

Andrew J. Sánchez Meador, Ph.D.

Associate Professor, School of Forestry
College of the Environment, Forestry, and Natural Sciences; Northern Arizona University
P.O. Box 15018, Flagstaff, AZ 86011
Building 82, Office 234, Southwest Forest Science Complex
Office: (928) 523-3448 • Mobile: (928) 853-8650
andrew.sánchezmeador@nau.edu

[School of Forestry](#) • [QuantitativeEcology.org](#) • [Google Scholar](#) • [NAU Research Profile](#)

EDUCATION

Doctorate of Philosophy <i>Northern Arizona University (NAU)</i> Dissertation topic: Modeling spatial and temporal changes of ponderosa pine (<i>Pinus ponderosa</i> var. <i>scopulorum</i>) forests in northern Arizona since Euro-American settlement. <i>Advisors: Drs. Margaret Moore and Pablo Parysow</i>	Forest Science	Dec. 2006
Master of Science <i>Mississippi State University (MSU)</i> Thesis topic: Applications in growth and yield of longleaf pine (<i>Pinus palustris</i> mill.): A comparison of artificial neural networks and other traditional modeling methodologies. <i>Advisors: Drs. Emily Schultz and Thomas G. Matney</i>	Forestry	May 2002
Bachelor of Science <i>Mississippi State University</i>	Forestry	May 1999

AWARDS

- **Teacher of the Year** Award; School of Forestry, NAU (2016-2017)
- **Outstanding Contribution to Forestry** Award, Society of American Foresters SW Chapter (2012)
- **Xi Sigma Pi** (Forestry Honor Society, 2001)
- **National Hardwood Lumber Association Scholarship** (1998)
- **Dean's Scholar**, MSU (1998)

PROFESSIONAL AND ACADEMIC APPOINTMENTS

Associate Professor of Forest Biometrics and Quantitative Ecology <i>Northern Arizona University (NAU), Flagstaff, AZ.</i> <i>Supervisor: James Allen, Ph.D., Professor and Executive Director, School of Forestry; PO Box 15017, Northern Arizona Univ., Flagstaff, AZ 86011; Ph: 928.523.5894, E-mail: james.allen@nau.edu</i>	08/2012-Present
Program Director of Biometrics and Forest Mgmt. (Joint-Appointed with School of Forestry) <i>Ecological Restoration Institute (ERI), Flagstaff, AZ.</i> <i>Supervisor: David Huffman, Ph.D., Director of Research and Development, Ecological Restoration Institute; PO Box 15018, Northern Arizona Univ., Flagstaff, AZ 86011; Ph: 928.523.7528, E-mail: david.huffman@nau.edu</i>	04/2012-08/2017

Led and assisted interdisciplinary research and science transfer team performing comprehensive primary and secondary research focused on solving the problem of unnaturally severe wildfire and degraded forest health throughout the American West. Obtained extramural funding for projects and directly supervised and mentored four research specialists within the ERI while working with partners (e.g., Forest Service, Bureau of Land Management, National Park Service, Arizona Dept. of Forestry, Fort Lewis College, Navajo and Mescalero Tribes) to establish a number of short-term monitoring and long-term ecological research projects in Arizona, New Mexico, and Colorado.

Forest Restoration Prog. Manager (Forester 460, GS 12) 07/2010-04/2012

Lincoln National Forest (LNF), US Forest Service (USFS), Alamogordo, NM.

Supervisor: Chad Stewart; Deputy Forest Supervisor, Grand Mesa, Uncompahgre and Gunnison Nat. Forest; 2250 South Main St Delta, Colorado 81416; Ph: 970.874.6600, E-mail: chadstewart@fs.fed.us

Performed duties related to the administration of LNF forestry and fuels program, reviewed new and proposed landscape plans, policies, procedures, and guidelines that applied to the management of forest resources and made recommendations on the need for changes in existing policies and practices. Assisted LNF Leadership Team in developing strategies and initiatives to advance LNF and USFS goals from local to regional and national levels. Directly supervised four full time employees in support of LNF program and project-based needs.

National Biometrician (Forester 460, GS 12) 04/2007-07/2010

Forest Management Service Center, US Forest Service, Fort Collins CO.

Supervisor: Ken Cormier, Forest Management Service Center Mensurationist; 2150 Centre Avenue, Bldg A, Suite 341A, US Forest Service, Forest Management Service Center; Fort Collins, CO 80526-1891; Ph: 970.295.5779, E-mail: kcormier@fs.fed.us

Oversaw projects from conception to completion focused on forest products measurement, forest vegetation simulation (FVS), and other biometry- and measurement-related topics. Specific duties included developing national protocols and standards related to biomass estimation, assessing the use of various remote sensing and sampling techniques for the inventory of low-value forest products, maintenance of the Forest Service Timber Cruising Handbook (FSH2409.12), and development of Forest Service software.

Landowner Support Forester 05/1996-05/1999

Champion International Corp. Jasper, AL.

Supervisor: Mike Norcross (Retired)

Supervised and conducted silviculture and forest measurement projects focused on pulpwood production including: supervision and auditing of site preparation and regeneration crews; conducting pine plantation survival and growth surveys; GIS data collection and digital aerial photo interpretation; prescribed burning; administration of herbicide preparation and application contracts; and design and implementation of forest inventories assessing both forest and non-forest resource attributes.

PUBLICATIONS

H-index = 16 and total citations = 839 as of Sunday, February 2, 2020 (Google Scholar)

¹undergraduate student; ²graduate student.

Refereed

- 47 Chamberlain¹, C., **Sánchez Meador, A.J.**, and A. Thode. *In Review*. Airborne lidar easily provides improved estimates of canopy base height and canopy bulk density in southwestern ponderosa pine forests. *Forest Ecology and Management*.
- 46 Donager, J., Sankey, T., **Sánchez Meador, A.J.**, Sankey, J., and A. Springer. *In Review*. Assessment of spatially continuous estimates of snow depth and cover persistence and their relationships with forest structure and topography. *Water Resources Research*.
- 45 Huffman, D.W., Floyd-Hanna, L., Hanna, D., Crouse, J.E., Fulé, P.Z., **Sánchez Meador, A.J.**, and J.D. Springer. *In Review*. Fire regimes and structural changes in oak-pine forests of the Mogollon Highlands ecoregion: implications for ecological restoration. *Forest Ecology and Management*.
- 44 Bryant², T., Waring, K.M., **Sánchez Meador, A.J.**, and J. Bradford. 2019. A Framework for Quantifying Resilience to Forest Disturbance. *Frontiers in Forests and Global Change*. 2, 56. [Download](#)
- 43 Huffman, D.W., Stoddard, M.T., Springer, J.D., Crouse, J.E., **Sánchez Meador, A.J.** and S. Nepal² 2019. Stand dynamics of pinyon-juniper woodlands following hazardous fuels reduction treatments in Arizona. *Rangeland Ecology and Management*. 72(5):757-767. [Download](#)
- 42 Yazzie², J.O., Fulé, P.Z., Kim, Y.-S., and **A.J. Sánchez Meador**. 2019. Diné kinship for conserving native tree species in climate change. *Ecological Applications*. 29(6):e01944. [Download](#)
- 41 Vaughan², D., Auty, D., Kolb, T., **Sánchez Meador, A.J.**, Mackes, K., Dahlen, J. and K. Moser. 2019. Climate alters ponderosa pine (*Pinus ponderosa*) wood density more than stand basal area in a

