Dr. Kathleen Kavanagh
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PROFESSIONAL PREPARATION:

Ph.D. 1993, Forest Science, Oregon State University,
M.S. 1987, Forest Management, SUNY College of Environmental Science and Forestry.
B.S. 1977, Forest Management, SUNY College of Environmental Science and Forestry.

EXPERIENCE:

Teaching and Research Appointments:

2014-Present	Professor and Department Head Ecosystem Science and Management Department, Texas A&M.
2010-2014	Professor, Department of Forest, Rangeland, and Fire Sciences. University of Idaho
2007	Interim Department Head Forest Resources Department (8 months). University of Idaho
2003- 2009	Associate Professor, Department of Forest Resources, University of Idaho.
1999-2003	Assistant Professor, Department of Forest Resources, University of Idaho.
1997-2003	Member of the Independent Multidisciplinary Science Team. State of Oregon.
1994-1999	Assistant Professor-Forestry Extension, Department of Forest Resources, Oregon State Univ.
1993-1994	Instructor and Continuing Education Coordinator, Forest Resources and Forest Science Departments, Oregon State Univ.
1989-1993	Graduate Research Assistant, Forest Science Department, Oregon State University
1990-1993	Assistant Instructor, Forest Science Department, Oregon State University
1987-1989	Teaching Assistant/Technical Specialist, S.U.N.Y. College of Environmental Science and Forestry
1984-1987	Graduate Research Assistant, S.U.N.Y. College of Environmental Science and Forestry. Syracuse, N.Y. 13210

TEACHING ACCOMPLISHMENTS:

Courses Taught:

University of Idaho:

FOR 270 Principles of Forest Ecosystem Management
FOR 330 Forest Ecosystem Processes
FOR 424 Silviculture
FOR 424 Forest Dynamics and Management
FOR 504 Use of Stable Isotopes in Ecological Investigations
FOR 504 Tree Physiology
FOR 504 Journal Club
FOR 525 Advanced Silviculture
FOR 529 Forest Ecosystem Analysis
FOR 551 Tree Physiology and Forest Ecology Journal Club

Oregon State University:

F240 Forest Biology.
FS691 Stress Physiology.
FS 506 Natural Resources Institute, Advanced Silviculture Module.
FS 504 Silviculture Institute, Stand Development and Regeneration.
FS499/599 Practical Applications of Uneven-aged Management.

International:

The Scientific Basis of Silviculture. 3 credit course offered to graduate students at the University of Buenos Aires and the Univ. National del Comahue Bariloche. 2002.

Forest Ecosystem Ecology, 2 credits course offered to graduate Students at Illia University in Tbilisi, Georgia. 2012.

Students Advised:

Undergraduate Students:

10-15 per year in Forest Resources, Fire Ecology and Management, Ecology Conservation Biology.

Senior Thesis Projects Advised:

Brad Smith, Environmental Science, 2002.
Autumn Lear, Natural Resources Ecology,. 2004.
Eric Clippinger, ECB, 2008, Devlig Research Scholar.
Anita Shrestha, Conservation Biology, 2008
Steve Daanen, ECB, 2009.
Tyler Jack, ECB, 2013
Kevin Fuchs, Forest Resources 2014

Graduate Students, Major Professor, in progress:

Andrea Noble Stuen MS, UI Department of Forest Resources expected Spring 2017.
Ben Soderquist, PhD, UI Department of Forest, Rangeland and Fire Sciences expected Spring 2017.

Graduate Students, Major Professor, completed:

Dan Manter PhD, (provided RA funding) OSU Forest Science Department. 2000.
Greg Estoll M.S., UI Department of Forest Resources. 2001.
Aki Koyama M.S., UI Department of Forest Resources, 2002.
Zeina El-Hajj, M.S., UI Department of Forest Resources expected Spring 2003.
Renee Van Aelst-Bouma M.S.(co-advisor,) UI Department of Forest Resources 2002.
Aki Koyama, PhD, UI Department of Forest Resources Spring 2007.
Jessica Schedlbauer PhD, UI Department of Forest Resources 2006.
Kirsten Stephan PhD, UI Department of Forest Resources 2007.
Alisa Schtozko, M.S. UI Department of Forest Resources 2007.
Matt Thompson MS Environmental Sciences 2007.
Robert Pangle, PhD, UI Department of Forest Resources Fall 2008.
Pete Gag, M.S. UI Departmental of Forest Resources Spring 2009.
Tadd Wheeler, PhD, UI Departmental of Forest Resources, Spring, 2014.

Graduate Students, Committee Memberships, in progress:

Graduate Students, Committee Memberships, completed:

Mengxue Xia, PhD. UI Department of Forest, Rangeland and Fire Sciences, Spring 2016
Kerry Kemp PhD. UI Department of Forest, Rangeland and Fire Sciences, Fall 2015
Paul Dunnette, MS, UI Department of Forest, Rangeland and Fire Sciences Fall 2013
Liang Wei PhD, UI Forest Resources, Spring 2013
Doug Frome, MS Electrical and Computer Engineering Spring 2013
Derek Neal, MS Electrical and Computer Engineering Winter 2013
Harry Jagerman, PhD. UI Fish and Wildlife. Winter 2011
Jessica Murphy, MS, UI Department of Fish and Wildlife. Fall 2009.
Laura Lietes-Barrios. PhD. UI Department of Forest Resources. Fall 2009.
Elizabeth Powers, PhD, UI, College of Natural Resources, Forest Resources Winter 2012.
Rob Keefe, PhD, UI, College of Natural Resources, Forest Resources, Winter 2012.
Nerea Ubierna Lopez, PhD. UI Department of Forest Resources Spring 2009.
Amy June Brumble, MS, UI Department of Forest Resources, 2007.
Zach Holden PhD. UI Department of Forest Resources. 2007.
Javier Lugo Perez PhD UI Plant Soil and Entomological Sciences, 2007.
Jason Hubbardt. PhD. UI Department of Forest Resources 2007.

Meghan Calhoun, PhD. UI Environmental Sciences 2007
Ryan Kriener MS. UI Dept of Fish and Wildlife 2006
Amy Pocewitz PhD UI Department of Forest Resources 2006
Robert Froese. PhD, UI Department of Forest Resources.
Abdul Majid, PhD. Outside reviewer. University of Agric. Faisalabad, Pakistan 2003.
Matt Anderson M.S. UI Department of Forest Resources, 2001.
Pablo Russo PhD, OSU Botany and Plant Pathology. 2001.
Christine Lomas M.S., OSU Forest Science Department 1999.
Elizabeth Littlefield, M.S. OSU Forest Resources Department. 1997.

Postdoctoral Scientists
Steve Blecker, Forest Ecologist, 2005-2007
Alexandra (Sascha) Lodge, Forest Ecologist, 2015-

Other Direct Reports
Paul Robinson, Electrical and Computer Engineer, 2011-2014

Non-credit classes, workshops field tours and lectures.

