologic and vegetative development of tidal marshes at Wells, Maine. U.S.A. Research Report to the Wells National Estuarine Research Reserve.
- Jacobson, G.L., Jr., H.A. Jacobson, and J.C. Winne: 1991. Conservation of rare plant habitat: Insights from the recent history of vegetation and fire at Crystal Fen, northern Maine, U.S.A. *Biological Conservation* 57:287-314.
- Jacobson, G.L. Jr.: 1991. Review of *Packrat Middens: The last 40,000 years of biotic change*, Betancourt, J., Van Devender, T. and Martin, P.S. (eds.). *Ecology* 72:760.
- Jacobson, G.L., Jr., and H.A. Jacobson: 1990. An inventory of distribution and variation in salt marshes from different settings along the Maine coast. pp. 69-84 in Anderson, W.A. and H.W. Borns, Jr. (eds.).

Neotectonics of Maine: Studies in Seismicity, crustal Warping and Sea-Level Change. *Maine Geological Survey, Bulletin 40.*

- McMahon, J.S., G.L. Jacobson Jr., and F. Hyland: 1990. An Atlas of the Native Woody Plants of Maine: A Revision of the Hyland Maps. *Maine Agricultural Experiment Station, Bulletin 830.* 259 pp.
- Mosley-Thompson, E., E. Baron, E.A. Boyle, K. Burke, T. Crowley, L.J. Graumlich, G.L. Jacobson Jr., D. Rind, G. Shen, and S. Stanley: 1990. Earth system history and modeling. *In* Committee on Global change, *Research Strategies for the U.S. Global Change Research Program*, National Academy Press, Washington, D.C., pp. 67-107.
- Jacobson, H.A. and G.L. Jacobson, Jr.: 1989. The nature and variability of vegetation in Maine salt marshes. *Canadian Journal of Botany* 67:230-238.
- Hunter, M.L., Jr., G.L. Jacobson, Jr., and T. Webb III: 1989. Paleoecology and the coarse-filter approach to maintaining biological diversity. *Conservation Biology* 2:375-385. [Reprinted as one of the featured papers in D. Ehrenfeld. Ed (1995) *Plant conservation: Readings from conservation Biology.*]
- Jacobson, G.L., Jr. and E.C. Grimm: 1988. Synchrony of rapid change in late-glacial vegetation south of the Laurentide ice sheet. *Bulletin of the Buffalo Society of Natural Sciences* 33:31-38.
- Kelley, J.T., D.F. Belknap, G.L. Jacobson, and H.A. Jacobson: 1988. The morphology and origin of salt marshes along the glaciated coastline of Maine, USA. *Journal of Coastal Research* 4:649-665.
- Jacobson, G.L., Jr.: 1988. Ancient permanent plots: Sampling in paleovegetational studies. pp. 3-16 *In* Huntley, B. and T. Webb III (eds.) *Vegetation history v 7* *In* H. Leith (ed.) *Handbook of Vegetation Science*. Kluwer Academic Publishers. Dordrecht, The Netherlands.
- Jacobson, G.L., Jr., H.A. Jacobson, and J.C. Winne: 1988. Recent history of vegetation and fire at Crystal Fen in northern Maine. Report to The Nature conservancy, Maine Chapter research Contracts program. 11 pp + 7 figures.
- Jacobson, G.L., Jr. and R.B. Davis: 1988. The real forest primeval. *Habitat* 5:26-29.
- Jacobson, G.L., Jr., T. Webb III, and E.C. Grimm: 1987. Patterns and rates of vegetation change during the deglaciation of eastern North America. Pp. 277-288. *In* W.F. Ruddiman and H.E. Wright, Jr. (eds.) *North*

America During Deglaciation. The Geology of North America, DNAG v. K3, Geological Society of America.

