

STEPHEN A. FITZGERALD

Professor & Extension Specialist
Of Silviculture

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Education and Training

MS, Forest Management, University of Idaho, Moscow, Idaho, 1983

BS, Forest Biology, State University of New York, College of Environmental
Science & Forestry, Syracuse, New York, 1979

AAS, Holyoke Community College, Holyoke MA, 1976

Research and Professional Experience

2013-Present Department of Forest Engineering, Resources and Management, Oregon State University, Corvallis, OR. Professor and Extension Silviculture Specialist. Director of the College of Forestry Research Forests.

2003-2013. Department of Forest Engineering, Resources and Management, Oregon State University Extension Service. Professor and Extension Eastside Silviculture & Wildland Fire Specialist, Redmond, OR.

1988-2003. Department of Forest Resources, Oregon State University Extension Service, Assistant and Associate Professor and Area Extension Forester, Central Oregon Region, Redmond, OR.

1984-1988. Department of Forest Resources, Oregon State University Extension Service. Assistant Professor and Area Extension Forester, South Coast Region, Coquille, OR.

1983-1984. Forester. University of Idaho Experimental Forest, Moscow, Idaho.

Grants and Contracts

Ahrens, G. R. (PI), Fitzgerald, S. A. (Co-PI), "Climate change and silviculture: managing forests in the face of climate change," Sponsored by USDA Forest Service, Federal, Total \$25,989.00. (October 1, 2020 - September 30, 2022).

Fitzgerald, S. A., "Assessing the Acreage and Age Class Distribution of planted Willamette Valley Ponderosa Pine," Sponsored by Forestry & Natural Resources Extension Program, Oregon State University, Total \$96,000.00, Status: Funded. (September 20, 2016 - June 30, 2018).

Betts, M. (PI), CoPIs: Verschuyll, M. Needam, D. Maguire, D. Mainwaring, T. Stokely, G. Latta, B. Phalan, J. Rivers, S. Fitzgerald, J. Hatten. 2015. Quantifying trade-offs and synergies between ecosystem services in intensively managed landscape. Funded by the Institute for Working Forest Landscapes. \$249,930.

Fitzgerald, S. (PI), CoPIs: T. Woolley and M. Agne. 2014. Post-mountain pine beetle lodgepole pine forests: Assessing fire behavior and fire effects in the recently burned Pole Creek Fire area on the Sisters Ranger District, Deschutes National Forest. Funded by Forest Health Monitoring Program, Region 6, USDA Forest Service, Portland, OR. \$55,846.

Fitzgerald, S. (PI), CoPIs: M. Bennett, R. Simes, N. Strong. 2013. Citizen Fire Academy Pilot Project. USDA State and Private Forestry Competitive Grants. \$159,724.

Creighton, J., Olsen, C., Moseley, C., Fitzgerald, S., Perleberg, A., Enzer, M., Hamman, S., DeMeo, T., and Bormann, B. Development of the Northwest Fire Science Consortium. USDA/Joint Fire Science Program, \$97,355 (2010-2011).

Shaw, D., Woolley, T., Fitzgerald, S. Temporal dynamics of ground, surface, ladder canopy fuels, and potential fire behavior following *Dendroctonus ponderosae* epidemics in the *Pinus contorta* zone of central Oregon. USDA/Joint Fire Science Program, \$261,823 (2009-2012)

Betts, M., Fitzgerald, S., Maguire, D., Johnson, J., Wilson, D., and Rose, R. Quantifying trade-offs between biodiversity conservation and timber production in intensively managed forests. USDA/NIFA, \$497,677 (2010-2013)

Shaw, D., Ganio, L., Fitzgerald, S. and Woolley, T. Evaluation of models to predict post-fire tree mortality. USDA/PNW Research Station, \$31,607 (2008).