Drought in conifers, relationships to insects and disease. Presentation given at UI Extension Workshops in Coeur d Alene ID and Orofino, ID. Approx. 90 attendees total 2012.
Advanced Regeneration Course. 35-40 participants, Moscow ID, 2010 2012, and 2014 3days.
Reforestation and Fire Course, 25 participants, Moscow, ID, 2005, 3 days.
Nutrient and Spring burn. 35 participants. USFS. Potlatch ID, 2004. 1 day.
Tree Biology and Reforestation Lecture. 64 participants. Boise ID. 2002. 3 days.
Tree Biology and Silviculture Lecture 34 participants. Advanced Silviculture Module of the Natural Resources Institute. OSU. Corvallis OR. 2002. 2 weeks.
Swiss Needle Cast Research Update. 15 participants. Moscow ID. 2002. 1 day.
Swiss Needle Cast Field Tour. 25 participants. Orofino ID. 2002. 2 days.
Reforestation and Restoration Ecology Shortcourse. 30 participants, Moscow ID, 2001. 4 days
Current Topics in Forest Health. 29 participants. Coeur D Alene ID. 2000. 1 day.
Swiss Needle Cast Disease in Douglas-fir lecture. 30 participants. Moscow ID SAF Meeting 2000.
Physiological Adaptations of Trees: Interactions with Forest Management. 100 participants. Inland Empire Tree Improvement Coop Annual Meeting 2000. 2 days
Tree Biology and Silviculture Lecture 34 participants. Advanced Silviculture Module of the Natural Resources Institute. OSU. Corvallis OR. 2001. 2 weeks.
Tree Biology and Reforestation Lecture. 30 participants. Idaho Department of Lands Reforestation Workshop. Moscow, ID. 3 days.
Forest Management Updates. 20 participants (avg.) Clatsop Tillamook Small Woodlands Association. Astoria and Tillamook OR 1994-1999.
Forest Management on the North Coast. 50 participants. Rotary Club Meeting. 1999.
Practical Applications of Uneven-aged Management. 13 participants. 1998. 2 months.
Tree Biology and Silviculture Lecture 34 participants. Advanced Silviculture Module of the Natural Resources Institute. OSU. Corvallis OR. 1998. 2 weeks
Reforestation with Western Hemlock, 25 participants Astoria, OR 1998. 1 day
Forest Ecology and Management Workshop. 29 participants. Astoria, OR 1998. 1 day
Common Tree Diseases on the North Coast: Ecological and Biological Implications. 30 participants. Tillamook OR 1998.
Coastal Oregon Productivity Enhancement (COPE) Research Results Workshop. 73 participants. Clatsop, Tillamook and Lincoln Co. OR. 1998. 1 day.
Coastal Forest Ecosystems. 20 participants. Astoria, OR. 1997. 1 day
Alternative Species Workshop. 23 participants. Tillamook, OR. 1997.1 day
Sixth-Grade Forestry Tour 220 participants (avg annual) Astoria OR 1995 to 1999. 2 days.
Reforestation Workshop. 30 participants . Astoria, OR. 1996.
Forest Ecology Presentation and Old Growth Field Tour. 16 participants. Astoria, OR. 1996.
Tree: Form and Function Community/Urban Forestry Institute. 18 participants .Corvallis, OR. 1996.
Basic Forestry Shortcourse. 13 participants. Astoria, OR. 1996.
Wood Products for Forestry Extension Shortcourse. 20 participants. Corvallis, OR. 1996.
Streamside Management Field Tour. 12 participants. Seaside, OR. 1995.
Forest Health Workshop. 10 participants. Corvallis, OR. 1995.

Master Woodland Manager Shortcourse. 20 participants. Seaside, OR, 1995-96.
Ecosystem Workforce Shortcourse.14 participants. Corvallis, OR. 1995-96.
Coastal Forest Ecosystems Workshop. 12 participants. Tillamook, OR. 1995.
Hemlock Regeneration Lecture. Society of American Foresters Chapter Meeting. 20 participants. Seaside, OR. 1995.
Hemlock Regeneration Workshop. Oregon Department of Forestry. 10 participants. 1995.
Ecosystem Management Workshop. 25 participants. 1995.
Hybrid Poplar Workshop. 32 participants. 1995.
Logger Education for the Advancement of Professionalism Workshop. 25 participants. Medford, Astoria and McMinnville, OR. 1994-96.
Decision Support Institute, Module 4. 30 participants. Corvallis, OR 1994
Ecosystem Management Workshop. 3 days, 40 participants. Corvallis, OR. 1994.
Jobs in the Woods Program. Taught Module on Forest Ecology. 12 participants Corvallis, OR. 1994.
Decision Support Institute, Module 3. 30 participants. Corvallis, OR. 1993

SCHOLARSHIP ACCOMPLISHMENTS:

Refereed Publications: (* my graduate students)

Thompson*, M., A. Koyama* and K. Kavanagh. 2017. Wildfire effects on physiological properties of conifers in central Idaho forests, USA. Trees. **DOI:** 10.1007/s00468-016-1489-z

Wei, L, T.E. Link, A.T. Hudak, J.D. Marshall, K.L. Kavanagh, J.T. Abatzoglou, H. Zhou, R.E. Pangle*, and G. Flerchinger. 2016. Simulated water budget of a small forested watershed in the continental/maritime hydroclimatic region of the United States. Hydrological Processes, DOI: 10.1002/hyp.10769.

Pangle*, R., K.L. Kavanagh and R. Duursma. 2015. Decline in canopy gas exchange with increasing tree height, atmospheric evaporative demand and seasonal drought in co-occurring inland Pacific Northwest conifer species. Can J For Res. 45:1086-1101.

Stephan*, K., K.L. Kavanagh and A. Koyama*. 2015. Comparing the influence of wildfire and prescribed burns on watershed nitrogen biogeochemistry using ^{15}N natural abundance in terrestrial and aquatic ecosystem components. PlosOne. doi:10.1371/journal.

Berryman, E. J. D. Marshall and K.L. Kavanagh (2014) Decoupling litter respiration from whole-soil respiration along an elevation gradient in a Rock Mountain mixed-conifer forest. Canadian Journal of Forest Research. Can J For Res 44: 432-440.

Wheeler*, T., K.L. Kavanagh and S. Daanen. 2014. Terrestrial salmon carcass decompostion: Nutrient and isotopic dynamics in central Idaho. Northwest Science, 88(2): 106-119.

Graham, C.B., H.R. Barnard, K.L. Kavanagh, and J. P. McNamara. 2013. Catchment scale controls the temporal connection of transpiration and diel fluctuations in streamflow. Hydr. Proceses 27 (18), 2541-2556

Wei, L, J.D. Marshall, T.E. Link, K.L. Kavanagh, E. Du, R.E. Pangle*, P.J. Gag*, and N. Ubierna. 2013. Constraining 3-PG with a new $\delta^{13}C$ submodel: a test using the $\delta^{13}C$ of tree rings. Plant, Cell and Environment doi: 10.1111/pce.12133.

