Curriculum Vitae: BARBARA J. BOND

Forest Science Department
Richardson Hall 330
Oregon State University
Corvallis, OR 97331
http://www.fsl.orst.edu/~bond/

phone: (541) 737-6110
fax: (541) 737-1393
cell: (541) 908-2515
internet: barbara.bond@oregonstate.edu

Professional Preparation

1992 Ph.D., Oregon State University; Plant Physiology/Forest Science (double major).

1984 M.S., Oregon State University; Terrestrial Plant Ecology.

1975 Teaching Certification, U.C. Santa Barbara; Secondary science and math.

1972 B.S., U.C. Irvine; Biological Science (graduation with honors).

Employment

2004 - present – Ruth H. Spaniol Chair of Renewable Resources. Forest Science Department, Oregon State University. Member of the Graduate Faculty in Forest Science, Plant Physiology, Environmental Science and Water Resources.

2003 - 2004 – Professor. Forest Science Department, OSU.

2001 - 2002 – Fulbright Visiting Professor. (Argentina/Uruguay teaching/research award in environmental science).

2000 - 2003 – Associate Professor. Forest Science, OSU.

1997 - 2000 – Assistant Professor. Forest Science, OSU.

1994 - 1997 – Assistant Professor, Senior Research. Forest Science, OSU.

1992 - 1994 – Research Associate. Forest Science Department, OSU.

1985 - 1988 – Research Assistant, Hardwood Silviculture. Forest Science, OSU.

1981 - 1984 – Project Leader, Forestry Education Project. College of Forestry, OSU.

1977 - 1979 – Research Assistant in Plant Pathology. Department of Botany and Plant Pathology; OSU.

1975 - 1977 – Secondary Teacher. 7th and 8th Grade Science and Math, Sequoia Jr. High School, Simi Valley, California.

Research

Research Interests. My research centers on physiological processes (especially water and carbon relations) at the whole-plant and plant community scales. I am interested in using and

developing methods that are appropriate for integrating physiological process over relatively large temporal and spatial scales, such as stable isotope analysis, remote sensing, and process models. Current research includes studies of growth decline in aging forests, relationships between vegetation water use and streamflow in small watersheds, impacts of plantations of exotic trees on water resources in Patagonia, and using isotope ratios in respired CO2 in small watersheds as indicators of ecosystem function.

Publications

(most of these publications are available as pdfs at http://www.fsl.orst.edu/~bond/publications.html)

Edited Volume:

Bond, B.J. (ed.) 2002. *Aging in Pacific Northwest forests*. Heron Publishing, Victoria, B.C., Canada. (Published as a special issue of *Tree Physiology* volume 22:2/3)

Refereed articles:

Chen, J. K.T. Paw U, S. Ustin, T. Suchanek, X. Wang, M. Falk, K. Brosofske, R. Bi, T. King and B.J. Bond. Net ecosystem exchanges (NEE) of carbon, water, and energy in young and old-growth douglas-fir forests. *Ecosystems*. In Press.

Woodruff, D.R., B.J. Bond, F.C. Meinzer. Does turgor limit growth in tall trees? *Plant, Cell and Environment* 27:229-236.

Winner, W.E., J. Berry, B.J. Bond, C. Cooper, T. Hinckley, J. Ehleringer, J. Fessenden, B Lamb, S. McCarthy, N. McDowell, N. Phillips, S.C. Thomas, M. Williams, Canopy carbon gain and water use: Analysis of old growth conifers in the Pacific Northwest. *Ecosystems*. In Press.

Unsworth, M., N. Phillips, T. Link, B.J. Bond, M. Falk, M. Harmon, T. Hinckley, D. Marks, K.T. Paw U. Components and Controls of Water Flux in an Old-Growth Douglas-Fir / Western Hemlock Ecosystem. *Ecosystems*. In Press.

Moore, G.W., B.J. Bond, J.A. Jones, N. Phillips and F.C. Meinzer. Structural and compositional controls on transpiration between 40- and 450-year-old riparian forests in Western Oregon, USA. *Tree Physiology* 24:481-489.