Selected Publications

- Riddell, A., Fitzgerald, S.A., Qi, C. and Strimbu, B.M. (2020). Classification strategies for unbalanced binary maps: finding Ponderosa Pine (*Pinus Ponderosa*) in the Willamette Valley. *Remote Sensing*, 12(20), 3325. <https://www.mdpi.com/2072-4292/12/20/3325/htm>
- Grand, L., Berger, C. A., Fitzgerald, S. A., Leavell, D. M. (2019). Fire FAQs—Who owns Oregon's forests, and how does that matter when it comes to fire? (EM 9228, pp. 2). Corvallis, OR: Extension and Experiment Station Communications (EESC). <https://catalog.extension.oregonstate.edu/em9228>
- Fitzgerald, S. A., Berger, C. A., Leavell, D. M. (2019). What is forest fuel, and what are fuel treatments? (EM 9230, pp. 2). Corvallis, OR: EESC. <https://catalog.extension.oregonstate.edu/em92230>
- Green, P., Chung, W., Leshchinsky, B. A., Belart, F., Sessions, J., Fitzgerald, S. A., Wimer, J. A., Cushing, T., Garland, J. 2019. Insight into the Productivity, Cost and Soil Impacts of Cable-assisted Harvester-forwarder Thinning in Western Oregon. *Forest Science* <https://doi.org/10.1093/forsci/fxz049>
- Garland, J., Belart, F., Crawford, R., W., Cushing, T., Fitzgerald, S. A., Green, P., Kincl, L., Leshchinsky, B. A., Morrissette, B. A., Sessions, J., Wimer, J. A. 2019. Safety in steep slope logging operations. *Journal of Agromedicine*, 24(2), 138-145. <https://doi.org/10.1080/1059924X.2019.1581115>
- Woolley, T., Shaw, D. C., Hollingsworth, L. T., Agne, M. C., Fitzgerald, S. A., Eglitis, A., Kurth, L. 2019. Beyond red crowns: complex changes in surface and crown fuels and their interaction 32 years following mountain pine beetle epidemics in south-central Oregon, USA. *Springer Open*, 15(4), 17. <https://doi.org/10.1186/s42408-018-0010-z>
- Oester, P.T., S.A. Fitzgerald, N.A. Strong, B. Parker, L.V. Henderson, T. Deboodt, W.H. Emmingham, G.M Filip, and W.D. Edge. 2018. Ecology and Management of Eastern Oregon Forests. Manual 12. Oregon State University Extension Service, Corvallis, OR. 243 p. Online at: <https://catalog.extension.oregonstate.edu/manual12>
- Bennet, M., S. Fitzgerald, A. Christiansen and K. Baylog. 2017. Keeping Your Home and Property Safe from Wildfire. EM 9184. Oregon State University Extension Service, Corvallis, OR. 36 p.
- Leavell, D., C. Berger, S. Fitzgerald, B. Parker. 2017. Fire Science Core Curriculum. EM 9172. Oregon State University Extension Service, Corvallis, OR. 161 p.
- Fitzgerald, S.A., K. Baylog, M. Bennett, R. Simes, and N. Strong. 2017. Citizen Fire Academy Curriculum Package for Facilitators and Educators. EM 9168. Oregon State University Extension Service, Corvallis, OR. 170 p.
- Huff, T., S.A Fitzgerald. 2016. Group Selection Cutting in Mature Douglas-fir Forests. *Alternative Silviculture Series* (em9106 ed., pp. 9). Corvallis, OR: Oregon State University Extension Service. Online at: http://contentviewer.adobe.com/s/Forestry%20iPad/e3bd1e00-8741-5738-92f1-c9581e0a8a84/mod4/front.html#page_lastPage
- Smith, J. E., Cowan, A. D., Fitzgerald, S. A. 2016. Soil heating during the complete combustion of mega-logs and broadcast burning in central Oregon USA pumice soils. *International Journal of Wildland Fire*, 25(11), 1202–1207.
- Agne, M., T. Woolley, and S. Fitzgerald. 2016. Fire severity and cumulative disturbance effects in the post-mountain pine beetle lodgepole pine forests of the Pole Creek Fire. *Forest Ecology and Management* 366: 73-86.
- Cowan, A.D., J. E. Smith and S. A. Fitzgerald. 2016. Recovering lost ground: Effects of soil burn intensity on nutrients and ectomycorrhiza communities of ponderosa pine seedlings. *Forest Ecology and Management* 378: 160-172.
- Ganio, L., T. Woolley, D. Shaw, and S. Fitzgerald. 2015. The discriminatory ability of post-fire tree mortality logistic regression models. *Forest Science* 61(2): 344-353.
- Fitzgerald, S.A. and P. Ries. 2015. Selecting, Planting and Caring for a New Tree, Extension Circular 1438. Oregon State University Extension Service, Corvallis, OR. Online at: <https://catalog.extension.oregonstate.edu/ec1438>