- replicated stand density experiment in the southwestern USA. *Annals of Forest Science*. 76(3):85-112. [Download](#)
- 40 Putraditama², A., Kim, Y.-S., **Sánchez Meador, A.J.**, and H. Baral. 2019. Evaluating effectiveness of Community Forest scheme in reducing deforestation in Indonesia. *Forest Policy and Economics*. 106(2019) 101976. [Download](#)
- 39 Wasserman, T.N., **Sánchez Meador, A.J.** and A.E.M. Waltz. 2019. Grain and extent considerations are integral for monitoring landscape-scale desired conditions in fire-adapted forests. *Forests*. 10(6) 465. [Download](#)
- 38 Singleton², M.E., Thode, A.E., **Sánchez Meador, A.J.**, and J. Iniguez. 2019. Increasing trends in high-severity fire in the southwestern USA from 1984-2015. *Forest Ecology and Management*. 433: 709-719. [Download](#)
- 37 Stoddard, M.T., Huffman, D.W., Fulé, P.Z., Crouse, J.E., and **A.J. Sánchez Meador**. 2018. Forest structure and regeneration 15 years after wildfire in a ponderosa pine and mixed conifer ecotone, Arizona, USA. *Fire Ecology*. 14: 12. [Download](#)
- 36 Azpeleta Tarancón², A., Fulé, P.Z., **Sánchez Meador, A.J.**, Kim, Y.-S., and T. Padilla. 2018. Spatiotemporal variability of fire regimes in adjacent Native American and public forests, New Mexico, USA. *Ecosphere*. 9(11): e02492. [Download](#)
- 35 Donager², J. Sankey, T.T., Sankey, J., **Sánchez Meador, A.J.**, Springer, A. and J.D. Bailey. 2018. Examining forest structure with terrestrial lidar: suggestions and novel techniques based on comparisons between scanners and forest treatments. *Earth and Space Science*. 5(11): 753-776. [Download](#)
- 34 Whitehair², L., Fulé, P.Z., **Sánchez Meador, A.J.**, Tarancón², A.A., and Yeon-Su Kim. 2018. Fire regime on a cultural landscape: Navajo Nation. *Ecology and Evolution*. 2018(8): 9848–9858. [Download](#)
- 33 Mockta², T.K., Fulé, P.Z., **Sánchez Meador, A.J.**, Padilla, T., and Yeon-Su Kim. 2018 Sustainability of teepee pole stands on Mescalero Apache Tribal Lands: characteristics and climate change effects. *Forest Ecology and Management* 530: 250-258. [Download](#)
- 32 Burch, B.D. and **A.J. Sánchez Meador**. 2018. Comparison of forest age estimators using k-tree, fixed-radius, and variable-radius plot sampling. *Canadian Journal of Forest Research* 48 (8): 942-951. [Download](#)
- 31 Springer, J.D., Huffman, D.W., Stoddard M.T., **Sánchez Meador, A.J.**, and Waltz, A.E.M. 2018. Plant community dynamics following hazardous fuel treatments and mega-wildfire in a southwestern warm-dry mixed-conifer forest. *Forest Ecology and Management* 429: 278-286. [Download](#)
- 30 Roccaforte, J.P., **Sánchez Meador, A.J.**, Waltz, A.E.M., Gaylord, M.L., Stoddard, M.T., and D.W. Huffman. 2018. Delayed tree mortality, bark beetle activity, and regeneration dynamics five years following the Wallow Fire, Arizona, USA: assessing trajectories towards resiliency. *Forest Ecology and Management* 428: 20-26. [Download](#)
- 29 Goodrich², B.A., Waring, K.M., Auty, D. and **A.J. Sánchez Meador**. 2018. Interactions of management and white pine blister rust on *Pinus strobiformis* regeneration abundance in southwestern United States. *Forestry: An International Journal of Forest Research* 91: 1-14 [Download](#)
- 28 Pommerening, A. and **A.J. Sánchez Meador**. 2018. Tree interactions between myth and reality. *Forest Ecology and Management*. 424: 164-176. [Download](#)
- 27 Kralicek², K., **Sánchez Meador, A.J.**, and L. Rathbun. 2018. Development and assessment of regeneration imputation models for forest in Oregon and Washington. *Forest Ecology and Management*. 409 667-682. [Download](#)
- 26 Huffman, D.W., Crouse, J.E., **Sánchez Meador, A.J.**, Springer, J.D., and M.T. Stoddard. 2018. Restoration benefits of re-entry with resource objective wildfire on a ponderosa pine landscape in northern Arizona, USA. *Forest Ecology and Management*. 408: 16-24. [Download](#)
- 25 Laughlin, D.C., Strahan, R.T., Huffman, D.W., and **A.J. Sánchez Meador**. 2017. Using trait-based ecology to restore resilient ecosystems: historical conditions and the future of montane forests in western North America. *Restoration Ecology*. 25 (S2): S135-S146. [Download](#)

- 24 Owen², S.M., Sieg, C.H., **Sánchez Meador, A.J.**, Fulé, P.Z., Iniguez, J.M., Baggett, L.S., Fornwalt, P.J., and M.A. Battaglia. 2017. Spatial patterns of ponderosa pine regeneration in high-severity burn patches. *Forest Ecology and Management*. 405: 134-149. [Download](#)
- 23 Rodman², K.C., **Sánchez Meador, A.J.**, Moore, M.M., and D.W. Huffman. 2017. Influence of Forest Type and Abiotic Factors on Variability in Reference Conditions Across *Pinus ponderosa*-Dominated Forests in the Southwestern United States. *Forest Ecology and Management*. 404: 316-329. [Download](#)
- 22 **Sánchez Meador, A.J.**, Springer J.D., Huffman, D.W., Crouse J.E., and M.A. Bowker. 2017. Ecological restoration treatments improve soil function in frequent-fire forests of the western United States: A systematic review. *Restoration Ecology*. 25: 497-508 [Download](#)
- 21 Massey², R., Sankey, T.T., Congalton, R.G., Yadav, K., Thenkabail, P.S., Ozdogan, M., and **A.J. Sánchez Meador**. 2017. MODIS phenology-derived, multi-year distribution of conterminous U.S. crop types. *Remote Sensing of Environment*. 198: 490-503. [Download](#)
- 20 Bagdon², B.A., Huang, C.-H., **Sánchez Meador, A.J.**, and S. Dewhurst. 2017. Climate change constrains the efficiency frontier when managing forests to reduce fire severity and maximize carbon storage. *Ecological Economics* 140: 201-214. [Download](#)
- 19 Huffman, D.W., **Sánchez Meador, A.J.**, Stoddard, M.T., Crouse, J.E., and J.P. Roccaforte. 2017. Efficacy of resource objective wildfires for restoring ponderosa pine (*Pinus ponderosa*) forests of northern Arizona. *Forest Ecology and Management*. 389: 395-403. [Download](#)
- 18 Strahan, R.T., **Sánchez Meador, A.J.**, Huffman, D.W., and D.C. Laughlin. 2016. Shifts in community-level traits and functional diversity in a mixed conifer forest: a legacy of land-use change. *Journal of Applied Ecology*. 53(6) 1755-1765. [Download](#)
- 17 Rodman², K.C., **Sánchez Meador, A.J.** Huffman, D.W. and K.M. Waring. 2016. Reference conditions and historical fine-scale spatial dynamics in a mixed-conifer forest, Arizona, USA. *Forest Science* 3(62), 268-280. [Download](#)
- 16 Schneider², E., **Sánchez Meador, A.J.** and W.W. Covington. 2016. Reference conditions and historical changes in an unharvested ponderosa pine stand on sedimentary soils. *Restoration Ecology* 24: 212-221. [Download](#)
- 15 Taylor, M.H., **Sánchez Meador, A.J.**, Kim, Y.S. Rollins, K., and Will, H. 2015. The economics of ecological restoration and hazardous fuel reduction treatments in the ponderosa pine forest ecosystem. *Forest Science* 61: 988-1008. [Download](#)
- 14 Stoddard, M.T., **Sánchez Meador, A.J.**, Fulé, P.Z., and J.E. Korb. 2015. 5-year post-restoration treatment conditions and simulated forest trajectories under alternative climate scenarios in a southwestern warm/dry mixed-conifer forest. *Forest Ecology and Management* 356: 253-261. [Download](#)
- 13 Ouzts², J., Kolb, T. **Sánchez Meador, A.J.** and D.W. Huffman. 2015. Post-fire ponderosa pine plantings in Arizona and New Mexico. *Forest Ecology and Management* 354: 281-290. [Download](#)
- 12 Tuten², M.C., **Sánchez Meador, A.J.** and P.Z. Fulé. 2015. Ecological restoration and fine-scale structural regulation in Southwestern ponderosa pine forests. *Forest Ecology and Management* 348: 57-67. [Download](#)
- 11 **Sánchez Meador, A.J.**, Waring, K.M., and E.L. Kalies. 2015. Implications of diameter caps on multiple forest resource responses in the context of 4FRI: Results from the Forest Vegetation Simulator. *Journal of Forestry* 113: 219-230. [Download](#)
- 10 Waltz, A.E.M., Stoddard, M.T., Kalies, E.L., Springer, J.D., Huffman, D.W. and **A.J. Sánchez Meador**. 2014. Effectiveness of fuel reduction treatments: assessing metrics of forest resiliency and wildfire severity after the Wallow Fire, AZ. *Forest Ecology and Management* 334: 43-52. [Download](#)
- 9 Nepal², S., Ojha, B.R., **Sánchez Meador, A.J.**, Gaire, S.P. and C. Shilpakar. 2014. Effect of gamma rays on germination and photosynthetic pigments of maize (*Zea mays* L.) inbreds. *International Journal of Research*. 1: 511-545. [Download](#)
- 8 Azpeleta Tarancón², A., Fulé, P.Z., Shive, K.L., Sieg, C.H., **Sánchez Meador, A.J.** and B. Strom. 2014. Simulating post-wildfire forest trajectories under alternative climate and management scenarios *Ecological Applications*. 24: 1626-1637. [Download](#)

