John Sessions, PhD, PE
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Oregon State University

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Updated 26-June 2024

DEGREES

PhD, Forest Management, Oregon State University, 1979
MS, Forest Engineering, University of Washington, 1971
MS, Civil Engineering, California State University, 1968
BS, Civil Engineering, University of California, 1966

TEACHING EXPERIENCE

Oregon State University, 1983-2023, resource scheduling, transportation planning, harvest planning, logging mechanics, road system management

Oregon State University, Forest Engineering Institute, 1975-1978, transportation planning, engineering economics, logging mechanics

RESEARCH EXPERIENCE

Oregon State University, 1983-present
Pacific Northwest Forest and Range Experiment Station, forest engineering, 1970-1971

INDUSTRIAL EXPERIENCE

- Harvesting Division Manager, JARI Florestal, Brazil 1981-1983
- Systems Analyst, JARI Florestal, Brazil 1980

GOVERNMENT EXPERIENCE

- Staff Economist, Division of Timber Management, Wash. D.C., USDA Forest Service, 1979-1980
- Harvesting Specialist and Director of Logging System Training, USDA Forest Service, 1974-1978
- Director of Transportation Planning, Rocky Mountain Region, USDA Forest Service, 1973

INTERNATIONAL CONSULTANT

- *South and Central America*: Colombia, 2013, 2005, 1995; Argentina, 2006, 2005, 1998, 1996; Brazil, 1996, 1989, 1980-83; Chile, 2014-15, 1995, 1994, 1992, 1990; Costa Rica, 1984; Jamaica, 1972-73
- *Africa*: South Africa, 2003, 2002, 1998, 1993, 1991; Zimbabwe, 1986; Zaire,1987
- *Europe:* Rome, Italy (FAO), 1985.
- *Asia*: Russia (Far East), 1996; Malaysia, 2009, 1996, 1995; Bhutan, 1973; Indonesia, 2015
- *North America*: British Columbia, 2004, Labrador, 1975, Newfoundland, 1975
- *Australasia:* New Zealand, 1986, Australia 2007

FIELD OF SPECIALIZATION

Transportation Planning, Harvest Scheduling, Forest Economics

PROFESSIONAL SOCIETIES

- Society of American Foresters
- Forest Products Research Society
- Council on Forest Engineering
- Sigma Xi
- Xi Sigma Pi (Faculty Advisor 2020-2023)
- Phi Kappa Phi (University Chapter President 1992-1993, Board 1992-2012)

REGISTERED PROFESSIONAL ENGINEER

- Registered Civil Engineer, Washington, No. 12063 (1970-present)
- Registered Civil Engineer, Colorado, No. 10831 (inactive)

AWARDS

- 2024. Scientific Achievement Award, International Union of Forest Research Organizations (26th IUFRO Congress, Stockholm, Sweden)
- 2019. Elected Fellow, Society of American Foresters (SAF)
- 2015. International Forest Engineering Achievement Award, Council on Forest Engr.
- 2015. Earle Wilcox National Forester of the Year, Intertribal Timber Council.
- 2013. National Award in Forest Science, Society of American Foresters.

- 2013-present. Appointed Chair for State of Oregon Forest Engineering Licensing Examination by Oregon State Board of Engineers and Surveyors.
- 2010. High Climber Award, Road Maintenance Modeling, Douglas Timber Operators.
- 2010. Oregon State University nominee to the U.S. Professor of the Year competition, Carnegie Foundation for the Advancement of Teaching.
- 2008. Appointed 1st Richard Strachan Chair of Forest Operations Management
- 2006. Recognition for Outstanding Service, Oregon Department of Forestry
- 2005, 1994, 1993, 1989, 1986. Aufderheide Award for Outstanding Teaching, Oregon State University, College of Forestry
- 2001. Appointed 1st Faye and Lucille Stewart Professor of Forest Engineering
- 2001. College of Forestry Dean's Award, Outstanding Service, 10 Year Strategic Plan
- 1999. Appointed 24th University Distinguished Professor of Forestry, Oregon State University
- 1996-2000. Appointed Marcus Wallenberg Prize International Selection Committee
- 1995. Top Prof Teaching Recognition Award, Oregon State University
- 1991. First Annual Dean's Award for Outstanding Achievement, College of Forestry
- 1980. Superior Service Award for Analysis of Alternative National Timber Harvest Programs, USDA Forest Service