- Oester, P., and S.A. Fitzgerald. 2015. Enhancing reforestation success in the Inland Northwest, PNW 520. Oregon State University Extension Service, Corvallis, OR. 20 p.
Online at: <https://catalog.extension.oregonstate.edu/pnw520>
- Fitzgerald, S., P. Oester, and B. Parker. 2013. Individual tree selection (ITS) in a northeast Oregon mixed conifer forest. EM 9083. Oregon State University Extension Service, Corvallis, OR. 8 p.
Online at: <https://catalog.extension.oregonstate.edu/em9083>
- Bennet, M., S. Fitzgerald, and M. Main. 2013. Mixed conifer and hardwood forest management in southwest Oregon. EM 9084. Oregon State University Extension Service, Corvallis, OR. 12 p.
Online at: <https://catalog.extension.oregonstate.edu/em9084>
- Dodson, E., S. Fitzgerald, T. Deboodt. 2013. Cruising methods, volume estimation, and chipping productivity for western juniper biomass market development. In: Proceedings of 2013 Council on Forest Engineering Annual Meeting, July 7-10, 2013, Missoula, MT.
- Abrams, J., J. Creighton, C. Moseley, C. Olsen, E. Davis, A. Pomeroy, S. Hamman, J. Bruce, A. Perleberg, T. DeMeo, L. Evers, and S. Fitzgerald. 2011. Fire Science Needs in the Pacific Northwest. Ecosystem Workforce Program Working Paper No. 33. University of Oregon, Eugene, OR. 8 p.
- Woolley, T., D.C. Shaw, L.M. Ganio, and S.A. Fitzgerald. 2011. A review of logistic regression models used to predict post-fire mortality of western North American conifers. *International Journal of Wildland Fire*.
- Online at: <http://dx.doi.org/10.1071/WF09039>.
- Fitzgerald, S.A. 2010. Chapter 2: Ecology of Quaking Aspens. In N. Strong, T. Welch, B. Littlefield, and D. Stringer (eds.) *Land Manager's Guide to Aspen Management in Oregon*. Chapter 2: Aspen ecology. Extension Manual 9005. Oregon State University Extension Service, Corvallis, OR. 79 p.
- Bennett, M., S.A. Fitzgerald, B. Parker, M. Main, A. Perleberg, C. Schnepf, and R. Mahoney. 2009. Reducing Fire Risk on Forest Property. PNW 618. A Pacific Northwest Extension Publication, Oregon State University Extension Service, Corvallis, OR. 35 p.
- Fillip, G.M., S.A. Fitzgerald, K.L. Chadwick, and T.A. Max. (2009). Thinning Ponderosa Pine Affected by *Armillaria* Root Disease: 40 Years of Growth and Mortality on an Infested Site in Central Oregon. *Western Journal of Applied Forestry*.
- Emmingham, W., R. Fletcher, S. Fitzgerald, and M. Bennett. 2007. Comparing Tree and Stand Volume Growth Response to Low and Crown Thinning in Young Douglas-fir Stands. *Western Journal of Applied Forestry* 22(2): 124-133.
- Filip, G.M., C.L. Schmidt, D.W. Scott, and S.A. Fitzgerald. 2007. Understanding and Defining Mortality in Western Conifer Forests. *Western Journal of Applied Forestry* 22(2): 105-115.
- Emmingham, W., R. Fletcher, S. Fitzgerald, and M. Bennett. 2007. Comparing tree and stand volume growth response to low and crown thinning in young natural Douglas-fir stands. *Western Journal of Applied Forestry*, 22(2):124-133.
- Fitzgerald, S.A. 2005. Fire Ecology of Ponderosa Pine and the Rebuilding of Fire-Resilient Ponderosa Pine Ecosystems. In M.W. Ritchie, M.A. Maguire, and A. Youngblood (Tech. Coordinators) *Proceedings of the Symposium on Ponderosa Pine: Issues, Trends, and Management*. 2004 October 18-21, Klamath Falls, OR. General Technical Report PSW-GTR-198, Pacific Southwest Research Station, USDA Forest Service, Albany CA.
- Fitzgerald, S.A., D.A. Maguire, and R. Singleton. 2005. Simulating Structural Development and Fire Resistance of Second-Growth Ponderosa Pine Stands. In C.E. Peterson and D.A. Maguire (Editors) *Proceedings of the Conference Balancing Ecosystem Values: Innovative Experiments for Sustainable Forestry*. General Technical Report PNW-GTR-635. Pacific Northwest Research Station, USDA Forest Service, Portland, OR. 389 p.

Awards

- 2019, Forester of the Year, Oregon Society of American Foresters.
- 2017, Vice Provost Award of Excellence, Outreach and Engagement, Team Award.
- 2016, OSUEA Search for Excellence, Oregon State University Extension Association.
- 2015, "Dean's Award for Outstanding Achievement: Service Team Award." College of Forestry, Oregon State

University.

- 2011, "Bronze Award" for the publication, *Reducing Fire Risk on Your Forest Property*, from the Association of Natural Resource Extension Professionals.
- 2010, "Dean's Award for Outstanding Achievement in Extended and Continuing Education," College of Forestry, Oregon State University.
- 2010, "Gold Award" for Web Design for the program, *How to Manage Your Forest*, from the Association of Natural Resource Extension Professionals.
- 2009, "Gold Award" for the educational poster, *Fire Resistant Plants for Home Landscapes*, from the Association of Natural Resource Extension Professionals.
- 2008, "Best Paper of the Year" Award from the Western Journal of Applied Forestry, a regional scientific publication of the Society of American Foresters.