- 7 Reynolds, R.T., **Sánchez Meador, A.J.**, Youtz, J.A., Nicotlet, T., Matonis, M.S., Jackson, P.L., Delorenzo, D., and A.D. Graves. 2013. Restoring composition and structure in Southwestern frequent-fire forests: a science-based framework for improving ecosystem resiliency. General Technical Report RMRS-GTR-310. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 76p. [Download](#)
- 6 Gedeon, C.I., Drickamer, L.C., and **A.J. Sánchez Meador**. 2012. Importance of burrow-entrance mounds of Gunnison's prairie dogs (*Cynomys gunnisoni*) for vigilance and mixing of soil. The Southwestern Naturalist. 57: 100-104. [Download](#)
- 5 **Sánchez Meador, A.J.**, Parysow, P.F., and M.M. Moore. 2011. A new method for delineating tree patches and assessing spatial reference conditions of ponderosa pine forests in northern Arizona. Restoration Ecology. 19: 490-499. [Download](#)
- 4 **Sánchez Meador, A.J.** and M.M. Moore. 2010. Lessons from long-term studies of harvest methods in southwestern ponderosa pine-Gambel oak forests on the Fort Valley Experimental Forest, Arizona, U.S.A. Forest Ecology and Management. 260: 193-206. [Download](#)
- 3 **Sánchez Meador, A.J.**, Parysow, P.F., and M.M. Moore. 2010. Historical stem-mapped permanent plots increase precision of reconstructed reference data in ponderosa pine forests of northern Arizona. Restoration Ecology. 18: 224-234. [Download](#)
- 2 **Sánchez Meador, A.J.**, Moore, M.M., Bakker, J.D. and P.F. Parysow. 2009. 108 years of change in spatial pattern following selective harvest of a ponderosa pine stand in northern Arizona, USA. Journal of Vegetation Science. 20: 79-90. [Download](#)
- 1 Abella, S.R., Covington, W.W., Fulé, P.Z., Lentile, L.B., **Sánchez Meador, A.J.**, and P. Morgan. 2007. Past, Present, and Future Old Growth in Frequent-Fire Conifer Forests of the Western United States. Ecology and Society 12: 16. [Download](#)

Refereed and Non-Refereed Science Transfer Publications

- 20 Donager, J.J., & **Sánchez Meador, A.J.** 2019. Fact Sheet: Understanding LiDAR for Forest Applications. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University: Flagstaff, AZ. 2 pp. [Download](#)
- 19 **Sánchez Meador, A.J.** 2017. Ecological restoration and fine-scale structural regulation in Southwestern ponderosa pine forests. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University: Flagstaff, AZ. 2 pp. [Download](#)
- 18 **Sánchez Meador, A.J.** 2017. Ecological restoration treatments improve soil function in frequent-fire forests of the western United States. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University: Flagstaff, AZ. 2 pp. [Download](#)
- 17 **Sánchez Meador, A.J.** 2016. Reference Conditions and Historical Changes in an Unharvested Ponderosa Pine Stand on Sedimentary Soil ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University: Flagstaff, AZ. 2 pp. [Download](#)
- 16 Taylor, M. H., & **Sánchez Meador, A.J.** 2016. The Economics of Ecological Restoration and Hazardous Fuel Reduction Treatments in Ponderosa Pine Forest Ecosystem. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University: Flagstaff, AZ. 2 pp. [Download](#)
- 15 Kralicek², K.; **Sánchez Meador, A.J.**; Rathbun, L. 2015. Development of forest regeneration imputation models using permanent plots in Oregon and Washington. In: Stanton, Sharon M.; Christensen, Glenn A., comps. 2015. Pushing boundaries: new directions in inventory techniques and applications: Forest Inventory and Analysis (FIA) symposium 2015. 2015 December 8–10; Portland, Oregon. Gen. Tech. Rep. PNW-GTR-931. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 67-68. [Download](#)
- 14 **Sánchez Meador, A.J.** 2014. Reflections on Teaching Applied Statistics and “R” in Nepal. NAU Global. Center for International Education, Northern Arizona University: Flagstaff, AZ. Pp 8-18. [Download](#)
- 13 Rodman², K., and **Sánchez Meador, A.J.** 2014. Fact Sheet: Characterizing Spatial Reference Conditions in Southwestern Warm/Dry Mixed-Conifer Forests. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University: Flagstaff, AZ. 3 pp. [Download](#)
- 12 Yeon-Su, K., W. W. Covington, P. Ervin, R. Fitch, E. Kailas, D. Rideout, K. Rollins, **A.J. Sánchez Meador**, M. Taylor, D. Vosick, T. Yu, T., and J. Yoder. 2013. The efficacy of hazardous fuel treatments: A rapid assessment of the economic and ecologic consequences of alternative

hazardous fuel treatments: A document for policy makers. Ecological Restoration Institute, Northern Arizona University. 28 pp. [Download](#)

- 11 Huffman, D.W., **Sánchez Meador, A.J.** and Greco, B. 2012 Fact Sheet: Canopy Cover and Forest Conditions. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University: Flagstaff, AZ. 4 pp. [Download](#)
- 10 Cawrse, D., Keyser, C., Keyser, T., **Sánchez Meador, A.J.**, Smith-Mateja, E., and M Van Dyck. 2009. Forest Vegetation Model Validation Protocols. U.S. Department of Agriculture, Forest Service, Forest Management Service Center. 10 pp. [Download](#)
- 9 Bakker, J.D., **Sánchez Meador, A.J.**, Fulé, P.Z., Huffman, D.W., and M.M. Moore. 2008 “Growing Trees Backwards”: Description of a Stand Reconstruction Model. Pp 136-142 in Olberding, S.D., and M.M. Moore (tech coords). 2008. Fort Valley Experimental Forest - A Century of Research 1908-2008. Conference Proceedings; August 7-9, 2008; Flagstaff, AZ. Proceedings RMRS-P-53. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 408 p. [Download](#)
- 8 De Blois¹, B.P., Finkral, A.J., **Sánchez Meador, A.J.**, and M.M. Moore. 2008. Early Thinning Experiments Established by the Fort Valley Experimental Forest. Pp 197-203 in Olberding, S.D., and M.M. Moore (tech coords). 2008. Fort Valley Experimental Forest - A Century of Research 1908-2008. Conference Proceedings; August 7-9, 2008; Flagstaff, AZ. Proceedings RMRS-P-53. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 408 p. [Download](#)
- 7 Dyer¹, J.H., **Sánchez Meador, A.J.**, Moore, M.M., and J.D. Bakker. 2008. Forest Structure and Tree Recruitment Changes on a Permanent Historical Cinder Hills Plot Over a 130-Year Period. Pp 214-221 in Olberding, S.D., and M.M. Moore (tech coords). 2008. Fort Valley Experimental Forest—A Century of Research 1908-2008. Conference Proceedings; August 7-9, 2008; Flagstaff, AZ. Proceedings RMRS-P-53. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 408 p. [Download](#)
- 6 **Sánchez Meador, A.J.** and M.M. Moore. 2008. 93 Years of Stand Density and Land-Use Legacy Research at the Coulter Ranch Study Site. Pp 321-330 in Olberding, S.D., and M.M. Moore (tech coords). 2008. Fort Valley Experimental Forest - A Century of Research 1908-2008. Conference Proceedings; August 7-9, 2008; Flagstaff, AZ. Proceedings RMRS-P-53. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 408 p. [Download](#)
- 5 **Sánchez Meador, A.J.** and S.D. Olberding. 2008. Fort Valley’s Early Scientists: A Legacy of Distinction. Pp 331-338 in Olberding, S.D., and M.M. Moore (tech coords). 2008. Fort Valley Experimental Forest - A Century of Research 1908-2008. Conference Proceedings; August 7-9, 2008; Flagstaff, AZ. Proceedings RMRS-P-53. Fort Collins, CO: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 408 p. [Download](#)
- 4 **Sánchez Meador, A.J.**, 2006. Modeling spatial and temporal changes of ponderosa pine forests in northern Arizona since Euro-American settlement. Ph.D. dissertation. School of Forestry, NAU, Flagstaff, AZ. 168 pp.
- 3 Friederici, P., and **A.J. Sánchez Meador**. 2005. Working Paper 9: Restoration of ponderosa pine forests to presettlement conditions. Ecological Restoration Institute, NAU, Flagstaff, AZ. 8 pp. [Download](#)
- 2 Moore, M.M., Huffman, D.W., Bakker, J.D., **Sánchez Meador, A.J.**, Bell, D.M., Fulé, P.Z., Parysow, P.F., and W.W. Covington. 2004. Quantifying forest reference conditions for ecological restoration: The Woolsey plots. Final report for the Southwest Fire Initiative. Prepared for the Ecological Restoration Institute, Northern Arizona University, Flagstaff, AZ. 55 p. [Download](#)
- 1 **Meador, A.J.**, 2001. Applications in growth and yield of longleaf pine (*Pinus palustris* mill.): A comparison of artificial neural networks and other traditional modeling methodologies. M.S. thesis. School of Forestry, MSU, Starkville, MS. 72 p.