- Jacobson, H.A., G.L. Jacobson, and J.T. Kelley: 1987. Distribution and abundance of salt marshes along the Coast of Maine. *Estuaries* 10:124-129.
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- Jacobson, G.L., Jr. and E.C. Grimm: 1986. Numerical analysis of Holocene forest and prairie vegetation in central Minnesota. *Ecology* 67:958-966.
- Davis, R.B. and G.L. Jacobson, Jr.: 1985. Late-glacial and early post-glacial landscapes in northern New England and adjacent Canadian regions. *Quaternary Research* 23:341-368.
- Davis, R.B. and G.L. Jacobson, Jr.: 1985. Inferred extent of ice cover during deglaciation. In Thompson, W.B. and H.B. Borns, Jr. (Eds.), *Surficial geologic map of Maine. Maine Geological Survey, Augusta.*
- Bonnichsen, R., G.L. Jacobson, Jr., R.B. Davis, and H.W. Borns, Jr.: 1985. The environmental setting for human colonization of northern New England and adjacent Canada in Late Pleistocene time. In Borns, LaSalle, and Thompson (Eds.) *Late Pleistocene History of Northern New England and Adjacent Quebec. Geological society of America special Papers* 197:151-159.
- Kenlan, K.H., G.L. Jacobson, Jr. and D.F. Brakke: 1984. Aquatic acrophytes and pH as controls of diversity for littoral Cladocerans. Pp. 63-84 In G.R. Hendry (Ed.) Chronic Stress of Acidification on Freshwater Biota. Acid Precipitation Series – vol. 6. Ann Arbor Science, Butterworth.
- Anderson, R.S., R.L. Homola, R.B. Davis and G.L. Jacobson, Jr.: 1984. The occurrence of the mycorrhizal fungus Glomus fasciculatum in post-glacial lake sediments from Maine. *Canadian Journal of Botany* 62:2325-2328.
- Belknap, E.F., J.T. Kelley, H.W. Borns, Jr., R.C. Shipp, G.L. Jacobson, and R. Stuckenrath, Jr.: 1984. Sea-level change curves for coastal Maine. Report from the Maine Geological Survey to the U.S. Nuclear Regulatory Commission. 33p.

- Davis, R.B., G.L. Jacobson, Jr., L.S. Widoff, and A. Zlotsky: 1983. Evaluation of Maine peatlands for their unique and exemplary qualities. Report to the Maine Dept. of conservation, Augusta, Maine. 186 pp.
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- Jacobson, G.L., Jr. and H.J.B. Birks: 1980. Soil development on recent terminal moraines of the Klutlan Glacier, Southwest Yukon, Canada. *Quaternary Research* 14:87-100.
- Jacobson, G.L., Jr.: 1979. The Palaeoecology of White Pine in Minnesota. *Journal of Ecology*, 67(2):697-726.
- Jacobson, G.L., Jr.: 1979. A congressional View of Noise Control in United States. Proceedings, National Symposium on Noise control Technology, pp. III, 15-20 U.S. Environmental Protection Agency, Washington, D.C.
- Jensen, P., G.L. Jacobson, Jr. and D.E. Willard: 1973. Effects of mowing and raking on Collembola. *Ecology* 54:564-572.

Profession-related Service (selected):

- 2012 - 2014 External Advisory Committee for Montana **NSF** EPSCoR Program
- 2011 **AAAS** External Review Committee for Kansas-Oklahoma NSF EPSCoR Program
- 2010 – 2019 Board of Directors, **Forest Society of Maine** (Chair, 2017-2019)
- 2008 - 2018 Trustee, Maine Chapter of **The Nature Conservancy** (Chair, 2015-2017)
- 2008 - 2014 Maine State Climatologist (hon.; non-compensated)
- 2008 Chair, Team formed at request of Maine Gov. Baldacci to complete an **Assessment of Climate Change in Maine**, with broad scope of analysis (future climate scenarios, ecosystem responses, economic implications/opportunities, etc.)

- 2006 External Reviewer, Paleoecology Center of Excellence Program, **Finnish Academy of Sciences**, Helsinki.
- 2005-2009 Elected Member-at-Large, **AAAS** Section Committee on Geology and Geography
- 2003-2011 **European Science Foundation** – Chair, Science Advisory Panel for the EuroCLIMATE Program.
- 1999-2003 Chair, Ecology Section of NASUCLG
- 1999-2003 Board of Natural Resources, NASULGC
- 1990-1999 Member (Governor's Appointee), Wells Estuarine Reserve Management Authority. Appointed (1990 and reappointed (1993) by Governor McKernan to fill one of five places on the Authority, which by statute has quasi-governmental responsibility for operations and management of the large National Estuarine Research Reserve in Wells, Maine.
- 1990-2004 Scientific Advisory Committee for Pollen Database – North America
- 1989-2004 Scientific Advisory Committee for Pollen database – Europe
- 1990-1994 NOAA/National Geophysical Data center, Science Advisory Panel
- 1989-1993 NOAA Paleoclimate Program – Science Advisory panel; Chair of the Panel, 1990-1993.
- 1990 Invited contributor, National Academy of Sciences/National Research Council USNC/CODATA Committee for IGBP Pilot Study on Database Interfaces. Washington, D.C.
- 1989-1990 National Academy of Sciences, Committee on Global Change – Working Group on Earth Systems History