Phillips, N., B.J. Bond, N. McDowell, M.G. Ryan, and A. Schauer. Leaf and whole-tree gas exchange in 10 m and 25 m tall Oregon white oak. *Functional Ecology* 17:382-840.

D. R. Bowling, N. G. McDowell, J. M. Welker, B. J. Bond, B. E. Law, J. R. Ehleringer**.** Oxygen isotope content of CO2 in nocturnal ecosystem respiration 1. Observations in forests along a precipitation transect in Oregon, USA. *Global Biogeochemical Cycles* 17(4):1120

D. R. Bowling, N. G. McDowell, J. M. Welker, B. J. Bond, B. E. Law, J. R. Ehleringer. Oxygen isotope content of CO_2 in nocturnal ecosystem respiration 2. Short-term dynamics of foliar and soil component fluxes in an old-growth ponderosa pine forest. *Global Biogeochemical Cycles* 17(4):1124

Cushing, J.B., N. Nadkarni, R. Dial and B. Bond. 2003. The Canopy Database Project: How Trees and Forests Inform Biodiversity & Ecosystem Informatics. Computing in Science and Engineering May/June 32-43.

McDowell, N.G., J.R. Brooks, S. Fitzgerald, and B.J. Bond. Carbon isotope discrimination and growth response of old *Pinus ponderosa* trees to stand density reductions. *Plant, Cell and Environment* 26:631-644.

Manter, D.K., B.J. Bond, K.L. Kavanagh, J.K. Stone and G.M. Filip. Modelling the impacts of the foliar pathogen, *Phaeocryptopus gaeumannii*, on Douglas-fir physiology: net canopy carbon assimilation, needle abscission and growth. *Ecological Modelling* 164:211-226.

Phillips, N., M.G. Ryan, B.J. Bond, N.G. McDowell, T.M. Hinckley and J. Čermák. Reliance on stored water increases with tree size in three species in the Pacific Northwest. *Tree Physiology* 23:237-245.

Brooks, J. R., P. J. Schulte, B. J. Bond, R. Coulombe, T. M. Hinckley, N. McDowell, and N. Phillips . 2003. The effects of transient reductions in functional leaf area on stomatal conductance: Branch level experiments on young and old trees. *Trees: Structure and Function* 17:101-108.

Bond, B.J., J.A. Jones, G. Moore, N. Phillips, D. Post and J. McDonnell. 2002. The zone of vegetation influence on baseflow revealed by diel patterns of streamflow and vegetation water use in a headwater basin. *Hydrological Processes* 16:1671-1677.

McDowell, N.G., N. Phillips, C. Lunch, B.J. Bond and M.G. Ryan. 2002. An investigation of hydraulic limitation and compensation in large, old Douglas-fir trees. Tree Physiology 22:763-774.

McDowell, N. G., H. Barnard, B. J. Bond, T. Hinckley, R. Hubbard, H. Ishii, K. B., F. C. Meinzer, J. D. Marshall, F. Magnani, N. Phillips, M. G. Ryan, and D. Whitehead. 2002. The relationship between tree height and leaf area:sapwood area ratio. *Oecologia* 132:12-20.

Hubbard, R.H., B.J. Bond, R.S. Senock and M.G. Ryan. 2002. The effect of branch height on leaf gas exchange, branch hydraulic conductance and branch sap flux in open grown ponderosa pine. *Tree Physiology* 22:575-581.

Woodruff, D., B.J. Bond, G.A. Ritchie and W. Scott. 2002. Effects of stand density on the growth of young Douglas-fir trees. *C.J.F.R.* 32:420-427.

Phillips, N., B.J. Bond, N.G. McDowell and M.G. Ryan. 2002. Canopy and hydraulic conductance in young, mature, and old Douglas-fir trees. *Tree Physiology* 22(2/3):205-212.

Apple, M., K. Tiekotter, M. Snow, J. Young, A. Soeldner, D. Phillips, D. Tingey and B.J. Bond. 2002. Needle anatomy changes with increasing tree age in Douglas-fir. *Tree Physiology* 22(2/3):181-188.