PRESENTATIONS AND SCIENCE TRANSFER (2003-PRESENT)

N = 80 total since 2012; n = 36 as presenting author since 2012

*presenting author; ¹undergraduate student advisee; ²graduate student advisee.

- 104 Chamberlain*², C., Thode, A., **Sánchez Meador, A.J.** Comparisons of LiDAR- and field-derived estimates of crown base height and canopy bulk density in ponderosa pine forests in northern

- Arizona. 2019. Poster presentation at the 8th International Fire Ecology and Management Congress, Tucson, AZ, November.
- 103 Donager*, J.J., **Sánchez Meador, A.J.**, Huffman, D.W. Are managed wildfires moving forest structure towards the historic range of variability? A comparison of landscape metrics across Northern Arizona. 2019. Oral presentation at the 8th International Fire Ecology and Management Congress, Tucson, AZ, November.
- 102 Roccaforte*, J.P., Stoddard, M., Fulé, P.Z., Huffman, D.W., **Sánchez Meador, A.J.** Management applications of resource objective wildfires in forests of Grand Canyon National Park, USA. 2019. Oral presentation at the 8th International Fire Ecology and Management Congress, Tucson, AZ, November.
- 101 Stoddard*, M., Huffman, D.W., Fulé, P.Z., Crouse, J.E., **Sánchez Meador, A.J.** Changes in forest dynamics 15 years after a wildfire in a mountainous ecotone, Arizona, USA. 2019. Oral presentation at the 8th International Fire Ecology and Management Congress, Tucson, AZ, November.
- 100 **Sánchez Meador*, A.J.**, Blackburn², R.C., Huffman, D.W., Laughlin, D.C., Normandin, D.P. Neighborhood effects on individual tree growth and understory production in ponderosa pine forests of the Southwest. 2019. Oral presentation at the 8th International Fire Ecology and Management Congress, Tucson, AZ, November. [invited presentation]
- 99 Jaquette*², M., **Sánchez Meador, A.**, Huffman, D.W. Drivers of Variability in mixed conifer forests prior to and following fire regime disruption. 2019. Poster presented at the Society of American Foresters National Convention. Louisville, KY. October.
- 98 Lommler*², M.L., Ganey, J.L., Beier, P., Sanderlin, J.S., Cushman, S.A., **Sánchez Meador, A.J.** Status of the Mexican spotted owl 15-years after the Rodeo-Chediski fire, Arizona. 2019 Oral presentation at the 15th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region. Flagstaff, AZ. September.
- 97 Huffman*, D.W., Hanna, D.P., Crouse, J.E., Floyd, M.L., **Sánchez Meador, A.J.**, Springer, J.D., Fulé, P.Z. Historical forest conditions in trailing edge ponderosa pine ecosystems of northern Arizona. 2019 Oral presentation at the 15th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region. Flagstaff, AZ. September.
- 97 Fulé*, P.Z., Becenti, A.C., Padilla, T., Azpeleta, A., Mockta², T., Yazzie², J.O., Whitehair², L., **Sánchez Meador, A.J.**, Kim, Y-S. Joys and challenges of manager-scientist collaboration in a tribal nation context. 2019 Oral presentation at the 15th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region. Flagstaff, AZ. September.
- 96 Chamberlain*¹, C.P., Thode, A.E., **Sánchez Meador, A.J.** Comparisons of LiDAR- and field-derived estimates of canopy base height and canopy bulk density in northern Arizona ponderosa pine forests. 2019. Poster presentation at the 15th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region. Flagstaff, AZ. September.
- 95 Blackburn, R.*², **Sánchez Meador, A.J.** Use of Individual Tree Detection when Quantifying Forest Structure. 2019. Oral presentation at the Arizona Geographic Information Council Symposium, Prescott AZ. October.
- 94 Blackburn, R.*² **Sánchez Meador, A.J.**, Donager, J.J., Sankey, T., Huffman, D.W. Quantifying Restored Forest Structure Using Lidar-Based Individual Tree Detection. 2019. Oral presentation at the Ecological Society of America 2019 Annual Meeting, Louisville KY. August
- 93 Azpeleta Tarancón*², A., Kim, Y-S., Padilla, T., Fulé, P.Z., and **Sánchez Meador, A.J.** Co-construction of ecosystem services management in tribal lands: Elicit expert opinion approach. 2019. Oral presentation at the North American Forest Ecology Workshop, Flagstaff, AZ, June.
- 92 Jaquette, M.B.*², **Sánchez Meador, A.J.**, and Huffman, D.W. Drivers of variability in mixed conifer forest conditions prior to and following fire regime disruption on the Mogollon Rim, AZ. 2019. Oral presentation at the North American Forest Ecology Workshop, Flagstaff, AZ, June.
- 91 **Sánchez Meador* A.J.**, Stoddard, M.T., Fulé, P.Z. and Korb, J.E. Climate-change trajectories and forest dynamics following treatments in warm/dry mixed conifer forests of San Juan Mountains in southwest Colorado. 2019. Oral presentation at the North American Forest Ecology Workshop, Flagstaff, AZ, June. [invited presentation]
- 90 **Sánchez Meador*, A.J.**, Effects of prescriptive rescaling on pattern and process in southwestern ponderosa pine-dominated forests. 2019. Oral presentation at the North American Forest Ecology Workshop, Flagstaff, AZ, June. [invited presentation]
- 89 Chamberlain C.P.*¹, Thode, A.E., **Sánchez Meador A.J.** Comparisons of LiDAR- and field-derived estimates of canopy base height and canopy bulk density in northern Arizona ponderosa pine