EDITORIAL BOARDS

- 2021 Editor, Special Issue of COFE-FORMEC, Int. J. of Forest Engr.
- 2020-2023. Co-Guest Editor for Special Issue of Operations Research and
- Optimization Techniques in Forest Management and Operations, Journal of Forests
- 2017-2023. Associate Editor for Operations Research, Canadian J. of Forest Research
- 2017-2018. Guest Editor for Special Issue of Biomass Production and Transport, Journal of Forests.
- 2008-2011. Editorial Board, International Journal of Forestry Research
- 1996. Associate Editor for Forest Engineering, Forest Science
- 1994-present. Forest Science (Silva Fennica) Editorial Board, Finland
- 1985-1996. Associate Editor, Western Journal of Applied Forestry, Society of American
- Foresters

CONGRESSIONAL AND STATE COMMITTEES

- 2020-23. Co-Chair, National Indian Forest Management Assessment Team (IFMAT IV)
- 2020-23. Member, Washington DNR Technical Committee for Sustainable Harvest Calculation
- 2011-13. Co-Chair, National Indian Forest Management Assessment Team (IFMAT III)
- 2006-09. Member, Interagency Science Team - National Fire Program Analysis Review
- 2004. Invited Testimony, Subcommittee on Forests and Forest Health hearing on Restoration after Catastrophic Events, Washington, DC.

- 2003. Member, National Panel Convened by Department of Interior to Review Monitoring Guidance for the Healthy Forest Initiative (HFI) Categorical Exclusions under NEPA
- 2001-03. Member, Washington DNR Technical Committee for Sustainable Harvest Calculation
- 2001-03. Co-Chair, National Indian Forest Management Assessment Team (IFMAT II)
- 2000. Member, Advisory Team, 2000/2001 Forestry Program Funding and Position Analysis. Bureau of Indian Affairs, US Dept. of Interior.
- 1993-1995. Member, Sierra Nevada Ecosystem Science Team
- 1991-1993. Vice-Chair, National Indian Forest Management Assessment Team (IFMAT)

OTHER SCIENCE AND TECHNICAL COMMITTEES

- 2022 Western States Railroad Forest Products Logistics Working Group
- 2021-present. Forest Biohubs Working Group
- 2020-22 Chair, COFE-FORMEC Scientific Committee.
- 2018-present. Elliott State Forest Exploratory Committee, College of Forestry.
- 2018. Technical Reviewer for USDA NIFA Biomass Logistics Research Panel.
- 2011-16. Leadership Team, Northwest Advanced Renewables Alliance (NARA)
- 2007-present. Member, BLM Road Committee Working Group
- 2000. Member, Strategic Planning Team, College of Forestry. Oregon State University
- 1998. Technical Advisor, Integrated Assessment of Willamette Watershed Alternative Futures, University of Oregon
- 1998, 1999. Technical Reviewer for USDA Small Business Innovation Research (SBIR).
- 1999-2006. Invited participant in ODF Forest Planning Process.
- 1995-1996. Chair, State Scientific Panel to Evaluate O&C Lands Transfer
- 1996-1999. Technical Reviewer, Consortium of Plant Biotechnology Research (CPBR)
- 1995-1999. Member, Umpqua River Basin Exchange Pilot Project
- 1994-95. Member, Coquille Forest Scientific Advisory Team
- 1994-1998. Member, Coastal Landscape Analysis and Modeling Study (CLAMS) Team
- 1994-1996. Member, IFMAT Implementation Team
- 1994-1996. Member, Boise Cascade Science Advisory Team
- 1996-1999. External Assessor, Faculty of Forestry, University of Agriculture, Malaysia
- 1993-1994. Member, Washington State Landscape Management Project
- 1992-present. Logging Engineering Examiner for State of Oregon
- 1991. Member, Forest Engineering Program Review Team, Univ. of British Columbia

PROFESSIONAL LEADERSHIP

- 2021. Chair, Western Regional Council on Forest Engineering.
- 2013-present. Chair, State of Oregon Professional Examination Team for Forest Engineering.
- 2011-2023. Chair, Graduate Program for Sustainable Forest Management, Oregon State University.