Chen, J., M. Falk, E. Euskirchen, K.T. Paw U, T. Suchanek, S. Ustin, B.J. Bond, K.D. Brosofske, N. Phillips, and R. Bi. 2001. Biophysical Controls of Carbon Flows in Three Successional Douglas-fir Stands Based upon Eddy-Covariance Measurements. *Tree Physiology* 22(2/3):171-180.

Bond, B.J. and J.F. Franklin. 2002. Aging in Pacific Northwest forests: A selection of recent research. *Tree Physiology* 22(2/3):73-76.

Bowling, D.R., N.G. McDowell, B.J. Bond, B.E. Law, and J.R. Ehleringer. 2001. ^{13}C content of ecosystem respiration is linked to precipitation and vapor pressure deficit. *Oecologia* 131:113-124.

Stenberg, P., S. Palmroth, B.J. Bond, D.G. Sprugel and H. Smolander. 2001. Shoot structure and photosynthetic efficiency along the light gradient in a Scots pine canopy. *Tree Physiology* 21:805-814.

Williams, M., B.J. Bond and M.G. Ryan. 2001. Evaluating different soil and plant hydraulic constraints on tree function using a model and water flux data from ponderosa pine. Plant, Cell and Environment 24:679-690.

Phillips, N., B.J. Bond and M.G. Ryan. 2001. Gas exchange and hydraulic properties in the crowns of two tree species in a Panamanian moist forest. *Trees*: *Structure and Function* 15:123-130.

Manter, D.K., B.J. Bond, K.L. Kavanagh, P.H. Rosso and G.M. Filip. 2000. Timing and mechanism of impact of the Swiss needle cast fungus, Phaeocrytopus gaeumanii, on Douglas-fir needle gas exchange and rubisco activation. New Phytologist 148:481-491.

Bond, B.J. 2000. Age-related changes in photosynthesis of woody plants. Trends in Plant Science 5(8):349-353.

Bond, B.J. and M.G. Ryan. 2000. Becker, Meinzer and Wullschleger's critique mis-interprets the hydraulic limitation hypothesis. Functional Ecology 14:138-140.

Ryan, M.G., B.J. Bond, R.M. Hubbard, E. Cienciala, J. Kucera, D. Woodruff, B.E. Law and R. Lewis. 2000. Transpiration and whole-tree conductance in ponderosa pine trees of different heights. Oecologia 124:553-560.

Canadell, J., H.A. Mooney, D. Baldocchi, J. Berry, J. Ehleringer, C. Field, T. Gower, D. Hollinger, J. Hunt, R. Jackson, S. Running, G. Shaver, S. Trumbore, R. Valentini and B. J. Bond. 2000. Carbon metabolism of the terrestrial biosphere: A multi-technique approach for improved understanding. Ecosystems 3:115-130.

Ganapol, B.D., C.A. Hlavka, D.L. Peterson, L.F. Johnson and B.J. Bond. 1999. LCM2: A coupled leaf/canopy radiative transfer model. *Remote Sensing of Environment* 70:153-166.

Bond, B.J., B.T. Farnsworth, R.A. Coulombe and W.E. Winner. 1999. Foliage physiology and biochemistry in response to radiation gradients in conifers with varying shade tolerance. *Oecologia* 199(2):183-192.

Bond, B.J. and K.L. Kavanagh. 1999. Stomatal conductance of four woody species in relation to leaf-specific hydraulic conductance and threshold water potential. *Tree Physiology* 19:503-510.

Phillips, N. and B.J. Bond. 1999. A micro-power precision amplifier for converting the output of light sensors to a voltage readable by miniature data loggers. *Tree Physiology* 19:547-549.

Hubbard, R.M., B.J. Bond and M.G. Ryan. 1999. Evidence that hydraulic conductance limits photosynthesis in old *Pinus ponderosa* trees. *Tree Physiology* 19(3):165-172.

Bond, B.J. 1999. The maximum heights of trees. McGraw-Hill Yearbook of Science & Technology. McGraw-Hill Book Co., New York. Pp. 375-378.