- forests. 2019. Poster presented at the 6th International Fire Behavior & Fuels Conference. Albuquerque, NM. March-April.
- 88 **Sánchez Meador*, A.J.**, The Potential of LiDAR: An effort to get every last drop of information from a product. 2019. Oral presentation to Natural Resource Specialists from the Coconino and Kaibab National Forests at Regional Lidar Training. March. [invited presentation]
- 87 Vaughan*², D.R., Auty, D., Kolb, T.E., Sánchez Meador, A.J., Mackes, K.H., Dahlen, J., Moser, K. Wood density variation in southwestern USA ponderosa pine. 2019. Poster presentation at ARCS Foundation Phoenix Scholar Awards Dinner. Camby Hotel, Phoenix, AZ. March.
- 86 Vaughan*², D.R., Auty, D., Kolb, T.E., **Sánchez Meador, A.J.**, Mackes, K.H., Dahlen, J., Moser, K. Wood density variation in southwestern USA ponderosa pine. 2019. Poster presentation at the NAU Graduate Student Government Poster Symposium. High Country Conference Center, Flagstaff, AZ. March.
- 85 **Sánchez Meador*, A.J.**, Lidar analysis in R in support of forest resource decision making. 2018 Oral presentation at the Geographic Information Council (AGIC) Education & Training Symposium, Prescott, AZ, September. [invited presentation]
- 84 **Sánchez Meador*, A.J.**, Resiliency and heterogeneity in southwestern frequent-fire forests: Considerations of tree-, stand- and landscape-level patterns. 2018. Oral presentation to the Jones Ecological Research Center, Newton, GA, September. [invited presentation]
- 83 Vaughan*², D.R., Auty, D., Dahlen, J., Sánchez Meador, A.J., Mackes, K.H., Kolb, T.E.. Effect of stand density and climate on the wood properties of ponderosa pine. 2018. Oral presentation at IUFRO Divisions 4 and 5 Joint Meeting: New Frontiers in Forecasting Forests. Stellenbosch University, Western Cape, South Africa. Sept.
- 82 Blackburn*², R.C., **Sánchez Meador, A.J.**, Donager, J.J., Sankey, T., Huffman, D.W. Validation of Individual-tree Detection Algorithms for Lidar in Southwestern Ponderosa Pine Forests. 2018. Oral presentation at the National Convention of the Society of American Foresters. Portland OR, Oct.
- 81 **Sánchez Meador*, A.J.**, Using lidar in Natural Resource Management: Assessments, planning, and implementation. 2018. Oral presentation at the Arizona Geographic Information Council (AGIC) Lidar Symposium, Flagstaff, AZ, August. [invited presentation]
- 80 **Sánchez Meador*, A.J.**, Additional lidar topics and projects: Background and status continued. 2018. Oral presentation to the USFS Southwestern Region Modernization and Efficiency Team, Albuquerque, NM, July. [invited presentation]
- 79 Vaughan*², D.R., D. Auty, **A.J. Sánchez Meador**, K. Mackes, T. Kolb. 2018. Effects of stand basal area on ponderosa pine wood quality. Oral presentation at the 2018 Western Mensurationists meeting. Flagstaff, AZ, June.
- 78 **Sánchez Meador*, A.J.**, Using remote sensing and R to reveal the secrets of Powell Plateau, Grand Canyon National Park. 2018. Oral presentation at the 2018 Western Mensurationists' Meeting, Flagstaff, AZ, June.
- 77 **Sánchez Meador*, A.J.**, Western Mensurationists' Meeting Field Tour. 2018. Led field tour of Fort Valley Experimental Forest restoration/demonstration site and Grand Canyon National Park at the 2018 Western Mensurationists' Meeting, Flagstaff, AZ, June.
- 76 **Sánchez Meador*, A.J.**, Moore, M.M., Fulé, P.Z., Normandin, D.P., Huffman, D.W., Laughlin, D.C., Covington, W.W., Strahan, R.T., and W.K. Moser. Twenty-five years of ecological restoration research at the G.A. Pearson Natural Area. 2017. Oral presentation at the Fire Continuum Conference, Missoula, MT, May. [invited presentation]
- 75 **Sánchez Meador*, A.J.** Twenty-five years of ecological restoration research at the G.A. Pearson Natural Area. 2018. Oral presentation to the NAU Biology Department, Flagstaff, AZ, March. [invited presentation]
- 74 Springer*, J.D., Stoddard, M.T., Huffman, D.W., **Sánchez Meador, A.J.**, and Waltz, A.E.M. Do Hazardous Fuels Treatments Ameliorate Effects of High-Intensity Wildfire on Warm-Dry Mixed-Conifer Forest Plant Communities? 2017. Oral presentation at the Natural Areas Conference, Fort Collins, CO, October.
- 73 Fulé*, P.Z., **Sánchez Meador, A.J.**, Normandin, D.P., Huffman, D.W., Moore, M.M., Moser, W.K., Covington, W.W., and R.T. Strahan. Ponderosa Pine Growth and Mortality Responses to Climate and Restoration at Fort Valley Experimental Forest. 2017. Oral presentation at the National Convention of the Society of American Foresters, Albuquerque, NM, November.

- 72 Rochimi^{*2}, D., Waring, K.M., and **A.J. Sánchez Meador**. Evaluating post-fire forest recovery in Indonesia: A case study in Grand forest Park Raden Soerjo – East Java. 2017. Poster presentation at the National Convention of the Society of American Foresters, Albuquerque, NM, November.
- 71 **Sánchez Meador***, **A.J.** Lessons Learned Teaching Visualization in Forest Science. 2017. Oral presentation at the National Convention of the Society of American Foresters, Albuquerque, NM, November.
- 70 Moser^{*}, W.K. and **Sánchez Meador, A.J.**, Individual Tree Response to Neighborhood and Climate 80 Years after 3 Cutting Treatments at Coulter Ranch, AZ. 2017. Oral presentation at the National Convention of the Society of American Foresters, Albuquerque, NM, November.
- 69 Owen^{*2}, S.M., C.H. Sieg, P.Z. Fulé, J.M. Iniguez, C.A. Gehring, **A.J. Sánchez Meador**, P.J. Fornwalt, M.A. Battaglia. Above- and belowground recovery after high-severity wildfires in ponderosa pine forests. 2017. Annual Meeting of the Ecological Society of America, Portland, OR. August.
- 68 **Sánchez Meador***, **A.J.** Overview of Current Research Topics Being Conducted by the NAU School of Forestry. 2017. Oral presentation (via Provost and Vice President for Academic Affairs) for the Pine Canyon Community, Flagstaff, AZ, May. [invited presentation]
- 67 **Sánchez Meador***, **A.J.** Using Historical Range of Variability to Inform Future Management Strategies. 2017. Oral presentation at the 67th Western Forest Insect Work Conference, Jackson, WY, May. [invited presentation]
- 66 Owen^{*2}, S.M., Sieg, C.H., Iniguez, J.M., Gehring, C.A., **Sánchez Meador, A.J.**, Fornwalt, P.J., Battaglia, M.A. and P.Z. Fulé. Are ponderosa pine forests recovering after severe wildfires? 2017. Oral presentation at the ARCS (Achievement Rewards for College Scientists) Awards Reception, Phoenix, AZ, April.
- 65 **Sánchez Meador***, **A.J.** Technological Developments in Forestry: The Inevitable Change. 2017. Keynote to the Society of American Foresters Southwestern Section Meeting, Flagstaff, AZ, April. [invited presentation]
- 64 **Sánchez Meador***, **A.J.**, Azpeleta², A., Stoddard, M.T., Bagdon², B., and S. Nepal². Using Climate-FVS to Inform Management Decisions: Three Case Studies from the American Southwest. 2017. Oral presentation at the 2017 Forest Vegetation Simulator (FVS) e-Conference, Fort Collins, CO, March. [Recorded Presentation](#)
- 63 **Sánchez Meador***, **A.J.** Powell Plateau's Magic: New Technology Reveals the Secrets of an Old Forest. 2017. Oral presentation for the USDA Forest Service Enterprise Unit's "Brown Bag" series. Flagstaff, AZ March. [invited presentation]
- 62 Huffman^{*}, D.W., **Sánchez Meador, A.J.**, Stoddard, M.T., and J.E. Crouse. Efficacy of Resource Objective Wildfires for Restoring Ponderosa Pine Ecosystems in Northern Arizona. 2016. Oral presentation for the 3rd Southwest Fire Ecology Conference held concurrently with the 1st Applied Fire Science Workshop in Tuscon, AZ, December.
- 61 Nepal^{*2}, S and **A.J. Sánchez Meador**. Quantifying Impacts of Potential Management and Climate Change Using State and Transition Models for Dry Forests of the Colorado Plateau. 2016. Oral presentation for the 3rd Southwest Fire Ecology Conference held concurrently with the 1st Applied Fire Science Workshop in Tuscon, AZ, December.
- 60 Owen^{*2}, S.M., Sieg, C.H., Fulé, P.Z., Iniguez, J.M., Gehring, C.A., **Sánchez Meador, A.J.**, Fornwalt, P.J., and M.A. Battaglia. Are ponderosa pine forests recovering after severe wildfires? 2016. Oral presentation for the 3rd Southwest Fire Ecology Conference held concurrently with the 1st Applied Fire Science Workshop in Tuscon, AZ, December.
- 59 Rapp², M., Waring, K., **Sánchez Meador, A.J.**, Grady, A., Graves, A.D., and A. Polinko². 2016. Impacts of Native Defoliators in Two Southwestern Forest Types. Poster presentation at the National Convention of the Society of America Foresters Madison WI. November. [poster presentation]
- 58 **Sánchez Meador***, **A.J.**, Moore, M.M., Strahan, R.T., Huffman, D.W., Fulé, P.Z., Covington, W.W., and W.K. Moser. Vegetation Dynamics of a 20-Year Ecological Restoration Experiment on Fort Valley Experimental Forest, Arizona. 2016. Oral presentation at the National Convention of the Society of American Foresters, Madison, WI November.
- 57 Huffman^{*}, D.W., **Sánchez Meador, A.J.**, Stoddard, M.T., and Crouse, J.E. Efficacy of Resource Objective Wildfires for Restoring Ponderosa Pine Ecosystems in Northern Arizona. 2016. Oral presentation at the National Convention of the Society of American Foresters, Madison, WI November.