- 2005-2008. Board, Oregon State University Chapter of Engineers without Borders. One of three founding faculty advisors. Beth McNair, FE/CE, first student president.
- 1992-2012 Board, Phi Kappa Phi, University Chapter President 1992-1993
- 1990-1995. Chairman, Forest Operations in Mountainous Terrain S3.06, International Union of Forestry Research Organizations (IUFRO)
- 1988-1990, 1996-2006. Deputy, Forest Operations in Mountainous Terrain S3.06
- International Union of Forestry Research Organizations (IUFRO)
- 1986-1988. Chair, Mountain Logging Working Group S3.06-02 International Union of Forestry Research Organizations (IUFRO)
- 1985-1988. Secretary, Systems Analysis Working Group, Society of American Foresters, Certificate of Merit, Most Improved Working Group (1986)

INVITED PRESENTATIONS

- 2024. Invited Speaker, Wildfire Mitigation and Response. Helena, MT. October 1, 2024.
- 2024. Invited Speaker, Vibrant Planet, IFMAT findings on forest health. May 7, 2024.
- 2023. Invited Speaker, National Academies. Biomass and Biochar Logistics. Wildfire Risk Reduction, Carbon Dioxide Removal, and Biochar. The Challenges of Scaling Up. October 4, 2023.
- 2022. Invited Speaker, Optimizing transportation networks for biomass utilization, National Biomass Workshop, USDA Forest Service sponsor, May 22, 2022.
- 2021. Invited Speaker, Pacific Logging Congress, November 9, 2021. Future of Battery Electric Log Trucks in the Mountainous Pacific Northwest.
- 2021. Invited Speaker, Coos Chapter, Society of American Foresters, May 22, 2021. Future of Battery Electric Log Trucks in the Mountainous Pacific Northwest.
- 2021. Invited Speaker Western Regional Council on Forest Engineering, Future of Battery Electric Log Trucks in the Mountainous Pacific Northwest. Eugene, OR
- 2020. Invited Speaker University of Oregon Public Interest Environmental Law Conference, Tribal Forest Management, University of Oregon, Eugene, OR
- 2020. Invited Speaker Emerald Valley SAF Chapter, Tethered Logging, Eugene, OR
- 2018. Invited Speaker EXPO 2018 Brazilian Forestry Fair, Sao Paulo, BR
- 2016, Invited Speaker, Protecting the Logging Workforce: Development of Innovative Logging Techniques for a Safer Working Environment. San Diego, CA
- 2016. Invited Keynote Speaker, Sustainable Supply Chains for the Timber Economy of the Future Conference, Austimber2016, Victoria, Australia
- 2015. Invited Speaker, Pacific Logging Congress, World Overview of Log Truck Scheduling and Opportunities for the Pacific Northwest, Hawaii
- 2015. Invited Speaker for Associated Oregon Loggers, Optimizing Pole Recovery, Eugene, OR
- 2014. Top Ten Contributing Scholars in Combinatorial Optimization of Bioenergy Supply Chain Problems in Metaheuristic Algorithms Applied to Bioenergy Supply Chain Problems, Energies 2014(7):7640-7672.
- 2014. Invited Reader for the Wallenberg International Forestry Prize
- 2013. Invited Speaker for Olympic Logging Conference, Bioenergy, Victoria, BC