Kavanagh, K.L., B.J. Bond, S.N. Aitken, B.L. Gartner and S. Knowe. 1999. Shoot and root vunerability to xylem cavitation in four populations of Douglas-fir seedlings. *Tree Physiol.* 19(1):31-38.

Rundel, P.W. and B.J. Yoder. 1998. Ecophysiology of *Pinus*. In: D. Richardson, ed., *Ecology and Biogeography of Pinus*. Cambridge University Press. Pp. 296-323.

Treuhaft, R., M. Moghaddam and B.J. Yoder. 1997. Forest vertical structure from multibaseline interferometric radar for studying growth and productivity. IGARSS97, Singapore, #H6-06, August 1997.

Ryan, M.G. and B.J. Yoder. 1997. Hydraulic limits to tree height and tree growth. *BioScience* 47(4):235-242.

Aitken, S.N, K.L. Kavanagh and B.J. Yoder. 1995. Genetic variation in seedling water use efficiency as estimated by carbon isotope ratios and its relationship to sapling growth in Douglas-fir. *Forest Genetics* 2(4):199-206.

Yoder, B.J. and R.E. Pettigrew-Crosby. 1995. Predicting nitrogen and chlorophyll from reflectance spectra (400-2500 nm) at leaf and canopy scales. *Remote Sens. Environ.* 53(3): 199-211.

Yoder, B.J., M.G. Ryan, R.H. Waring, A.W. Schoettle and M.R. Kaufmann. 1994. Evidence of reduced photosynthetic rates in old trees. *Forest Science*: 40(3):513-527.

Waring, R.H., J. Runyon, S.N. Goward, R. McCreight, B. Yoder and M.G. Ryan. 1994. Developing remote sensing techniques to estimate photosynthesis and annual forest growth across a steep climatic gradient in western Oregon, U.S.A. In: Management of structure and productivity of boreal and subalpine forests. (eds. S. Linder and S. Kellomaki). *Studia Forestalia Suecica* 191:33-41.

Billow, C.R., P.A. Matson and B.J. Yoder. 1994. Seasonal biochemical changes in coniferous forest canopies and their response to fertilization. *Tree Physiology* 14(6):563-574.

Yoder, B.J. and R.H. Waring. 1994. Normalized difference vegetation index of small Douglas-fir canopies with varying chlorophyll concentrations. *Remote Sens. Environ*. 48:1-11.

Shainsky, L.J., B.J. Yoder, T.B. Harrington, and S. Chan. 1994. Physiological characteristics of red alder: Water relations and photosynthesis. In: *The Biology and Management of Red Alder*. (eds. D.E. Hibbs, D. DeBell, and R. Tarrant). Oregon State University Press. pp. 73-91.

Hibbs, D.E. and B.J. Yoder. 1993. Development of Oregon white oak seedlings. *Northwest Science:* 67(1):30-36.

Yoder, B.J. and L.S. Daley. 1990. Development of a visible spectroscopic method for determining chlorophyll a and b in vivo in leaf samples. *Spectroscopy* 5(8):44-50.

Omi, S.K., B. Yoder, and R. Rose. 1990. Fall lifting and long-term storage of ponderosa pine seedlings: effects on post-storage leaf water potential, stomatal conductance, and root growth potential. *Tree Physiology* 8:315-325.

Non-refereed articles:

Yoder, B.J. and D.E. Hibbs. 1991. White oak's future uncertain. *Northwest Woodlands* 7(1):22.

Yoder, B.J. 1985. *People and Forests in Oregon*. 16 min. slide-tape program. Forestry Media Center, Oregon State University, Corvallis, OR.

Published datasets:

Yoder, B. and L. Johnson. 1999. ACCP Seedling canopy chemistry data. Available online (http://www.eoscis.ornl.gov) from the ORNL Distributed Active Archive Center, Oak Ridge National Laboratory, Oak Ridge, TN, USA.

Yoder, B. and L. Johnson. 1999. ACCP Seedling canopy reflectance spectra data. Available online (http://www.eoscis.ornl.gov) from the ORNL Distributed Active Archive Center, Oak Ridge National Laboratory, Oak Ridge, TN, USA.