Stephan*, K., K.L. Kavanagh and A. Koyama*. 2012. Effects of spring prescribed burning and wildfires on watershed nitrogen dynamics of central Idaho headwater areas. For Ecol and Manag. 263 240-252.

Koyama*, A., K. Stephan* and K.L. Kavanagh. 2011. Fire effects on gross inorganic N transformation in riparian soils in coniferous forests of central Idaho, USA: wildfire v. prescribed fires. Intl Journal of Wildland Fire. http://dx.doi.org/10.1071/WF10132.

Koyama*, A., K.L. Kavanagh and K. Stephan*. 2010. Wildfire effects on soil gross nitrogen transformation rates in coniferous forests of central Idaho, USA. Ecosystems. 13(7) 1112-1126.

Kavanagh, K.L., M.B. Dickinson, and A.S. Bova. 2010. A way forward for fire-caused tree mortality prediction: Modeling the physiological consequence of fire. Fire Ecology. Vol 6(1) 80-94.

Morse, W. C., J. L. Schedlbauer*, S. E. Sesnie, B. Finegan, C. A. Harvey, S. J. Hollenhorst, K. L. Kavanagh, D. Stoian, and J. D. Wulfhorst. 2009. Consequences of environmental service payments for forest retention and recruitment in a Costa Rican biological corridor. Ecology and Society **14**(1): 23. [online] URL: http://www.ecologyandsociety.org/vol14/iss1/art23/

Stephan*, K. and K. Kavanagh. 2009. Suitability of the diffusion method for low concentrations of ammonium and nitrate in KCl extracts for ^{15}N analysis at natural abundance. Soil Science Society of America Journal. Online publication January 22nd 2009.

Schedlbauer*, J.L. and K.L . Kavanagh. 2008. $\delta^{13}C$ in *Pentaclethra macroloba* trees growing at forest edges in north-eastern Costa Rica. Journal of Tropical Ecology. 24: 49-56.

Holden, Z. A., P. Morgan, M. G. Rollins, and K. L. Kavanagh. 2007.. Effects of multiple fires on stand structure in two southwestern wilderness areas, USA. Fire Ecology 3(2) 18-24.

Kavanagh, K.L., R.Pangle* and A.D. Schotzko*. 2007. Nocturnal transpiration causing disequilibrium between soil and stem predawn water potential in mixed conifer forests of Idaho. Tree Physiology 27: 621–629

Hubbart, J.A. Kavanagh, K.L. R. Pangle*, T Link and A.D. Schotzko*. 2007. Cold air drainage and modeled nocturnal leaf water potential in complex forested terrain. Tree Physiology 27::631–639

Schedlbauer*, J.L. and K.L. Kavanagh. 2007. Soil carbon dynamics in a chronosequence of secondary forests in northeastern Costa Rica. Forest Ecology and Management.

Schedlbauer*, J.L., B. Finegan, and K.L. Kavanagh. 2007. Rainforest structure at forest - pasture edges in northeastern Costa Rica. Biotropica 39:578-584.

Pocewicz, A., K.L. Kavanagh, and P. Morgan. 2007. The effects of adjacent land use on nitrogen dynamics at forest edges in Idaho, Ecosystems, 10(2) .

Manter*, D, Kavanagh, K., Rose, C., and Waring, R. H. (2005) Growth response of Douglas-fir seedlings to N fertilization: Importance of rubisco activation state and dark respiration rates. Tree Physiology. 25(8) 1015-1021.

Koyama*, A., Kavanagh, K., and Robinson, A. (2005). Marine nitrogen in central Idaho riparian forests: evidence from stable isotopes. Canadian Journal of Fisheries and Aquatic Sciences. 62 (3) 518-526.

El-Hajj*, Z, K.L Kavanagh, Z. C. Rose and Kanaan-Atallah. (2004). Nitrogen and carbon dynamics of a foliar biotrophic fungal parasite in fertilized Douglas-fir. New Phytologist, 163:139-147.

Peery, C.A., K. Kavanagh and J.M. Scott. 2003. Pacific Salmon: Setting Ecologically Defensible Recovery Goals. BioScience. July 2003. 53 (7). 622-623.

Manter*, D. and K. Kavanagh. 2003. Stomatal sensitivity in Douglas-fir following a fungal-mediated reduction in leaf area, maximum stomatal conductance and hydraulic conductance. 17:6 485-491. Trees Structure and Function.

Manter*, D., Bond B.J., Kavanagh K.L., Stone J.K. and G. M. Filip. 2003. 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.

Wang, T, Aitken, S and K. Kavanagh (2003). Selection for improved growth and wood quality in lodgepole pine: Effects on phenology, physiology and growth of seedlings. Trees Structure and Function. 17(3) 211-226.

Anekonda, T.S., M.C. Lomas, W.T. Adams, K. L. Kavanagh and S.N. Aitken. 2002. Genetic variation in drought hardiness of coastal Douglas-fir seedlings from British Columbia. Can J For Res: 32(10) 1701-1716.

Manter*, D., Bond B.J., Kavanagh K.L., Rosso P.H. and Filip G.M. 2000. Pseudothecia of Swiss needle cast fungus, *Phaeocryptopus gaeumannii*, physically block stomata of Douglas-fir, reducing CO_2 assimilation. New Phytologist: 148:481-491

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

Kavanagh, K.L., Bond B. J., Aitken S.N., Gartner B.L., and S.A. Knowe 1999. Root and shoot vulnerability to cavitation in four populations of Douglas-fir seedlings. *Tree Physiology*: 19;31-37.

Kavanagh, K.L. and J. Zaerr 1997. Xylem cavitation and loss of hydraulic conductance in western hemlock seedling following planting. *Tree Physiology:* 17, 59-63.

Aitken, S.N., Kavanagh K.L. and B.J. Yoder 1995. Genetic variation in water-use efficiency in Douglas-fir as measured by ^{13}C:^{12}C ratios. *Forest Genetics:* 2(4) 199-206.

Kavanagh, K.L., D. Lee, P.P. Drew and C.A. Maynard 1993. The effects of GA_3 and organic and organic solvents on acclimatization of tissue culture propagated black cherry (*Prunus serotina* Ehrh.) plantlets. *Forest Science*: 39(4):644-654.

Drew, A.P., K.L. Kavanagh, and C.A. Maynard. 1992. Acclimatizing micropropagated black cherry by comparison with half-sib seedlings. *Physiologia Plantarum*: 86:459-464.

Peer reviewed Papers

Gregory, S. Buckhouse J., Elmore W., Kavanagh K., Lichatowich J., Norris L., Schreck C., Pearcy W., Shepard R., and C. Yee. 2004. Oregon's water temperature standard and it application: Causes, consequences and controversies associated with stream temperature. IMST Technical Report 2004-01 161pp.

Buckhouse, J. Kavanagh K., Pearcy W., Elmore W., Gregory S., Lichatowitch J., Norris L., and C. Schreck. 2002. Recovery of wild salmonids in western Oregon lowlands. IMST Technical Report 2002-01. 190pp.