- 2013. Invited Speaker for Oregon Logging Conference, Jet Fuel from Woody Biomass, Eugene, OR.
- 2010. Invited Speaker, Pre- and Post-Wildfire Forest Management for Ecological Restoration and Fire Resiliency, Sacramento
- 2009, 2008, 2007. Invited Speaker, Public Land Wildfire Policy, Ecological Policy, OSU F&W
- 2009. Invited Speaker, Annual Meeting of National Forest Counties, Reno
- 2008. Invited Speaker, O&C Counties Annual Meeting
- 2006. Invited Professor, Northeast Forestry University, Harbin, China
- 2006. Invited Keynote Speaker, 29th Annual Meeting of Council on Forest Engineering
- 2006. Invited Keynote Speaker, 9th Annual Meeting of National Forest Coalition of Counties and Schools, Reno
- 2006. Invited Participant, BLM Western Oregon Plan Revision Process
- 2005. Invited Speaker, National Meeting, Association of Consulting Foresters
- 2004, 2001, 1993, 1990. Dean's Award for Outstanding Achievement
- 2004. Keynote Speaker, O&C Counties Annual Meeting
- 2004. Invited Participant, Klamath Country Institute for Journalism and Natural Resources
- 2004. Invited Speaker, Oregon Society of Certified Public Accountants, Eugene
- 2004. Invited Speaker, Siskiyou Wildlands Project, Southern Oregon University
- 2004. Invited Speaker, Annual Meeting of Western Forest Economists, Wemme
- 2004. Invited Speaker, Annual Meeting of National Forest Counties, Reno
- 2004. Invited Speaker, Portland State University, Executive Training,, Medford
- 2004. Invited Speaker, National Public Radio, Annenberg Policy Center, Philadelphia
- 2004. Invited Speaker, Cascadia Wildlands Project, Oregon Natural Resources Council Audubon Society, Harris Hall, Eugene, Oregon.
- 2003. Keynote Speaker, O & C Counties Annual Meeting
- 2003. Invited Speaker, Pacific Logging Congress
- 2003. Invited Speaker, Southern Oregon Timber Industry Association Annual Meeting
- 2003. Invited Author for Harvesting in the Tropics, Springer-Verlag Publishers
- 2003. Invited Author for Roads in the Tropics, Springer-Verlag Publishers
- 2003. Invited Author for Roading and Transport Operations, Encyclopedia of Forest Science, Elsevier Science
- 2003. Invited Speaker and Panelist, Pacific Logging Congress
- 2003. Invited Testimony for Healthy Forests Initiative, Bend, OR, Field Hearings
- 2002. Invited Lecturer, Winter 2002 Environmental Studies Lecture Series, University of Oregon.
- 2000. Lecturer, Yale Forest Forum Series on Current Issues in Commercial Forestry, School of Forestry and Environmental Studies, Yale University.
- 1998. Lecturer. F.K. Weyerhaeuser Lecture Series on Current Issues in Commercial Forestry, School of Forestry and Environment Studies, Yale University.

PUBLICATIONS

In Refereed Journals and Other Peer-Reviewed Publications:

Schriver, R., J. Sessions and B. Strimbu. 2024. Landscape restoration using individual tree harvest strategies. Sustainability 2024, 16, 5124. https://doi.org/10.3390/su16125124.

Diniz, C., R. Timofeiczyk, J. Garzel, R. Robert, J. Sessions, and E. Lopes. 2024. Comparing different replacement policies for logging machines in Brazil. Special Issue of the Croation J. for the 2022 IUFRO-CFE-FORMEC meeting. Corvallis, Oregon. Croation J. of Forest Engr. 45(1):57-70.

Diniz, C., M. Smidt, and J. Sessions. 2024. Applying optimum bucking method to compare volume and value recovery of cut-to-length and tree-length merchandizing systems in Piedmont and Coastal Plain. FORMEC/FEC 2023—Improving Access to Sustainable Forest Materials in a Resource-Constrained World. Special Issue *Forests* 2024, *15*(3), 550; https://doi.org/10.3390/f15030550 Published online March 18, 2024.

