LEON H. LIEGEL, PhD: Short Professional Resume - 29 May 2023

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Languages English; Bilingual in Spanish since 1970

Education B.S., Forestry (Spanish minor), Univ. Wisconsin, Stevens Point, 1970; M.S., World Forestry, SUNY-ESF, Syracuse, 1973; Ph.D., Forestry/Soil Science Co-majors, NC State - Raleigh, 1981.

Oregon State University (OSU), Corvallis, OR, 97331 From 2018 to present: Courtesy Faculty/Instructor, Crop and Soil Science (CSS) Dept; Co-developer with two colleagues for Ecampus, 3-quarter-credit course, SOIL 511 - Soil: A Natural and Societal Resource, and primary Instructor for Winter terms 2019, 2020, 2023 and Summer 2021; member of CSS-DEI Committee since 2021. OSU College of Forestry (COF) Forest Ecosystems and Society (FES) Dept.: Fall 2007 to Winter 2016: Taught SNR 533 seven times---Alternative [Nontimber] Forest Products, a then 2-quarter-credit course in the 18-credit Sustainable Natural Resources (SNR) Graduate Certificate. Since 2013: Certified Quality Matters (QM) Peer Reviewer for classroom, online, and blended courses.

Other Positions while at OSU: 2005-2015, Editorial Board, *Environmental Management*, Sept 2001 to Dec. 2007: Part-time Research Associate, Forest Science Dept. and OSU-COF Coordinator, Sustainable Forests Partnership.

USDA Forest Service Positions (1973-2001) Pacific Northwest Research (**PNW**) Station, 3200 SW Jefferson Way, Corvallis, OR 97331: June 1998 to August 2001, GS-460-14 Research Forester; Jan. 1993-June 1998, GS-460-13/14 Team Leader, Forest Health Monitoring; May 1985-Dec.1992, GS-470-13 Research Soil Scientist [May 1985-Sept 1991, interagency agreement, US Environmental Protection Agency (**EPA**), 200 SW 35 St., Corvallis, OR, 97333]; Institute of Tropical Forestry, Rio Piedras, PR: 1979-85, GS-470-11/12 Research Soil Scientist; 1975-78, GS-460-09/11 Research Forester; 1973-74, GS-462-09 Supervisory Forestry Research Technician.

Other Positions 1971-73: Natural Resources Specialist (land use inventory), Puerto Rico Area of Natural Resources, San Juan, PR; and 1 July to 31 August, 1970: GS-460-05 Forester, USDA Soil Conservation Service (**SCS**), Bayamón, PR.

International Forestry-Soil Science-Natural Resource Experience Brazil, 1 wk, 1980; Colombia, 2 wks, 1971; Costa Rica, 10 wks, 1971-90; Germany, 4 wks, 1975; Haiti, 2 wks, 1982; Honduras, 2 wks, 1971; Jamaica, 4 wks, 1979-83; Puerto Rico, 14 yrs, 1970-98; Suriname, 1 wk, 1979; Trinidad, 4 wks, 1979-84; England, 2 wks, 1975-90; Venezuela, 5 wks, 1979-83.

OREGON STATE UNIVERSITY (OSU) - SUSTAINABLE FORESTRY

1 Jan. 2004 to 31 Dec 2007: Coordinator, OSU Sustainable Forests Partnership and member, National Sustainable Forests Partnership; July 2002 to 1 Jan. 2004: Co-Principal Investigator with Steve Radosevich and others for a \$250K competitive grant from the National Commission on Science for Sustainable Forestry: "Survey Lessons Learned About...Forest Biodiversity..."; Sept. 2001 to Dec. 2003, via the OSU Sustainable Forestry Partnership: co-developer for a \$10K OSU Critical Issues grant to create curriculum for a 14-week Sustainable Natural Resources Graduate Program for summer 2006; as courtesy Associate Professor, 1986-2002: give guest lectures, seek grant funds, and exchange information with students and faculty; 1996-1997: coordinated an \$8K competitive grant to prepare a U.S. Man and the Biosphere (US-MAB) teaching case study on human and natural resource sustainability; 1993-1997: coordinated a \$51K competitive grant from the US-MAB Program with five regional scientists to study the biological, sociocultural, and managerial concerns of commercial and recreational harvesting of chanterelle mushrooms on the Olympic Peninsula--13 publications including Poster presentations for scientific meetings, 1989; AMBIO Special Report No. 9, 1998 [The MAB Mushroom Study]; and 3 posters.

FOREST HEALTH MONITORING (FHM)

July 1998-August 2001: Resource Analyst to report and interpret FHM field data and other resource databases; Jan. 1993-June 1998: Team Leader for regional FHM activities in CA, OR, and WA with a \$250K to \$1.1 million annual budget: supervised baseline detection monitoring field plot establishment; conducted personal research to identify mensuration, damage, crown, soil, and other forest (health) "indicator" conditions for diverse regional and national ecosystems; member of a 6-person Core Team that administered an annual \$3 to 5 million FHM National Program in the United States--22 publications, 4 posters.

CULTURE AND BIOLOGY OF FOREST PLANTS

Oct. 1991-Dec. 92: Part of a 5-member team that investigated conservation biology of Pacific yew (*Taxus brevifolia*). Personal contribution was determining effects of stand density, soils, and other variables on individual tree and stand growth across dry, moist, and wet landscapes in Oregon--2 publications.