Lichatowitch, J., Kavanagh K., Pearcy W., Buckhouse J., Elmore W., Gregory S., and L. Norris. 2001. The scientific basis for artificial propagation in the recovery of wild anadromous salmonids in Oregon.. IMST Technical Report 2001-01. 80pp.

Kavanagh, K.L., Rogers R. and G. Filip. 2000. Needle blight, casts and rusts in Coast Range conifers. Woodland Workbook Publication EC 1515. OSU Extension Publication. Oregon State University. 8pp.

Pearcy W., Gregory S., Lichatowich J., Buckhouse J., Elmore W., Kavanagh K., and. L. Norris. 2000. Salmon abundances and effects of harvest: Implications for rebuilding stocks of wild coho salmon in Oregon. IMST Technical Report 2000-3. 57pp.

Gregory, S., Buckhouse J., Elmore W., Kavanagh K., Lichatowich J., Norris L., and W. Pearcy. 2000. Influences of human activity on stream temperatures and existence of cold-water fish in streams with elevated temperature. Report of a Workshop. IMST Technical Report 2000-2. 59pp.

Gregory, S., Pearcy W., Lichatowich J., Buckhouse J., Elmore W., Kavanagh K., and. L. Norris. 2000. Conservation hatcheries and supplementation strategies for recovery of wild stocks of salmonids. Report of a Workshop. IMST Technical Report 2000-1. 35pp.

Filip, G, Kanaskie A., Kavanagh K., Johnson G. and Maguire D. 2000 Silviculture and Swiss Needle Cast: Research and Recommendations. Research Contribution 30. FRL Publications, Oregon State University.16pp.

Norris, L., Kavanagh K., Lichatowich J., Buckhouse J., Elmore W., Gregory S., and W. Pearcy. 1999. Recovery of wild salmonids in western Oregon forests: Oregon forest practices act rules and measures of the Oregon plant for salmon and watersheds. IMST Technical Report 1999-1. 85pp.

Gregory, S., Lichatowich P., Pearcy W., Buckhouse J., Elmore W., Kavanagh K., and L. Norris. 1999. Defining and evaluating recovery of Oregon coastal coho salmon stocks: Implications for rebuilding stocks under the Oregon plan. IMST Technical Report 1999-2. 18pp.

Kavanagh, K.L., Boyle J. and G. Stankey. 1999. The integration of planted and natural forests in a regional landscape. New Forests. 17: 145-174.

Lichatowitch, J., Kavanagh K., Pearcy W., Buckhouse J., Elmore W. Gregory S., and L. Norris. 1998. Review of the hatchery measures in the Oregon plan for salmon and watersheds. IMST Technical Report 1988-1. 31pp.

Pearcy, W., Gregory S., Kavanagh K., Lichatowitch J., Buckhouse J., Elmore W. and L. Norris. 1998. Pinniped and seabird predation: Implications for recovery of threatened stocks of salmonids in Oregon under the Oregon plan for salmon and watersheds. IMST Technical Report 1998-2. 27pp.

Elwood, N., BowersS., Campbell A., Clements S., Duddles R., Fitzgerald S., Fletcher R., Garland.,. Kavanagh K., Kramer M., and P. Oester. 1997. Managing Your Timber Sale. Extension Circular**.** Oregon State University Extension Service.

Kavanagh, K.1992. Xylem cavitation: An indication of moisture stress in newly planted western hemlock seedlings. In: Proceedings of the Intermountain Forest Nursery Association Meeting. Park City Utah. p. 96-99.

Book Chapters

Kavanagh, K. and R. Bunch. 1998. Forest ecology and management. In: F. Conway, D. Godwin and M. Cloughsey (eds.) Watershed Stewardship: A Learning Guide. EM 8714, OSU Extension Service, Corvallis, OR 400pp.

Drew, A.P., Kavanagh K., and C.A. Maynard. 1986. Comparative growth of micropropagated *Prunus serotina* plantlets and seedlings in different containers. In: Valentine (ed.) Progress and Prospects in Forest and Crop Biotechnology. New York: Springer Verlag.

Kavanagh, K.,Drew, A.P. and C.A. Maynard. 1992. The effect of culture vessel on micropropagation. In: Y.P.S. Bajaj (ed.), Biotechnology in Agriculture and Forestry. New York: Springer Verlag .

Book

Boyle, J., Winjum J., Kavanagh K. and E. Jensen.(eds). 1999. Planted Forests: Contributions to the Quest for Sustainable Societies. Kluwer Academic Publishers. The Netherlands 469p..

Professional Meeting Papers

Invited Papers

Kavanagh, K., Dickinson M., and T. Bova 2016. Post-fire tree mortality: heating increases vulnerability to cavitation in longleaf pine branches. Association of Fire Ecology, San Antonio TX.

Noble Stuen, A., Kavanagh K., and T.Wheeler. 2013. Modeling the effects of anadromous fish nitrogen on riparian forest carbon balance. Idaho Fish in Game Headquarters, Boise, ID

Wheeler, T., Kavanagh K., and A. Noble Stuen. 2013. Marine Nutrient Subsidies in Inland riparian forests. Idaho Fish in Game Headquarters, Boise, ID

Kavanagh, K.L, Hess H.. Link T., Newingham B., Gessler P., Davis A., Holden Z.,, Robinson P., Neal D., and D. Frome. 2013. Mountainous ecosystem sensor array (MESA). Presented to WSU College of Engineering Seminar Series. Pullman, WA.

Kavanagh, K., Koyama A., Noble Stuen A., and T. Wheeler. 2012. Linking long-term forest productivity to the presence of ocean going fish. -Or -The forests that fish built: A tale from Idaho, USA. Presented to the Faculty at Ilia State University, Tblisi, Republic of Georgia.

Kavanagh, K., Koyama A., Noble Stuen A.,and T. Wheeler. 2012. What do anadromous fish and inland riparian forests have in common? Presented to WSU SAF and Wildlife club.

Kavanagh, K., Noble Stuen, A., and T. Wheeler. 2010. Anadromous fish and riparian forests. Presented to UI Fish and Wildlife Dept. Seminar Series.

Stephan, K., Kavanagh K., and A. Koyama. 2007. Soil Nutrient Effects of Prescribed Burns and Wildfire-Nitrogen. Intermountain Forest Tree Nutrition Coop Annual Meeting, Moscow, ID.

Kavanagh, K., Pangle R., and P. Gag. 2007. Climate Change Impacts in Idaho's Forests; What Trees are Telling Us. Climate Change Seminar Series University of Idaho, Moscow ID.

Kavanagh, K., Koyama, A., Stephan K.,and P. Morgan. 2006. Carbon and nitrogen dynamics in ponderosa pine and Douglas-fir forests impacted by prescribed and wild fire. Paper presented at ECOFUEGO meeting Esquel, Argentina.