Hamilton, D, V. Diederichs, and John Sessions. 2024. A Forestry Electric Vehicle Energy Routing and Mapping GIS Tool. International J. of Forest Engineering. Published online May 23, 2024. https://www.tandfonline.com/doi/full/10.1080/14942119.2024.2353501

Sessions J., K. Lyons, and D. Hamilton. 2024. Breakeven Analysis Considering Ultra-Fast Charging Stations at Mills for Battery-Electric Log Trucks. Croation J. of Forest Engineering. https://doi.org/10.5552/crojfe.2024.2292.

Lyons, K., P. Oyier, F. Belart, S. Brown, J. Calvo-Amodio, and J. Sessions. 2023. Coaching forest engineering: soccer and forest harvesting simulators. In revision.

Neşe, G., A. Akay, and J. Sessions. 2023. A Comparison of Two Felling Techniques Considering Stump-Height-Related Timber Value Loss. Croation J. of For. Engr. 44(1):103-110.

Sessions, J. 2023. Optimizing transportation networks for biomass utilization. In: Proceedings: Forest biomass utilization in the Pacific Northwest: Innovative research enables business success. Workshop held online May 21-22, 2022. Forest Service General Technical Report, David Nicholls (Ed.).

Diniz, C., M. Smidt and J. Sessions. 2022. Engine idle time and its effects on logging machine costs. Submitted to the Croation J. of Forest Engr. In Review.

Lyons, K., J. Wimer, and J. Sessions. 2022. Hazard recognition and risk assessment by cable logging rigging crews. Accepted March 16, 2022, Published on line April 4, 2022. COFE-FORMEC Special Issue of Int. J. of For. Engr.   https://doi.org/10.1080/14942119.2022.2055411

Sessions, J. and J. Wimer. 2022. A mobility model for a tethered skidder. COFE-FORMEC

Special Issue of Int. J. of For. Engr. 33(3): 189-194. Accepted Feb 18, 2022, Published online March 8, 2022. DOI: 10.1080/14942119.2022.2045172

Chung, W., B. Morrissette, P. Green, B. Leshchinsky, F. Belart, J. Sessions, J. Wimer, and J. Garland. 2022. Effects of pre-bunching logs with a tethered feller-buncher on cable logging productivity and costs: A case study in Southern Oregon. Accepted February 14, 2022. Published April 8, 2022. https://doi.org/10.1093/forsci/fxac008. Forest Science.

Nicholls, D., D. Vaughn, H-S Han, D. Mitchell, M. Smidt and J. Sessions. 2022. Forest Biohubs to enhance forest health while supporting the emerging bioeconomy: a comparison between three U.S. regions. Accepted January 14, 2022. Published on line January 27, *Energies* 2022, *15*(3), 931; https://doi.org/10.3390/en15030931

West, T., J. Sessions, and B. Strimbu. 2022. Steep Slope Harvest System Models for Small to Large Trees. *Forests*, 13(2):305-322. https://doi.org/10.3390/f13020305.

Diniz, C., and J. Sessions. 2022. ESPDS: A support tool to assist forest equipment purchase decisions. Published online December 1, 2021. doi: 10.5552/crojfe.2022.1168, 43(1)12 pages. Croation J. of Forest Engr 43(1):98-108.

Acuna, M., J. Sessions, and G. Murphy. 2021. Financial impacts of harvesting with spatial, access and size considerations. In preparation.

Sessions, J., B. Strimbu, and T. West. 2021. Do Larger Diameter Logs Cost More to Haul? In preparation.

Sessions, J., K. Lyons, and J. Wimer. 2021. Maximizing the Standing Skyline Log Load Using a Variable Length Tagline. Forests 2021, 12, 927. https://doi.org/10.3390/f12070927. Published July 15, 2021.
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West, T., J. Sessions, and B. Strimbu. 2021. Heuristic Optimization of Thinning Individual Douglas-Fir. Forests 2021, 12, 280. https://doi.org/10.3390/f12030280. Published on line Feb 28, 2021. 14 pp.