- 56 **Sánchez Meador***, **A.J.** Restoration of Southwestern Frequent Fire Forests: How Did We Get Here and Where Are We Going? 2016. Oral presentation for The New Mexico Forest and Watershed Restoration Institute's Sacramento Mountains Desired Conditions Tour. Ruidoso, NM October. [invited presentation]
- 55 **Sánchez Meador***, **A.J.** Restoration of Southwestern Frequent Fire Forests: Mixed Conifer Considerations. 2016. Oral presentation for The New Mexico Forest and Watershed Restoration Institute's Sacramento Mountains Desired Conditions Tour. Ruidoso, NM October. [invited presentation]
- 54 **Sánchez Meador***, **A.J.** Powell Plateau's Magic: New Technology Reveals the Secrets of an Old Forest. 2016. Oral presentation for Sigma Xi's "Science on Tap" series. Flagstaff, AZ October. [invited presentation]
- 53 Huffman*, D.W., and **A.J. Sánchez Meador***. Ecology and restoration of dry mixed conifer forests. 2016. Oral presentation to the Four Forest Restoration initiative Western Stakeholder's Meeting. Pinetop, AZ. June. [invited presentation]
- 52 Owen*², S.M., Sieg, C.H, Iniguez, J.M., Gehring, C.A., **Sánchez Meador, A.J.**, Fornwalt, P.J., Battaglia, M.A., and P.Z. Fulé. Are Arizona's forests recovering after severe wildfires? 2016. Oral presentation at the ARCS (Achievement Rewards for College Scientists) Awards Reception, Phoenix, AZ, April.
- 51 **Sánchez Meador***, **A.J.** Proposed Action: Restore the resilience of Southwestern frequent-fire forests. 2016. Oral presentation to the Carson National Forest, Tres Piedres, NM. April. [invited presentation]
- 50 **Sánchez Meador***, **A.J.** Powell Plateau: Fine-scale forest patterns and landscape ecology. 2016. Oral presentation to the No. AZ Chapter of the Society of American Foresters, Flagstaff, AZ. March. [invited presentation]
- 49 Rodman*², K.C. and **Sánchez Meador, A.J.** On quantifying openings in forest point pattern datasets. 2016. Oral presentation at the National Convention of the American Association of Geographers, San Francisco, CA. March-April.
- 48 Kralicek*², K., **Sánchez Meador, A.J.** and Rathbun, L. Development of forest regeneration imputation models using permanent plots in Oregon and Washington. 2015. Oral presentation at the 2015 Forest Inventory and Analysis Science Symposium, Portland, OR. December.
- 47 Owen*², S.M., Sieg, C.H, Iniguez, J.M., Gehring, C.A., Sánchez Meador, A.J., Fornwalt, P.J., Battaglia, M.A., and P.Z. Fulé. Are Ponderosa Pine Forests Regenerating After Severe Wildfires? 2015. Oral presentation to the 6th International Fire Ecology and Management Congress. San Antonio, TX, November.
- 45 Huffman*, D.W., R.T Strahan, **A.J. Sánchez Meador**, and D.C. Laughlin. Functional changes associated with fire regime disruption in a mixed conifer forest of Arizona. 2015. Oral presentation at the 13th Biennial Conference of Science and Management on the Colorado Plateau, Flagstaff, AZ. October.
- 44 **Sánchez Meador***, **A.J.** HRV in a changing world: Is the concept of historical range and variation still relevant? 2015. Oral presentation at the 13th Biennial Conference of Science and Management on the Colorado Plateau, Flagstaff, AZ. October.
- 43 **Sánchez Meador***, **A.J.**, Wasserman, T.Z., Stoddard, M.T., and J.P. Roccaforte. Fine-scale forest patterns and landscape ecology of Powell Plateau, Grand Canyon National Park. 2015. Oral presentation at the 13th Biennial Conference of Science and Management on the Colorado Plateau, Flagstaff, AZ. October.
- 42 Bryant*², T., **Sánchez Meador, A.J.**, and K. Waring. Collaborative planning of a landscape restoration project. 2015. Poster presentation at the National Convention of the Society of America Foresters, Baton Rouge LA. October.
- 41 Kralicek*², K., Rathbun, L. and **A.J. Sánchez Meador**. Modeling Forest Regeneration for Oregon and Washington. 2015. Oral presentation to the Pacific Northwest Regional Office Staff, USDA Forest Service.
- 40 O'Reilly*¹, M. and **A.J. Sánchez Meador**. Using Growth Releases to Identify Disturbance Events in Southwestern Dry Mixed-Conifer. 2015. Hooper Poster Presentations and Reception Special Event. Flagstaff, AZ.
- 39 **Sánchez Meador***, **A.J.** Overview of the Mixed Conifer LEARN Project on Mogollon Ranger District. 2015. Oral presentation at the Mixed Conifer Forest Ecology: Emerging Science Workshop, Ecological restoration Institute, Flagstaff, AZ. March.