Stephan, K., Kavanagh K., and A. Koyama. 2006. Ecological Effects of Wildfire and Prescribed Fires. Spring 2006. USFS Fire Mangers Boise ID,

Peery, C., Kavanagh K., and M. Scott. 2004. Pacific Salmon: Setting Ecologically Defensible Recovery Goals. Conservation Biology. New York , NY.

Kavanagh, K. 2005. Transpiration Rates in Coniferous Forests. University of Bologna, Bologna, Italy.

Kavanagh, K. 2002. Physiological impacts of Swiss needle cast disease in Douglas-fir, Goliath, meet David. Plant Science Seminar Series. University of Idaho Moscow, ID.

Kavanagh, K. 2001. Some plants like it wet. Paper presented At the Waters Edge: An urban riparian workshop. Corvallis OR.

Kavanagh, K., Koyama A., and A. Robinson. 2001. Nutrients on the salmon superhighway: Is it a two-way street? Third North American Forest Ecology Workshop. Duluth, Minnesota

Kavanagh K., Koyama A., and A. Robinson 2001. Movement of salmonid-derived nitrogen into riparian conifer forests of Central Idaho. Restoring Nutrients to Salmonid Ecosystems. American Fisheries Society. Eugene, OR.

Presentations, posters:

Soderquist, B. Kavanagh K., Link T., Seyfried M., and E. Strand. 2016. Growing season conditions mediate the dependence of aspen on redistributed snow under climate change. AGU Fall Meeting San Francisco, CA.

Lodge, A, Kavanagh K., and M. Dickinson. 2016. Post-fire tree mortality: heating increases vulnerability to cavitation in longleaf pine branches. AGU Fall Meeting San Francisco, CA.

Soderquist, B. Kavanagh K., Link T., Seyfried M., and E. Strand 2015. Projecting the Dependence of Sage-steppe Vegetation on Redistributed Snow in a Warming Climate. AGU Fall Meeting San Francisco, CA.

Wei, L., Hudack, Link T., Marshall JD., Kavanagh K., Zhou H., Abatzoglou JT., Pangle RE., Flerchinger GN., and RJ. Denner 2014. Why has streamflow in a northern Idaho creek increased while flows from many other watersheds in the US Pacific Northwest have decreased over the past sixty years? AGU Fall Meeting San Francisco, CA.

Soderquist, B., Kavanagh K., Link T., Strand, E., and M. Seyfried. 2014. Simulating the Dependence of Sagebrush Steppe Vegetation on Redistributed Snow in a Semi-Arid Watershed**.** AGU Fall Meeting San Francisco, CA.

Wei, L., Hudack A., Link T., Marshall J., Kavanagh K., Zhou H., Abatzoglou J., Pangle R., Flerchinger G., and R. Denner. 2014. Why has streamflow in a northern Idaho creek increased while flows from many other watersheds in the US Pacific Northwest have decreased over the past sixty years? Society of American Foresters and IUFRO Joint Meeting, Salt Lake City Utah.

Soderquist, B., Kavanagh K., Link, T., Seyfried M., and E. Strand. 2014. Simulating the dependence of aspen on redistributed snow. Society of American Foresters and IUFRO Joint Meeting, Salt Lake City Utah.

Wu, J.Q., Dun S., Elliot W., Link T., Kavanagh K., and A. Srivastava. 2014. Application of the WEPP model to simulate the water balance of a forested watershed, Interior US Pacific Northwest. ASABE Evapotranspiration Symposium, Raleigh, NC.

Robinson, P., Kavanagh K., Gag P., Frome D., Neal D., Hess H., Link T., Newingham B., Gessler P., Davis A., and Z. Holden. 2013. MESA (Mountainous ecosystem sensor array) a 3D sensor network for terrain-climate research in remote environments. AGU Fall Meeting San Francisco, CA.

Soderquist, B., Kavanagh K., Link T., Seyfried M., and A.Winstral. 2013. Simulating the dependence of aspen on redistributed snow. AGU Fall Meeting San Francisco, CA.

Noble Stuen, A., Kavanagh K.,and T. Wheeler. 2012. Modeling the effects of anadromous fish nitrogen on riparian forest carbon balance. Presentation given at the Ecological Society of America meeting in Portland, OR

Wheeler, T., Kavanagh K., and A. Noble Stuen. 2012. Marine Nutrient Subsidies in Inland riparian forests. Presentation given at the Ecological Society of America meeting in Portland, OR.

Kavanagh, K., Davis A., Gessler P., H Hess H., Holden Z., Link TE., Newingham BA., Smith AM., and P Robinson. 2011. Development of a Three Dimensional Wireless Sensor Network for Terrain-Climate Research in Remote Mountainous Environments. AGU Fall Meeting San Francisco, CA.

Link, T., Klos, P., Abatzoglou J., and K. Kavanagh. 2011. Assessing the climatic water deficit in a changing climate: A new index to evaluate the potential importance of subsurface storage in mountain ecosystems. AGU Fall Meeting San Francisco, CA.

Kavangh, K., Link T., Seyfried M., and KB. Kemp. 2010. The Fate of Aspen in a World with Diminishing Snowpacks

Wheeler, T., Kavanagh K., and A. Noble Stuen, 2010. The Importance of Marine Nutrient Subsidies in Mountainous Riparian Forests

Kavanagh, K.L. 2010. Ecohydrology, Forest, Coupling of Carbon and Water Cycles, Unattended Sensor Networks. The Mountain Research Initiative Workshop on Global Change Research in Mountain Regions. Vienna, Austria.

Berryman, EM,, Ubierna Lopez, NU Gag P Kavanagh, K and Marshall JD. 2008. Partitioning respiration fluxes in a forested mountainous ecosystem using natural abundance of stable carbon isotopes. AGU Fall Meeting San Francisco, CA.

Marshall, JD., Ubierna Lopez N., Kavanagh K., Pangle R., and Powers E. 2008. Canopy photosynthesis estimated from sapflux and stable carbon isotope ratios in northern Idaho. AGU Fall Meeting San Francisco, CA.

Pangle, R. Kavanagh, K. and Pangle R. 2008. Enrichment in $\delta^{13}C$ of soil CO_2 with increased tree height, atmospheric VPD, and seasonal water stress in mixed conifer stands located in the complex mountainous setting of northern Idaho, U.S.A. . AGU Fall Meeting San Francisco, CA.

Warrens, N, Blecker, S W, and K. Kavanagh, 2007. Spatial and temporal variation in nighttime atmospheric carbon dioxide profiles in mountainous terrain.. AGU Fall Meeting. San Francisco, CA.

Stephan, K. Kavanagh, K. and A. Koyama. 2007. Influence of Fire Severity on Watershed Nitrogen Cycling Using ^{15}N Natural Abundance in Terrestrial and Aquatic Ecosystem Components. AGU Fall Meeting. San Francisco, CA.

Kavanagh, K. Blecker, S.W. Pangle, R. and P. Gag 2007. What Trees do at Night When no one is Looking: Impacts of Elevation on Hydraulic Redistribution in Mountainous Terrain. AGU Fall Meeting. San Francisco, CA.