Akay, A.E., Serin, H., Sessions, J., Pak, M., Bilici, E. 2021. Evaluating the Effects of Improving Forest Road Standards on Economic Value of Forest Products, Croatian J. of Forest Engineering, 42(2):245–258.

Sessions, J., M. Berry and H-S. Han. 2021. Machine rate calculations – A modified approach. Croation J. of Forest Engineering, 42(3):437-443.

Eker, M., and J. Sessions. 2020. Refocusing on Operational Harvest Planning Model for State Owned Forestry in Turkey. Published on line December 12, 2020. European J. of Forest Engr.6(2):96-106.

Berry, M., and J. Sessions. 2020. Evaluating the economic incentives of biomass removal on site preparation for different harvesting systems in Australia. *Forests* 11(1370):1-12. doi:10.3390/f11121370.

Diniz, C. and J. Sessions. 2020. Ensuring Consistency between Strategic Plans and Equipment Replacement Decisions. Published online June 5, 2020. International J. of Forest Engineering 31(3):211-223. https://www.tandfonline.com/doi/full/10.1080/14942119.2020.1768769

Lyons, K., J. Sessions and J. Wimer. 2020. Design of continuous bridle multiple-stump anchors. International J. of Forest Engr. 31(1):1-8, DOI: 10.1080/14942119.2020.1685833

Lyons, K., J. Sessions and J. Wimer. 2020. The effect on tether tension when using trees to redirect live machine tethers during forest harvesting on steep slopes. Biosystems Engineering 195(2020):89-96.

Wooley, R., J.Y. Zhu, R. Gleisner, A. Hawkins, P. Starkey, J. Gao, T. Spink, J. Ley, M. Wolcott, G. Marrs, and J. Sessions. 2020. Production of 1,000 gallons of certified biojet fuel through biochemical conversion of softwood forest residues. Gen. Tech. Rep. FPL-GTR-278. Madison, WI: US Department of Agriculture, Forest Service, Forest Products Laboratory. 109 p.

Green, P., W. Chung, B. Leshchinsky, J. Sessions, S. Fitzgerald, J. Wimer, T. Cushing, and J. Garland. 2020. Insight into the Productivity, Cost and Soil Impacts of Cable-assisted Harvester forwarder Thinning in Western Oregon. Forest Science 66(1):82-96.

Diniz, C., J. Sessions, R. Timofeiczyk Junior, and R. Robert. 2020. Equipment replacement policy for forest machines in Brazil. International J. of Forest Engineering 31(2):87-94.

Hall, D. and J. Sessions 2019. Calculating the length of long bridle legs. Journal of Theater Design and Technology 55(4):46-50.

Strimbu, B., C. Qi, and J. Sessions. 2019. Accurate geo-referencing of trees with no or inaccurate terrestrial location devices. Remote Sensing 2019, 11(16), 1877; doi:10.3390/rs11161877. Online August 11, 2019.

Petitmermet, J., J. Sessions, J. Bailey, and R. Zamora-Cristales. 2019. Cost and productivity of tethered cut-to-length systems in a dry forest fuel reduction treatment: A case study. Forest Science 65(5):581-592. Online March 30 at https://academic.oup.com/forestscience/advance-article/doi/10.1093/forsci/fxz010/5423754.

Acuna, M., J. Sessions, R. Zamora-Cristales, K. Boston, M. Brown, and M. Ghaffariyan. 2019. Methods to manage and optimize forest biomass supply chains: A review. Current Forestry Reports (2019) 5:124–141 https://doi.org/10.1007/s40725-019-00093-4. Springer. On line June 25 at https://link.springer.com/epdf/10.1007/s40725-019-00093-4

Hersh, B., A. Mirkouei, J. Sessions, B. Rezaie, and Y. You. 2019. A review and future directions on enhancing sustainability benefits across food-energy-water systems: The potential role of biochar-derived products. AIMS Environmental Science 6(5):379-416. doi: 10.3934/environsci.2019.5.379

Petitmermet, J., J. Fried and J. Sessions. 2019. Estimating biomass availability and cost when implementing forest restoration with tethered harvest systems. Journal of Forestry 177(4):323-339. Online June 5 at
https://academic.oup.com/jof/advancearticle/doi/10.1093/jofore/fvz033/5511745

Bilici, E., V. Andiç, A. Akay and J. Sessions. 2019. Productivity of a portable winch system used in salvage logging of storm-damaged timber. Croation J. of For. Engr. 40(2):311-318.