WHOLE-WATERSHED STUDIES AND GLOBAL CLIMATE CHANGE RESEARCH

May 1985-Sept. 1990: Managerial Soil Scientist and member of a multidisciplinary team that made <u>regional</u> <u>predictions about acidic deposition effects on 262 lake/stream watersheds in the eastern United States</u>; supervised contractor projects; analyzed, interpreted, and published data about effects of land use on soil physical and chemical properties and lake water chemistry. Oct. 1990-Sept. 1991: Evaluated the potential of forest practices to sequester greater carbon in temperate and tropical ecosystems--9 publications, 3 posters.

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TROPICAL ECOSYSTEMS RESEARCH

June 1973-May 1987: Conducted independent/cooperative research in Puerto Rico and Latin America on land use, silviculture, forest genetics, growth, ecology, nutrient cycling, and <u>nursery practices for plantation and natural forests</u>. Grants: A.E. Lugo and L.H. Liegel, 1980, *Nutrient dynamics of tropical tree plantations in a Biosphere Reserve*--a \$50K competitive US-MAB grant; L.H. Liegel, 1983-87, Principal Investigator for a US-AID \$150K study to <u>predict growth and site response of Pinus caribaea across Costa Rica, Jamaica, Puerto Rico, Trinidad, and Venezuela</u>--46 publications, 1 poster.

FOREST HEALTH, FOREST SOILS, SOIL SCIENCE, AND SUSTAINABLE FORESTRY PUBLICATIONS Radosevich S., Fletcher, R., Kerkvliet, K., Liegel, L., Smidt, M., Jacobson, M., Finley, J., Luloff, A. 2003. Final Report: Survey the lessons learned about managing forests for biodiversity and sustainability based on practical experiences. Results from a \$250K competitive grant from the National Commission on Science for Sustainable Forestry (NCSSF), 2002-2003.

Kerns, B.K., Liegel, L., Pilz, D., Alexander, S.J. 2002. Biological inventory and monitoring. Pgs. 237-269. *In* Nontimber Forest Products in the United States. Jones, Eric T., McLain, Rebecca J., Weigand, James (Eds.). University Press of Kansas, Lawrence. 424 p.

Bailey, J.D., Liegel, L.H. 1998. Pacific yew (*Taxus brevifolia* Nutt.) growth and site factors in western Oregon. Northwest Science 72(4): 283-292.

Busing, R.T., Liegel, L.H., LaBau, V.J. 1996. Overstory mortality as an indicator of forest health in California. Environmental Monitoring and Assessment 42: 285-295.

Liegel, LH. 1992. Organic carbon sequestration in the soils of Puerto Rico. Pgs. 9-32. *In* Beinroth, F.H. (Ed.). Organic carbon sequestration in the soils of Puerto Rico - A case study of a tropical environment. University of Puerto Rico, Department of Agronomy and Soils, Mayaguez, PR, and the US Dep. Agric., Soil Conservation Service, World Soil Resources Division, Washington, DC. 67 p.

Liegel, LH. (Compiler). 1991. Growth and site relationships of *Pinus caribaea* across the Caribbean Basin. US Dep. Agric. For. Serv. Gen. Tech. Rept. SO-83. New Orleans: US Department of Agriculture, Forest Service, South. For. Exp. Stn. 70 p. [Growth and yield field data across diverse soils in five Caribbean countries.]

Liegel, L., Cassell, D., Church, R., Stevens, D., Shaffer, P. 1991. Characteristics of land use in Northeast and Southern Blue Ridge Province: Associations with acid rain effects on surface-water chemistry. Environmental Management 15: 269-279.

Liegel, LH; Venator, CR. 1987. A technical guide to forest nursery management in the Caribbean and Latin America. U.S. Dep. Agric. For. Serv. Gen. Tech. Rep. SO-67. New Orleans, LA. 156 p. [Includes soil fertility issues and recommendations for container- vs. bare root-produced coniferous and hardwood nursery seedlings.]

Liegel, LH. 1986. Effects of sterilization procedures on the biological, chemical, and physical properties of soil: A review. Turrialba 36(1): 11-19.

Liegel, L.H. 1985. Growth, form, and flowering of eight Caribbean pine families in Puerto Rico. Commonw. For. Rev. 64(1): 67-74.

Liegel, L.H. 1985. Plantations and soils. *In* Training manual for forestry technicians in the Caribbean. Rio Piedras, PR: Southern Forest Experiment Station and Institute of Tropical Forestry. Various paging. [*Soils* section: 116 p.]

Liegel, L.H., Balmer, W.E., Ryan, G.W. 1985. Honduras pine spacing trial results in Puerto Rico after 18 to 20 years. Southern Journal of Applied Forestry 9(2): 69-75.

Liegel, LH. 1984. Effect of adding magnesium nitrate before dry-ashing on phosphorus in Honduras pine foliage. J. Agric. Univ. Puerto Rico. 68(2): 219-221.

Liegel, LH. 1984. Results of 5- to 6-year-old provenance trials of <u>Pinus oocarpa</u> Schiede on eight sites in Puerto Rico. *Silvae Genetica* 33(6): 223-230.

Liegel, LH. 1983. Effect of dry-heat sterilization on chemical properties of Puerto Rican soils. Commun. Soil Sci. Plant Anal. 14(4): 277-286.