Gray, L. Hubbart, J A, Kavanagh, K , Link, T E, Pangle, R . 2006. Persistent Cold Air Drainage and Modeled Nocturnal Leaf Water Potential in Complex Forested Mountainous Terrain AGU Fall Meeting. San Francisco, CA.

Kavangh, K., Blecker, S.W. and JD Marshall. 2006. Estimating Water Use Efficiency at the Watershed. AGU Fall Meeting. San Francisco, CA.

Ubierna Lopez, K. Kavanagh and J.D. Marshall. 2006. Testing a new Method of Estimating the $\delta^{13}C$ of Photosynthate in Trees: Stem CO_2 Equilibration. AGU Fall Meeting. San Francisco, CA.

Kavanagh, K., Stephan, K. and Koyama. 2006. Carbon and nitrogen dynamics in ponderosa pine and Douglas-fir forests impacted by prescribed and wild fire. Poster presented at the 3rd International Fire Ecology and Management Congress, San Diego.

Kavanagh, K.L., R. Pangle, and A. Schotzko, 2005. Disequilibrium between soil and foliar predawn water potential due to night time canopy water loss in temperate conifers exposed to nocturnal vapor pressure deficits.

Schtozko, A. Pangle, R, and K. Kavanagh 2005. Carbon isotope composition of foliar bulk material and carbohydrates. Implications for assessing hydraulic limitation in Northwest conifers. Oral presentaiton at the 90th annual meeting of the Ecological Society of America. August 2005, Montreal, Canada.

Schtozko, A. Pangle, R, and K. Kavanagh 2004. Exploring the relationship between respired CO_2 and shifts in respiratory substrate in inland northwest conifers. Oral presentation at the 89th annual meeting of the Ecological Society of America. August 2004, Portland, Oregon.

Rose, C.L. Kavanagh, K. and D. Manter. 2002. The role of nitrogen in Swiss needle cast disease: modifying foliar N to improve needle retention. Paper presented at SNCC Annual Meeting. Corvallis, OR.

Manter, D. K. and K. Kavanagh 2002. Stomatal sensitivity in Douglas-fir following a fungal-mediated reduction in leaf area, maximum stomatal conductance, and hydraulic conductance. Poster presented at the 87th Annual Ecological Society of America Meeting, Tuscon, AZ.

Van Aelst-Bouma. Kavanagh, K. and Newcombe G. 2002. Elevational effects on the distribution of Phaeocryptopus gaeumannii in Idaho. Paper presented at The American Phytopathological Society Pacific Division Meeting San Jose CA.

Rose, C. Kavanagh K. and R. Waring. 2001. Nitrogen surplus in Douglas-fir forests: Consequences for susceptibility to and endemic foliar fungus. Paper presented at the 86th Annual Ecological Society of America Meeting, Madison, WI.

Koyama A. Kavanagh K. and A Robinson. 2001. Evidence supporting the legacy of marine-derived nitrogen in riparian forests of Central Idaho. Paper presented at the 86th Annual Ecological Society of America Meeting, Madison, WI.

Manter, D K, Bond B J, Kavanagh, K L and Filip, G M. 2001. Influence of a foliar fungus on net canopy carbon assimilation, needle abscission and growth in Douglas-fir. Paper presented at the 86th Annual Ecological Society of America Meeting, Madison, WI.

Manter D., Bond B.J., Kavanagh K.L., Rosso P.H. and Filip G.M. 2000. Timing and mechanism of impact of the Swiss needle cast fungus, *Phaeocryptopus gaeumannii*, on Douglas-fir needle gas exchange and rubisco activation. Paper presented at the 85th Annual Ecological Society of America Meeting, Snowbird, UT.

Rose, C., Kavanagh K., Waring R. and D. Manter. 2000. Nutritional imbalance as a predisposing factor in Swiss needle cast disease: Part II. A mechanism to explain Douglas-fir susceptibility to an endemic fungus. Paper presented at the Swiss Needle Cast Cooperative Annual Conference. Corvallis, OR.

Manter D. and Kavanagh K.L. 2000. Tree physiology impacts of Swiss needle cast disease. Paper presented at the Swiss Needle Cast Cooperative Annual Conference. Corvallis, OR

Kavanagh, K.L. 1999. Interactive effects of leaf area loss, stomatal conductance and stem hydraulics in Douglas-fir. Paper presented at the 84th Annual Ecological Society of America Meeting. Spokane, WA.

Manter, D., Kavanagh K.L. and J. Stone 1998. Stomata Response to Swiss Needle Cast Infection in Douglas fir; Understanding the Interaction Between Symptoms and Site Conditions. Paper presented at Swiss Needle Cast Cooperative Annual Conference. Corvallis, OR.

Kavanagh, K.L. 1998. Stomatal conductance in Douglas-fir needles infected with Swiss needle cast. Paper presented at the North American Forest Biology Workshop, University of Victoria, Victoria, BC.

Kavanagh, K.L. and W. Emmingham. 1998. Practical applications of uneven-aged management: Long distance education in action. Paper presented at the OSU Extension Service Annual Meeting. Corvallis, OR.

Bunch, R. and K.L. Kavanagh. 1998. Using COPE information to deliver research-based information to communities and watershed councils. Poster presented at the OSU Extension Service Annual Meeting. Corvallis, OR.

Kavanagh, K.L. 1998. The intimate relationship between wood formation, tree biology and silviculture. Paper presented to the Willamette Valley Forest Products Society meeting. Corvallis, OR.

Kavanagh, K.L and R. Bunch. 1998. Forest ecology and management: An educational program for watershed councils in Oregon. Paper presented at the 83rd Annual Ecological Society of America Meeting, Baltimore, MD.

Kavanagh, K.L. 1997. Teaching scientific concepts: Bringing a deeper level of understanding to continuing education programs. Paper presented at the 82nd Annual Ecological Society of America Meeting, Albuquerque, NM.

Kavanagh, K.L., B.J. Yoder, B.L. Gartner, and S.N. Aitken. 1996. Root and shoot vulnerability to cavitation in four populations of Douglas-fir seedlings. Paper presented at the 81st Annual Ecological Society of America Meeting, Providence, RI.

Kavanagh, K.L., S.N. Aitken, B.J. Yoder, B.L. Gartner, and S.A. Knowe. 1996. Vulnerability to xylem cavitation in two varieties of Douglas-fir seedlings. Paper presented at the Northwest Forest Genetics Meeting, Newport OR.

Kavanagh, K. 1996. The impacts of Swiss needle cast on Douglas-fir stomatal function. Paper presented at Swiss Needle Cast Cooperative Annual Conference. Corvallis, OR.

Boyle, J., G. Stankey, and K. Kavanagh. 1995. The integration of planted and natural forests in a regional landscape. Paper presented at the Planted Forests Symposia Portland, OR.

Kavanagh, K.L., B.J. Yoder, and S.N. Aitken 1995. Growth and physiology in response to drought of four populations of Douglas-fir seedling. Paper presented at the 80th Annual Ecological Society of America meeting, Snowbird, UT.