Garland, J., F. Belart, R. Crawford, W. Chung, T. Cushing, S. Fitzgerald, P. Green, L. Kincl, B. Leshchinsky, B. Morrissette, J. Sessions and J. Wimer. 2019. Safety in steep slope logging operations, Journal of Agromedicine 24(2):138-145, doi: 10.1080/1059924X.2019.1581115. Online March 12, 2019 https://doi.org/10.1080/1059924X.2019.1581115.

Sessions, J., D. Smith, K. Trippe, J. Fried, J. Bailey, J. Petitmermet, W. Hollamon, C. Phillips, and J. Campbell. 2019. Can Biochar Link Forest Restoration with Commercial Agriculture? Biomass and Bioenergy 123(2019):175-185. Online March 9, 2019.
https://doi.org/10.1016/j.biombioe.2019.02.015

Belart, F., B. Leshchinsky, J. Sessions, W. Chung, P. Green, J. Wimer, and B. Morrissette. 2019. Sliding Stability of Cable-Assisted Tracked Equipment on Steep Slopes. Forest Science 65(3):304-311. Online Dec 20, 2018.
https://academic.oup.com/forestscience/advancearticle/doi/10.1093/forsci/fxy064/5256532#

Sessions, J. and K. Lyons. 2019. Harvesting elevation potential from mountain forests. International J. of Forest Engineering 29(3):192-198. Published on line Oct. 1, 2018.
https://www.tandfonline.com/eprint/vDYX7eDrjZe9dyJ8Y2AZ/full

Belart, F., J. Sessions, and G. Murphy. 2019. Seasonal changes in live tree branch moisture in Oregon, USA: four case studies. Forest Science, 65(1):100-107. Available on line, August 29, 2018 at https://doi.org/10.1093/forsci/fxy038.

Campbell, J., J. Sessions, D. Smith, and K. Trippe. 2018. Potential carbon storage in biochar made from logging residue: basic principles and southern Oregon case studies. Published Sep13, 2018. PLoS ONE 13(9): e0203475. https://doi.org/10.1371/journal.pone.0203475.

Daugherty, B., J. Sessions, R. Zamora-Cristales, and M. Wing. 2018. Improving Large Trailer Access for Biomass Recovery in Steep Terrain. Forest Science 64(4):429-441. Online April 4, 2018. https://doi.org/10.1093/forsci/fxx020

Zamora-Cristales, R, K. Boston, J. Long, and J. Sessions. 2018. Economic Estimation of the Available Biomass Following Logging Operations in Western Oregon and Washington. Forest Products J. 68(2):191-198. Available on line March 2, 2018 at http://www.forestprodjournals.org/doi/pdf/10.13073/FPJ-D-17-00045

Han, H.-S., A. Jacobson, E.M. Bilek, and J. Sessions. 2018. Waste to Wisdom: Utilizing forest residues for the production of bioenergy and biobased products. Applied Engineering in Agriculture 34(1):1-7.

Berry, M. and J. Sessions. 2018. The Economics of Biomass Logistics and Conversion Facility Mobility: An Oregon Case Study. Applied Engineering in Agriculture 34(1):57-72.

Berry, M. and J. Sessions. 2018. A Forest-to-Product Biomass Supply Chain in the Pacific Northwest, USA: A multi-product approach. Applied Engineering in Agriculture 34(1):109-124. Available on Line at doi: 10.13031/aea.12384.