Newspaper Stories

"Forestry Bridges Cultures, Continents". *The Barometer*, March 2002. http://barometer.orst.edu/0102/02winter/020213/020213n7.html

"Higher Learning: Cranes carry scientists to new views of life in the tops of old growth" *The Eugene Register Guard*, Sept. 1998. http://www.4j.lane.edu/partners/eweb/ttr/crane/higher.html

"Long drink of water takes on new meaning with old trees" *The Oregonian*, Aug. 31, 1995

TV program

"The Forest Through the Trees", a 12 minute production for the program*, Real Science* that highlighted my canopy research. Produced by PBS in 1999 and broadcast at multiple times. (*VHS copy available for loan through the Forestry Media Center*).

Radio program

Earth and Sky, Sept. 28, 2000, "Why Trees Stop Growing" (transcript available at http://earthsky.com/2000/es000928.html)

Magazine Articles

Wright, Karen. 2002. "Antigravity Plumbing". Discover 9/02:2021. http://www.discover.com/current_issue/index.html

Zimmer, Carl. 2000. "High and Dry." *Natural History* 10/00:36-37. http://www.amnh.org/naturalhistory/biomechanics/1000_biomechanics.html

"Unlocking the Secrets of Old Trees", *The Forestry Source*. http://www.safnet.org/archive/102_secrets.htm

Grants and Contracts

Bond, B.J., M.H. Unsworth, E. Sulzman and A. Mix. "Airsheds, isotopes and ecosystem metabolism in mountainous terrain". NSF. $790,000 (7/1/04 – 6/30/07).

Bond, B.J. "Impacts of plantations of exotic trees on water resources in Patagonia". $225,000. NSF. (7/1/03 – 6/30/06).

Harmon, M., Bond, B.J., Johnson, S.L., Jones, J.A., Swanson, F.J. "Long-Term Ecological Research at the H.J. Andrews Experimental Station – LTER5". $4,680,000. NSF (12/1/02 – 11/31/08).

Bond, B.J., M. Unsworth and A. Mix. "Using isotope ratios of respired CO2 in small watersheds as indicators of ecosystem function: a pilot study" $156,096. NSF (3/1/02 – 2/28/04).

Bond, B.J., M. Greenwood and M. Day. “Collaborative Research: The regulation of age-related decline in photosynthesis in forest trees” $180,000, NSF (9/1/01 – 8/31/04).

Bond, B.J., M.G. Ryan and M. Williams. “Vegetation water use in different aged Douglas-fir/western hemlock stands”. $300,000. WESTGEC. (7/1/2001-6/30-2004).

Bond, B.J. and F. Meinzer. “Canopy Processes Research Services”. $150,304. Research Cost Reimburseable Agreement, USDA Forest Service, PNW Station. (1/1/2001 – 12/31/2004).

Reyes, J., D. Pence, N. Phillips and B.Bond. $25,000. Transport enhancement using ractal geometry: applications to microchip cooling, heat exchangers and forest-atmosphere exchanges. Rickert Account, OSU College of Engineering.

Ehleringer, J.R. and B.J. Bond. $400,000. Isotopic analysis of ecosystem respiration and photosynthetic discrimination along the OTTER transect. USDA National Research Institute Competitive Grants Program. (9/1/99-8/31/2002).

Bond, B.J. and N. Phillips. $7,891. "Vegetation water use and stream flow at the H.J. Andrews Experimental Forest: A first step". Oregon State University Research Council. (4/1/99 - 3/31/2000).

Mix, A., R. Collier, L.I. Gordon, N.G. Pisias, J. Dilles, K.K. Falkner, B. Hales, M.E. Torres, F.G. Prahl, B. Simoneit and B. Bond. $368,000. "Modernizing the OSU Isotope Ratio Mass Spectrometry Facility". NSF.

Bond, B.J., M.G. Ryan and M. Williams. $150,000. “Stand age, productivity and hydraulic conductance of Douglas-fir in the wind River Basin”. WESTGEC (7/1/98-6/30/01).

Yoder, B.J. $2,932. “Distribution of photosynthetic capacity in coniferous forests of Finland and Sweden”. OSU Office of International Research and Development. (12/17/97 - 12/17/98).