Kavanagh, K.L. 1992. Xylem cavitation in newly planted western hemlock seedlings. Paper presented at the North American Forest Biology Workshop. Sault Ste. Marie, Ontario.

Kavanagh, K.L., C.A. Maynard, and A.P. Drew. 1987. Tissue culture propagation of mature trees of *Prunus serotina* EHRH.II. acclimatization. Paper presented at the Tissue Culture Association 38th Annual Meeting, Washington D.C.

Kavanagh, K.L. 1987. Improved acclimatization of *Prunus serotina* plantlets. Paper presented at the Fourth Annual Northeast Forestry Graduate School Conference. Quebec, Canada.

Drew, A.P., K.L. Kavanagh, and C.A. Maynard. 1985. Effects of micropropagation container type on the growth and development of *Prunus serotina* plantlets. Poster presented at the Tissue Culture Association 36th Annual Meeting. New Orleans, LA.

Scientific/Policy Panels

1997 to 2003. Independent Multidisciplinary Science Team. Evaluate and report on the scientific basis for the implementation of the Oregon Plan for Salmon and Watersheds.

1994 to 1999. Academic representative on the forum appointed to advise and evaluate the Northwest Oregon State Forest Management Plan.

Grants and Contracts Awarded, Total greater than $7 million.

Projects/contracts Total greater than 0.5 million

Kavanagh, K. 1997-2003. Independent Multidisciplinary Science Team. State of Oregon, $79,525 annually, over $450,000 total funds.

Kavanagh, K.L. and P. Adams. Management plan development for the Bear Creek Watershed. City of Astoria, $54,000. 1997-99.

Kavanagh, K.L., Reed A.S. and S. Hobbs. Coastal forest management lessons for regional natural resource-based organizations. Weyerhaeuser Company Foundation, $25,000. 1997-98.

Duddles, R. and **K.L. Kavanagh**. Precommercial thinning in western hemlock; 25-yrs later. Cavenham Forests Inc., $16,000. 1996-7

Research Grants Total approx. $6.6 million.

K. Kavanagh. Tree Physiological Response to Plume Exposures. USDA JVA. $24,000. 2014-2017.

Hudak, A., T. Jain, J Byrne, J. Marshall, T. Link, and **K. Kavanagh**. Effects of forest management and succession on long-term carbon and water budgets. USDA FS Western Wildlands Env Threat Assessment Center. $60,000. 2013-2015.

Shinneman, D., T. Link, **K. Kavanagh**, E. Strand, S. McIIroy, S. Powell, R. Scheller, J. Campbell, D. Marks, M. Seyfrieid and A. Winstral. Projecting climate change effects on aspen distribution and productivity in the central and northern Rockies by coupling hydrological and landscape-disturbance models. $476,295 total funds, amount to UI $202,802. USCS NW Climate Center. 2014-2017.

M. Dickinson, W. Heilmann, W. Mell, Shiyuan S. Zhong, and **K Kavanagh**.. Excessive tree mortality during prescribed fires. Do fire atmosphere interactions through a pine canopy mediate fire effects during point-ignition firing operations? $317,000 total funds, $56,867 to Kavanagh as a USDA JVA. 2013-2016.

K. Kavanagh, A Smith, A Davis, B Newingham, T Link P Gessler. McIntire-Stennis Funding.. Development of a smart 3-D wireless sensor network for terrain-climate research on forested ecosystems in remote mountainous environments. $241,148.00. 2010-2014

K. Kavanagh, A Smith, A Davis, B Newingham, Z Holden, T Link P Gessler and H Hess. NSF MRI: Development of a smart 3-D wireless sensor network for terrain-climate research in remote mountainous environments. $872,000 (Including UI match). 2010-2014.

Servheen, G.,. **K. Kavanagh** , M. Wifli, CT Robbins and C. Baxter., Mitigation of marine-derived nutrient loss in the Boise-Payette-Weiser subbasin. Bonneville Power Authority, Idaho Power. 2007-2012. $980,000.

Fielder, F (PI) and **Kavanagh K.** (CoPI). Water Resources Research Experience for Undergraduates. National Science Foundation. $350,420. 2006-2008.

Humes, K., Marshall, J., **Kavanagh, K**., Cook, S., Qualls, R.,and Walden, V. Water and carbon fluxes in complex landscapes. As part of the: Idaho Grand Challenge Initiative: Fluxes of Water and Nutrients & Impacts on Stream Ecology & Fish Physiology. NSF EPSCoR EPS-0447689, $1,802,499 out of a $9M statewide submission. 2005-2008

Kavanagh, K., W. Minshall and N. Bosworth. The effect of wild fires on nitrogen dynamics within riparian and stream ecosystems. USDA Joint fire Sciences Program. $67,000. 2005-2007

Kavanagh, K. Tree ring isotopes as a legacy of salmon abundance. NOAA. $20,000. 2005-06.

T. Link, J. Braatne, P. Gessler, H. Han, **K. Kavanagh**, J. Marshall, J. Rachlow and A. Robinson. Managed Forests as Productive Systems: A Research and Education Initiative. Congressional Appropriation.. $250,000. 2004-2006

Kavanagh, K., W. Minshall and J. Erickson. The effect of spring prescribed fires on nitrogen dynamics within riparian and stream ecosystems. USDA Joint Fire Sciences Program. $147,950. 2003-2006.

Kavanagh K and R. Pangle. Seasonal changes in water use across forest stands of differing age and height at the Priest River Experimental Forest. McIntire-Stennis $34, 144.

Marshall, J, V. Aizen, **K. Kavanagh** and J. Braatne. UI-NSF EPSCoR Funding for Instrument Acquisition. $144, 497.

T. Link, J. Braatne, P. Gessler, H. Han, **K. Kavanagh**, J. Marshall, J. Rachlow and A. Robinson. Managed Forests as Productive Systems: A Research and Education Initiative. Congressional Appropriation. 2003. 350,000.

Kavanagh K. The role of foliar amino acids in Douglas-fir susceptibility to an endemic fungus. University of Idaho Stillinger Fund. $19,992, 2002-03.

Kavanagh K. Linking forest canopy height to basin water yield: Is it true big trees use less water? University of Idaho Seed Grant. $68,994, 2002-03

Kavanagh, K. Mill Creek Riparian Prescribed Burn Research Project. USDA/USFS. $69,000. 2002-05.

Newcombe G. and **K. Kavanagh**. The incidence of Swiss needle cast and Dothistroma needle blight in Idaho conifers. University of Idaho Stillinger Fund $18,195. 2000-2001, $14,764. 2001-02.

Rose, C., **Kavanagh K.,** Waring R. and D. Manter. Nutritional imbalance as a predisposing factor in Swiss needle cast disease: Part II. A mechanism to explain Douglas-fir susceptibility to an endemic fungus.
Oregon State University, Swiss Needle Cast Coop. $20,217. 2001-02.