Berry, M. , J. Sessions and R. Zamora-Cristales. 2018. Sub-regional comparison for forest-toproduct biomass supply chains on the Pacific West Coast, USA. Applied Engineering in Agriculture 34(1):157-174.

Mirkouei, A., K. Haapala, J. Sessions, and G. Murthy. 2017. A Mixed Biomass-based Energy Supply Chain for Enhancing Economic and Environmental Sustainability Benefits: A Multicriteria Decision Making Framework. Published online: 26-Sep-2017. Applied Energy 206C (2017):1088-1101. DOI: 10.1016/j.apenergy.2017.09.001.

Sessions, J., B. Leshchinsky, W. Chung, K. Boston, and J. Wimer. 2017. Theoretical Stability and Traction of Steep Slope Tethered Feller-Bunchers. Forest Science 63(2):192-200.

Chen, C., F. Pierobon, R. Zamora-Cristales, I. Ganguly, J. Sessions, and I. Eastin. 2017. Modeling the processing and transportation logistics of forest residues using life cycle assessment.   Journal of Forestry 115(2)86-94.

Belart, F., B. Leshchinsky, and J. Sessions. 2017. Finite element analysis to predict in-forest stored harvest residue moisture content. Forest Science 63(4):362-376. http://dx.doi.org/10.5849/FS-2016-064R1.

Ghaffariyan, M. R., M. Brown, M. Acuna, J. Sessions, T. Gallagher, M. Kühmaier, R. Spinelli, R. Visser, G. Devlin, L.Eliasson, J. Laitila, R. Laina, M. Wide, and G. Engell. 2017. An international review of the most productive and cost effective biomass recovery technologies and supply chains.   J. of Renewable Energy Reviews 74(2017) 145-158. Available online Feb 20, 2017. http://dx.doi.org/10.1016/j.rser.2017.02.014

Sessions, J., J. Gordon, P. Rigdon, D. Motanic, and V. Corrao. 2017. Indian Forests and Forestry: Can they play a larger role in Sustainable Forest Management?   Journal of Forestry 115(5):364-365.

Belart, F., J. Sessions, B. Leshchinsky, and G. Murphy. 2017. Economic implications of moisture content and logging system in forest harvest residue delivery for energy production: a case study. Canadian Journal of Forest Research 47(4): 458-466, https://doi.org/10.1139/cjfr2016-0428.

Mirkouei, A., K. Haapala, J. Sessions, and G. Murthy. 2017. A Review and Future Directions in Techno-Economic Modeling and Optimization of Upstream Forest Biomass to Bio-oil Supply Chains.   Renewable and Sustainable Energy Reviews 67(2017)15–35.

Zamora-Cristales, R., J. Sessions, and G. Marrs. 2017 Economic implications of grinding, transporting, and pretreating fresh versus aged forest residues for biofuel production. Available on line October 24, 2016. Can. J. For. Res. 47(2):269–276, dx.doi.org/10.1139/cjfr-2016-022

Leshchinsky. B., J. Sessions, J. Wimer and M. Clausen. 2016. Designing Mobile Anchors to Yield: A Tension Relief System for Tail Anchoring. Croation J. of Forest Engineering 37(2):269-278.

Mirkouei, A. K.R. Haapala, G.S. Murthy, and J. Sessions. 2016. Reducing Greenhouse Gas Emissions For Sustainable Bio-Oil Production Using A Mixed Supply Chain. Proceedings of the 2016 ASME IDETC/CIE: 21st Design for Manufacturing and the Life Cycle Conference (DFMLC), Paper DETC2015-59262, August 21-25, Charlotte, North Carolina.

Marrs, G., R. Zamora-Cristales and J. Sessions. 2016. Forest biomass cost sensitivity to grinding parameters for bio-jet fuel production.   J. of Renewable Energy 99(2016):1082-1091.

Zamora-Cristales, R. and J. Sessions. 2016. A collection model for forest biomass residues. Croatian J. of Forest Engineering. 3(2):287-296.

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