Yoder, B.J. $10,000. “Use of maple seedling canopy reflectance dataset for validation of SART/LEAFMOD Radiative transfer model.” NASA Ames University Consortium. (8/1/97 - 8/1/99).

Yoder, B.J., M.G. Ryan, M. Williams and E. Rastetter. $439,000. “Is productivity of old forests limited by tree hydraulic conductance?” USDA National Research Institute Competitive Grants Program. (10/1/97-9/30/2000).

Yoder, B.J. and G.A. Ritchie. $207,645. “What causes the 'density effect' in young forest plantations?” The National Council of the Paper Industry for Air and Stream Improvement, Agenda 20-20 (administered through DOE, 10/25/96).

Sprugel, D.G., Yoder, B.J., and Hinckley, T.M. $195,221. “Distribution of photosynthetic capacity in conifer canopies: the role of shoot geometry, leaf morphology, and nitrogen concentration.” NSF. (7/1/96 - 6/30/99).

Martin, M.E., Aber, J.D., Wessman, C., Clark, R., Yoder, B.J., and Johnson, L. $150,000. “Method Comparison for the estimation of foliar chemistry from high spectral resolution visible and near infrared data”. NASA (9/1/95 - 8/31/96).

Yoder, B.J. $17,080: “Correlation of proxy characteristics with environmental stressors in ponderosa pine”. USFS Pacific Northwest Research Station Cooperative Agreement (11/15/94 - 9/30/96).

Ryan, M.G. and B.J. Yoder. $100,000: “Identifying the mechanism for reduced photosynthetic performance in old trees”. USDA National Research Institute Competitive Grants Program. (9/1/94-8/31/96).

Yoder, B.J. $6,000: "Carbon isotope discrimination in Douglas-fir seedlings". Oregon State University Research Council. (7/1/94-6/30/95).

Yoder, B.J. and W.E. Winner. $285,570: "Relationships between chlorophyll, spectral vegetation indices and photosynthetic potential on the Oregon Transect". NASA. (3/1/94-2/28/97).

Yoder, B.J. $121,000: "Remote sensing of canopy chemistry at the miniature canopy scale". NASA. (7/1/92-6/30/94).

Yoder, B.J. $62,000: "The physiological basis for the relationship between NDVI and above-ground growth". NASA Graduate Student Researcher's Program (1989 - 1992)

Yoder, B.J. $600: "How the age of trees affects stable isotopes of carbon in growth rings"; Grant-in-Aid of Research from Sigma Xi, The Scientific Research Society. (1/1/92-6/1/93).

Research Panels/Advisory Committees

Member of CSREES review team for Departments of Forest Ecology and Forest Science, University of Maine, April 2003.

Member of NSF's Ecosystems panel review team, April, 2002, 2003 and 2004.

Member of organizing committee for IUFRO Canopy Processes Travelling Workshop, "Linking the Complexity of Forest Canopies to Ecosystem and Landscape Function", Oregon and Washington, July 11-19, 2001.

Member of Terrestrial Ecology & Ecosystems Panel for EPA Graduate Student Fellowships. February, 2001.

Member of Peer Review panel for NASA's EOS IDS program. December 1999.

Member of NASA committee to develop remote sensing research to complement FACE (Free Air CO_2 Enrichment) studies. July, 1997 - June 1998.

Member of the National Center for Ecological Analysis and Synthesis working group, "NPP decline with stand age". May, 1997 - Jan. 1999.

Member of the National Scientific Advisory Committee of the Wind River Canopy Crane Research Facility. May, 1997 - present.

Member of Interagency (NSF/USDA/EPA/NASA) Terrestrial Ecology and Global Change Initiative (TECO) Peer Review Panel. June 1995.

Invited participant in the IGBP Global Change and Terrestrial Ecosystems workshop, "Changes in Forest Productivity and Carbon Balance with Stand Development: Linking Models and Experiments". Rotorua, New Zealand (February 8-9, 1995).