Manter, D., **Kavanagh K**, Resser P. and Stone J. Tree physiology and Swiss needle cast disease: Phase III. Oregon State University, Swiss Needle Cast Coop. $35,500. 2001-02.

Kavanagh K. and G. Estoll. Leaf specific conductivity to determine density management zones for mixed species uneven-aged management. University of Idaho, Stillinger Fund. $10,517. 2000-01.

Maguire, D., Waring D., Cromack K., Boyle J., **Kavanagh K**., and C. Rose. Trends in soil and foliar nutrient status across a gradient in Swiss needle case severity. Oregon State University, Swiss Needle Cast Coop. $ 44,143. 2000-01

Rose, C., **Kavanagh K.,** Waring R. and D. Manter. Nutritional imbalance as a predisposing factor in Swiss needle cast disease: Part II. A mechanism to explain Douglas-fir susceptibility to an endemic fungus.
Oregon State University, Swiss Needle Cast Coop. $34,000. 1999-00

Manter, D., **Kavanagh K**, Resser P. and J. Stone. Tree physiology and Swiss needle cast disease: Phase II. Oregon State University, Swiss Needle Cast Coop. $48,000. 2000-01.

Kavanagh K.L, and D. Manter. Stomata response to Swiss needle cast in coastal Douglas-fir. Oregon State University, Swiss Needle Cast Coop. $96,000. 1997-99.

Kavanagh, K.L. Stomata response to Swiss needle cast in coastal Douglas-fir. Oregon State University, Swiss Needle Cast Cooperative, $28,000. 1997-98.

Kanaskie A., Maguire D., and **K. Kavanagh** Growth response to precommercial thinning in Douglas-fir stands with varying intensity of Swiss needle cast in the coast range of Oregon. Oregon State University, Swiss Needle Cast Coop. $42,700. 1998-00.

Yoder, B.J Aitken S. and **K. Kavanagh** Carbon isotope discrimination. OSU Research Council, $6,000. 1994-95.

Kavanagh, K.L Patricia Robert Harris Fellowship for Graduate Study. $48,000. 1990-93.

SERVICE:

2007 Department Head Forest Resources Department University of Idaho 8 months.

Major Committee Assignments and offices:

2017- Member, College of Agriculture and Life Sciences Search Committee for Dean and Vice Chancellor.
2017- National Association of University Forest Research Programs (NAUFRP), Secretary Treasurer
2015- College of Agriculture and Life Sciences Climate Council
2015- Texas Women in Higher Education
2014- National Association of University Forest Research Programs (NAUFRP)
2014- Southern National Association of University Forest Research Programs (SNAUFRP)
2014- Women Department Head Forum Texas A&M University
2014- Women Faculty Network Texas A&M University
2013 External member for Promotion and Tenure Committees in Biology and Chemistry.
2013 Chair, Search Committee for Forest Biology Position
2012 Promotion and Tenure Committee
2010 Member, CNR Search Committee for CNR Dean Position
2009-14 Chair, Wildland Fire Petition and Curriculum Committee.
2009-14. Member and UI representative on the Northern Rocky Mountain Regional NEON planning committee.
2008 Member CNR Search Committee for CNR Interim Dean Position
2008-11 Member, CNR Graduate Committee
2007 Chair, Search Committee for Forest Nutrition Faculty Position
2004 -07 Co director of Northern Rocky Mountain Ecological Observatory Network (NoRMEO) domain as part of the National Ecological Observatory Network (NEON).
2007 Member, Search Committee for Timber Harvesting Faculty Position
2007 Hiring Officer, Search Committee for Fire Ecology and Management Faculty Position
2006-07 Member, Search Committee for Forest Biometrics and Measurement Faculty Position
2007 Member, Search Committee for Silviculture and Landscape Ecology Faculty Position WSU
2003 Member, Search Committee for Fish Ecologist Faculty Position.
2002 Chair, Committee to review the Biology Curricula in Forest Resources.
2001 Member, Search Committee for Timber Harvesting Faculty Position.
2000 Member, Search Committee for Forest Hydrology Faculty Position.
1997-99 Member, OSU Blodgett Forest Plan Development Committee.
1997-98 Member, Basic Forestry Shortcourse Curriculum Development Committee.
1997-99 Member, Master Woodland Manager Curriculum Development Committee.

1995-99 Member, Advisory Board for the Oregon Forestry Education Program.
1995 Member, Search committee for Computer Services Coordinator of the College of Forestry.
1995 Member, Search committee for Computer Training Coordinator of the College of Forestry.
1994-95 Member, OSU Forestry Extension Fall Planning Retreat Committee.
1993-99 Member, College of Forestry Extended Education Committee, (Chair in 1993).
1994Member, Search Committee for HJ Andrews Education Coordinator.
1993-94 Member regional Ecosystem Office Interagency Training working Group-USDA.

Professional and Scholarly Organizations

American Geophysical Union

Ecological Society of America.
Society of American Foresters
Education Chair for the Clatsop and Tillamook Chapter-1996-97
Program Chair for the Clatsop and Tillamook Chapter-1998

Manuscript reviews for the following journals:
Plant Cell and the Environment
Forest Ecology and Management
Trees
Tree Physiology
Canadian Journal of Forest Research
Plant Disease
Western Journal of Applied Forestry
Journal of Experimental Botany
Journal of Forestry
American Journal of Botany
New Phytologist

Grant proposal reviews for
National Science Foundation Ecosystem Sciences Panel Member 2008, 2009, 2010, 2011, 2012.
National Science Foundation Ad Hoc
United States Departments of Interior Agriculture, Joint Fire Sciences
Shota Rustaveli National Science Foundation, Tbilisi, Georgia

Sessions Convened
Kavanagh,K., B.J. Bond and J.M. Marshall. 2007. Mountains Are Not Elevated Plains: Biogeochemistry in Complex Terrain I, Session organized at AGU Fall Meeting. 10 presentations and 11 posters.

Kevin Tu (Berkeley) Lisa Welp (Scripps), JD Marshall, (UI) Barbara Bond (Oregon State U) and A. Knohl (ETH Zurich). 2008. Tracers of Bio-Atmosphere Interactions; Advances in Measurements, Theory and Analysis II Session organized at the AGU Fall Meeting. 10 presentations and 20 posters.

INTERVIEWS GIVEN

Environmental Monitor with Jeff Gillies **http://www.fondriest.com/news/** MESA Project**.**

HONORS AND AWARDS

SEC Academic Leadership Development Program Fellow. 2015-16.
Oregon State University. Outstanding Alumni Award. 2004.
Dean's Award for Outstanding Achievement, 1998 Team Award, College of Forestry, OSU.
Search for Excellence Award, 1998, OSU Extension Association.
Newer Faculty Award for Excellence in Extension Programming, 1997, OSU Extension Association.
Faculty Award for Graduate Student Achievement, 1993, Forest Science Department, OSU.
Patricia Robert Harris Fellowship for Graduate Studies, 1990-1992.
The Society of Sigma Xi Outstanding Graduate Student Award, 1986, Sigma Xi