- 38 Rodman*², K.C., **Sánchez Meador, A.J.**, and D.W. Huffman. Assessing and Analyzing Mixed Conifer Spatial Patterns in Northern Arizona. 2015. Oral presentation at the Mixed Conifer Forest Ecology: Emerging Science Workshop, Ecological Restoration Institute, Flagstaff, AZ. March.
- 37 Rodman*², K.C., **Sánchez Meador, A.J.**, Waring, K. and D.W. Huffman. Reference Conditions and Spatial Dynamics in the Southwestern Mixed Conifer Ecosystem. 2014. Oral presentation at the National Convention of the Society of America Foresters, Salt Lake City, UT. October.
- 36 Tuten*², M., and **A.J. Sánchez Meador**. Ecological Restoration and Fine-scale Structural Regulation in Southwestern Ponderosa Pine Forests. 2014. Oral presentation at the National Convention of the Society of America Foresters, Salt Lake City, UT. October.
- 35 Rodman*², K.C., **Sánchez Meador, A.J.**, and D.W. Huffman. Reference Conditions and Spatial Dynamics of a Southwestern Mixed Conifer Forest: San Francisco Peaks, Arizona, USA. 2014. Oral presentation at the American Association of Geographers Annual Meeting, Tampa, FL. April.
- 34 Black*¹, G.J., **Sánchez Meador, A.J.**, and D.W. Huffman. Stand structure and composition in treatment areas following the 2012 Grand Fire, Arizona. 2014. Poster presentation at the 28th Annual National Conference on Undergraduate Research, Lexington, KY. April. [poster presentation]
- 33 Black*¹, G.J., **Sánchez Meador, A.J.**, and D.W. Huffman. Stand structure and composition in treatment areas following the 2012 Grand Fire, Arizona. 2014. Hooper Poster Presentations and Reception Special Event. Flagstaff, AZ. [poster presentation]
- 32 **Sánchez Meador***, **A.J.**, B.E. Fox, M.M. Moore, and M.E. Lee. Integrating tablet technology into forestry field exercises. 2014. Oral presentation at the 10th Biennial Conference on University Education in Natural Resources, Auburn, AL. March.
- 31 **Sánchez Meador***, **A.J.** Advancing Forestry Education and Professional Development with Mobile Technology. 2013. Oral presentation to the School of Forestry Advisory Council, Flagstaff, AZ. October. [invited presentation]
- 30 O'Donnell, F.C., Springer, A.E, Masek Lopez, S and **A.J. Sánchez Meador**. Modeling the effect of forest restoration scenarios on runoff through a reanalysis of historical experimental watershed data. 2013. Oral presentation at the American Geophysical Union, Fall Meeting. San Francisco, CA. December.
- 29 **Sánchez Meador***, **A.J.** and S. Rayleigh. Applications of Unmanned Aerial Systems (UAS) and Remote Sensing in Wildfire and Vegetation Monitoring. 2013. Oral presentation to the Arizona Science Foundation, Phoenix, AZ. October. [invited presentation]
- 28 **Sánchez Meador***, **A.J.**, Huffman, D.W., and M.T. Stoddard. Warm/dry mixed conifer forest dynamics following fire exclusion along the Mogollon Rim. Oral presentation at the 12th Biennial Conference of Science and Management on the Colorado Plateau, Flagstaff, AZ. September.
- 27 **Sánchez Meador***, **A.J.** and Moore, M.M. Application of gap and non-gap detection methods for quantifying reference conditions in western North American forests. 2013. Poster presentation at the 2nd Conference on Spatial Statistics, Columbus, OH. June.
- 26 **Sánchez Meador***, **A.J.** An overview of LEARN. 2013. Oral presentation to the Kaibab National Forest, Williams, AZ. May. [invited presentation]
- 25 **Sánchez Meador***, **A.J.** Watershed impacts from the White Fire. 2013. Oral presentation to the Southwest Fire Science Consortium, Ruidoso, NM. April 2013. [invited presentation]
- 24 Youtz*, J., **Sánchez Meador***, **A.J.**, Jackson, P., Nicolet, T., and R.T. Reynolds. Desired conditions for restoring the resilience of southwestern frequent-fire forests. 2012. Oral presentation at the National Convention of the Society of America Foresters, Spokane, WA. October.
- 23 **Sánchez Meador***, **A.J.** Restoration of western frequent fire forests: Desired conditions from an evolutionary perspective. 2012. Oral presentation to the Bureau of Indian Affairs, Grants, AZ. June. [invited presentation]
- 22 **Sánchez Meador***, **A. J.** Tree Spatial Patterns and “The Art of Looking Sideways.” 2012. Oral presentation to the No. Az. Univ., School of Forestry Seminar Series. Flagstaff, AZ. [invited presentation]
- 21 Rathbun*, L. and **A.J. Sánchez Meador**. Canopy Cover: Spatial Statistics Developed from the Non-Spatial Model FVS. 2011. Oral presentation to the National Convention of the Society of America Foresters, Honolulu HI.
- 20 **Sánchez Meador***, **A.J.** Ponderosa Pine: Past Present and Future. 2011. Oral presentation to the Southwest Interagency Fuels Workshop, Southwest Fire Science Consortium. Flagstaff, AZ. [invited presentation]

- 19 Moore*, M.M., Bakker, J.D., Laughlin, D.C., **Sánchez Meador, A.J.**, Puhlick, J.J., Petrova, M.P., and E.C. Turnblom. Controls on conifer regeneration patterns (1909-2011) and implications for future stand development in southwestern forests. 2009. Oral presentation to the USDA CSREES NRI Managed Ecosystems Annual Awardee Meeting, Pittsburgh, PA. [invited presentation]
- 18 Moore*, M.M., **Sánchez Meador, A.J.**, Bakker, J.D., Laughlin, D.C., Huffman, D.W., and S.D. Olberding. Ecological lessons learned from the Fort Valley Experimental Forest. 2009. Oral presentation to the North American Forest Ecology Workshop, Logan, UT.
- 17 Dyer*¹, J.H., **Sánchez Meador, A.J.**, Moore, M.M., and J.D. Bakker. Long-term forest structure and tree recruitment changes on a cinder hills permanent sample plot in northern Arizona. 2008. Fort Valley Centennial Conference, Flagstaff, AZ. [poster presentation]
- 16 Stape*, J.L., **Sánchez Meador, A.J.**, and D. Binkley. Heterogeneity of tree sizes within stands decreases Eucalyptus growth. 2008. IUFRO conference on Factors Influence Productivity in Tropical Plantations, Porto Seguro, Bahia, Brazil. [poster presentation]
- 15 Vandendriesche, D. and **A.J. Sánchez Meador***. Using FIA data and FVS in support of state-and-transition planning models. 2008. Oral presentation to the National Convention of the Society of American Foresters. Reno, NV. [invited presentation]
- 14 Oberle*, M., **Sánchez Meador, A.J.**, and K. Cormier. Facilitating consistency in volume and biomass estimation using National Estimator Libraries. 2008. Oral presentation to the Forest Inventory and Analysis Symposium, Park City, UT.
- 13 Sánchez Meador*, A.J., Cormier, K., Oberle, M., Boyack, G., and D. Johns. Using PPP and remote sensing to estimate biomass for forest stewardship projects. 2007. National Convention of the Society of America Foresters, Portland, OR. [poster presentation]
- 12 **Sánchez Meador, A.J.**, Parysow*, P.F., and M.M. Moore. Historical stem-mapped permanent plots increase precision of reconstructed reference conditions in ponderosa pine forests of northern Arizona. 2005. Oral presentation to the 9th Biennial Conference of Research on the Colorado Plateau, Flagstaff, AZ.
- 11 Oberle*, M., Johns, D., Cormier, K., Boyack, G., and **A.J. Sánchez Meador**. Remote Sensing (3PRS): An efficient way to estimate stand volume in low value/biomass timber. 2007. National Silviculture Workshop, Ketchikan, AK. [poster presentation]
- 10 **Sánchez Meador***, **A.J.**, Moore, M.M., and J.D. Bakker. 2006. Land use legacies in southwestern ponderosa pine forests: Effects of historical harvesting practices. "Do past management activities compound the effects of fire exclusion in western forests?" Oral presentation in Special Session, 3rd International Fire Ecology and Management Congress, San Diego, CA. [invited presentation]
- 9 Bakker*, J.D., Moore, M.M., and **A.J. Sánchez Meador**. Land use legacies in southwestern ponderosa pine forests: Effects of historical livestock grazing. 2006. "Do past management activities compound the effects of fire exclusion in western forests?" Oral presentation in Special Session, 3rd International Fire Ecology and Management Congress, San Diego, CA. [invited presentation]
- 8 **Sánchez Meador***, **A.J.** Quantifying long-term changes in ponderosa pine spatial pattern and stand development using the Woolsey plots. 2006. Oral presentation to the Department of Forestry, Mississippi State Univ., MS.
- 7 *Moore, M.M., Bakker, J.D., **Sánchez Meador, A.J.**, Covington, W.W., Edminster, C., and S.D. Olberding. Long-term vegetation research in the Southwest: past, present, future. 2006. Managed Ecosystems: Results from Research, Education and Extension USDA CSREES National Research Initiative Projects. Oral presentation to the Agronomy, Crop, and Soil Science Societies Meeting, Indianapolis, IN. [invited presentation]
- 6 Moore*, M.M., Bakker, J.D., **Sánchez Meador, A.J.**, Covington, W.W., Olberding, S.D., and C.B. Edminster. Long-term vegetation research in the Southwest: Past, present, future. 2006. "Long Term Forest Research: Sustaining a Scientific Legacy" Oral presentation to the Symposium, National Convention of the Society of American Foresters. Pittsburgh, PA.
- 5 **Sánchez Meador***, **A.J.**, Dyer¹, J.H., Bakker, J.D., and M.M. Moore. Quantifying temporal changes (1876-2004) in tree spatial pattern using historically mapped permanent plots. 2006. Oral presentation to the Western Mensurationists' Meeting, Fortuna, CA.
- 4 **Sánchez Meador***, **A.J.**, Moore, M.M., and J.D. Bakker. Historical studies on the Colorado Plateau: Results from two long-term data sets. 2005. Oral presentation to the 8th Biennial Conference of Research on the Colorado Plateau, Flagstaff, AZ.