Invited member of expert panel convened by Weyerhaeuser Corp. to identify mechanisms of positive growth response to density (August, 1994)

Member of NASA's Accelerated Canopy Chemistry Program for remote sensing of canopy chemistry (1992-1994)

Member of NASA proposal review panel (for the BOREAS program) (June, 1992).

Teaching and Advising

Courses Taught

2001: 'Utilización de isótopos estables en fisiología de especies forestales discriminación isotópica (fotosíntesis agua en la planta). Curso teórico y práctico' Montevideo, Uruguay, Sept. 7-14. An 8-day intensive course for graduate students and professionals offered through the PEDECIBA and Universidad de la Republica, Montevideo, Uruguay. (The course outline is posted at http://www.rau.edu.uy/pedeciba/bio2001.htm, along with other courses offered the same term through PECEDIBA.)

2001: 'Fisiología forestal: comparación en el uso del agua entre especies natives y exóticas', Buenos Aires, Argentina, Oct. 15-20. A 6-day intensive course for graduate students and professionals offered through the Escuela de Graduados at the University of Buenos Aires.

1999-2002; 2004: 'Forest Science Teaching Practicum' (Forest Science 629) -- a 1-credit graduate course (http://www.fsl.orst.edu/~bond/fs629/index.htm)

2000: 'Tree Physiology: Concepts, methods, and applications to forestry'. Bariloche, Argentina: 13-24 March, 2000 – an 8-credit course for graduate students and professionals offered through the Escuela de Graduados at the University of Buenos Aires. (http://www.fsl.orst.edu/~bond/shortcrs/index.htm

1996-2001; 2003-2004: 'Physiology of Woody Plants' (Forest Science 561) -- a 3-credit graduate course (http://www.fsl.orst.edu/~bond/fs561/index.htm)

1996: 'Stable Isotopes in Ecological Research' (Forest Science 691) -- a 2-credit advanced graduate seminar (co-taught with Dr. Kate Lajtha)

1995: 'Whole Plant Physiology' (Forest Science 541X) -- a 3-credit course for graduate students with majors in an area of natural resources

1993: 'Plant Autecology' (Botany 441/541)-- a 3-credit course for advanced undergraduates and graduate students

1982 and 1983: 'Forestry for Teachers' (Forest Management 360X) -- a 3-credit course for undergraduate education majors at Oregon State University

Advisees

Post doctoral associates:

Kate George (June. 2001 – present)
Nathan Phillips (Jan. 1998 – Aug. 2000)
Maciej Zwieniecki (May 1994 – Sept. 1994)

Major advisor for:

Tom Pypker, Ph.D., Forest Science (Sept. 2001 –)
Julián Licata, M.S., Forest Science (Sept. 2001 – Dec. 2003)
Nate McDowell, Ph.D., Forest Science (Sept. 1998 – March 2002)
Georgianne Moore, Ph.D., Environmental Science (Sept. 1999 – Sept. 2003)
David Woodruff, M.S., Forest Science (Sept. 1997 – March 2000)

AWARDS/FELLOWSHIPS

2001 - Fulbright Award for Teaching and Research in Environmental Science in Argentina and Uruguay
2001 – College of Forestry Dean's award for outstanding achievement in teaching, advising and mentoring of undergraduate and graduate students.
2000 -- Outstanding Faculty Award, OSU Forest Science Department (awarded by the graduate sudents)
1999 -- Emerging Scholar Faculty Award, Phi Kappa Phi
1995 -- Facilities development award -- awarded by the office of the Provost to improve the Tree Physiology Laboratory in Peavy Hall
1995 -- L.L. Stewart Faculty Development Award
1994 -- Elected to Sigma Xi, The Scientific Research Society
1994 -- Outstanding Faculty Award, OSU Forest Science Department (awarded by the graduate sudents)
1991 -- Elected to the Honor Society of Phi Kappa Phi
1989 -- Dorothy D. Hoener Graduate Fellowship
1988 -- South Santiam Graduate Fellowship
1988 -- Oregon State University Graduate School Fellowship
1972 -- National Science Foundation Undergraduate Researcher Fellowship

Professional Memberships

The Ecological Society of America, The American Geophysical Union, The Association for Women in Science, Sigma Xi, Phi Kappa Phi