Curriculum Vita cont. – Sánchez Meador

- 3 Bakker*, J.D., Moore, M.M., and **A.J. Sánchez Meador**. Historical studies on the Colorado Plateau: An overview. 2005. Oral presentation to the 8th Biennial Conference of Research on the Colorado Plateau, Flagstaff, AZ.
- 2 **Sánchez Meador***, A.J., Parysow, P.F., and M.M. Moore. Reconstructing ponderosa pine spatial reference conditions in northern Arizona using permanent plots. 2004. 89th Annual Meeting of the Ecological Society of America, Portland, OR. [poster presentation]
- 1 **Meador***, A.J., Moore, M.M., Covington, W.W., Fulé, P.Z., Parysow, P.F., Huffman, D.W., and J.D. Bakker. The Woolsey plots. Quantifying forest reference conditions for ecological restoration. 2003. Oral presentation to the Southwest Fire Initiative Conference, Flagstaff, AZ.

MEDIA COVERAGE

- 15 [Combining western science, Indigenous knowledge offers new approach to help forests adapt to new conditions](#) – Staff Writer, August 15, 2019
- 14 [Research partnership between NAU, Salt River Project provides solutions to Arizona’s problems](#) – Staff Writer, NAU News, August 12, 2019
- 13 [At Century-Old Experimental Forest, History Is In The Trees](#) – M. Sevigny, KNAU, April 9, 2019
- 12 [Study Quantifies Upward Trend in Southwest Wildfires](#) – M. Sevigny, KNAU, March 1, 2019
- 11 [Raging California wildfires give us a taste of climate change’s deadly potential](#) – B. Parsons, The Colorado Independent, November 14, 2018
- 10 [Kaibab National Forest leads partner effort to bring critical geographic data to Arizona](#) – J. Banks, USDA Forest Service, Sep 17, 2018
- 9 [Planning to mitigate disasters](#) – J. Russell, The Lumberjack; October 19, 2017
- 8 [Study finds surprising ponderosa regrowth after severe wildfires](#) – E. Cowen, Arizona Daily Sun; October 5, 2017
- 7 [Catastrophe: A Forest in Flames – Chapter 13: Cattle grazing's effect on the fire](#) - T. Balcom, Payson Roundup/White Mtn Independent; July 18, 2017
- 6 [Decades after the Radio Fire, how Mount Elden's recovery is playing out](#) - E. Cowen, Arizona Daily Sun; June 18, 2017
- 5 [The structure and functions of forests](#) - K. Young, Science Moab; March 31, 2017
- 4 Preventing future forest fires. [KPNX Phoenix](#) and [NAZ Today](#) coverage of Semester C course - N. Harrison, KPNX 12 News; September 16, 2016
- 3 [Mixed-conifer forests at risk for high-severity wildfire](#) - NAU Staff Writer, NAU News; November 1, 2015
- 2 [Research Matters: How Do Diameter Caps Affect Forest Resources?](#) - S. Wilent, The Forestry Source; March 1, 2015
- 1 [Restoring Composition and Structure in Southwestern Frequent-Fire Forests](#) - K. Malcolm, Forest Service RMRS; April 16, 2015

SPONSORED GRANT ACTIVITY

Total funded/pending since 2012 as PI or Co-PI: \$2,011,985
Total funded since 2012 as lead PI: \$1,166,434

Funded/Pending

- 19 Huffman, D.W., **Sánchez Meador, A.J.**, and Donager, J.D. 2019. Technological advances for evaluating restoration effectiveness at multiple scales. Bureau of Land Management, Rangeland Resource Management. 2020-2022. **\$276,760.**
- 18 **Sánchez Meador, A.J.** and Huffman, D.W. 2019. Drivers of variability in mixed conifer forest conditions prior to and following fire regime disruption on the Mogollon Rim, AZ: Project Completion for NAU Grant #17-0244. Salt River Project Competitive Grant Program. 2018-2019, **\$43,450.**
- 17 **Sánchez Meador, A.J.** 2018. Data Fusion for Forest Planning and Implementation Monitoring: Development and Validation of a Big Data, Remote Sensing and Inventory Platform for Forest Ecosystem Assessment. McIntire-Stennis, Mission Research. 2018-2022. **\$168,124.**
- 16 **Sánchez Meador, A.J.** and Huffman, D.W. 2018. Drivers of variability in mixed conifer forest conditions prior to and following fire regime disruption on the Mogollon Rim, AZ. Salt River Project Competitive Grant Program. 2018-2019, **\$39,247.**
- 15 Kim, Y.S., Kolb, T., Fulé, P.Z., **Sánchez Meador, A.J.** and M. Begay. 2018. Training The Next Generation of Native American Leaders for Managing Resilient Agroecosystems. USDA-NIFA Food

- and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship (NNF) Grants Program. 2019-2023, **\$82,000.**
- 14 **Sánchez Meador, A.J.** and D.W. Huffman. 2018. Drivers of variability in mixed conifer forest conditions prior to and following fire regime disruption on the Mogollon Rim, AZ. Salt River Project Competitive Grant Program. 2018-2019, **\$46,004.**
 - 13 Huffman, D.W. and **Sánchez Meador, A.J.** 2017. Effects of restoration treatments on resilience of mixed conifer forests in a changing climate. Salt River Project Competitive Grant Program. 2017-2018, **\$41,366.**
 - 12 **Sánchez Meador, A.J.** and D. Auty. 2016. Measuring and Modelling Individual-Tree Volume, Biomass and Carbon Estimates for the USDA Forest Service National Forest Inventory and Analysis Program. USDA Forest Service, Rocky Mountain Research Station. 2016-2020, **\$275,000.**
 - 11 Fulé, P.Z., Kim, Y.S., and **A.J. Sánchez Meador.** Teepee Pole Assessment and Management. Mescalero Apache Tribe, Mescalero, NM. United States Department of the Interior, Bureau of Indian Affairs. 2016-2018. **\$122,360.**
 - 10 Moore, M.M., Huffman, D.W., Fulé, P.Z., Strahan, R.T., **Sánchez Meador, A.J.**, and W.K. Moser. 2014. Restoration experiments in ponderosa pine at Ft Valley Experimental Forest: Twenty years post-fire. United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2016-2017. **\$99,829.**
 - 9 Fulé, P.Z., Kim, Y.S. and **A.J. Sánchez Meador.** 2014. Assessing future ecosystem services from managed Native American forests. United States Department of the Agriculture, Agriculture and Food Research Initiative, Renewable Energy, Natural Resources, and Environment Program. 2015-2017. **\$499,996.**
 - 8 **Sánchez Meador, A.J.** and K. Waring. 2014. Assessing Current Conditions and Restoration Treatment Alternatives on the Rio Tusas-Lower San Antonio Landscape. US Forest Service Carson National Forest. 2015-2017. **\$83,025.**
 - 7 **Sánchez Meador, A.J.** 2014. Evaluating the economic returns of fuel treatments at multiple spatial scales: Accounting for treatment timing, method, and ecological conditions. Univ. Nevada at Reno; via United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2015-2017. **\$95,869.**
 - 6 **Sánchez Meador, A.J.** 2014. Development and Delivery of Forest Regeneration Models for Oregon and Washington. US Forest Service Pacific Northwest Region Vegetation Inventory and Monitoring Program. 2014-2015. **\$43,211.**
 - 5 **Sánchez Meador, A.J.** 2012. Old Meets New: Using Aerial Photography and Computer Vision to Quantify Vegetation Structure. Northern Arizona University Faculty Grant Program. 2013-2014. **\$9,744.**
 - 4 **Sánchez Meador, A.J.** 2012. Modeling snag fall and downed log decay rates in southwestern ponderosa pine forests. McIntire-Stennis, Mission Research. 2013-2015. **\$86,000.**
 - 3 Affleck, D.L.R., Goodburn, J., Queen, L.P., **Sánchez Meador, A.J.**, Seielstad, C., and R.E. Keane. 2010. Characterizing Crown Biomass and Crown Density Profiles in Conifer Forests of the Interior Northwest. National Interagency Fire Center, Joint Fire Science Program. 2010-2013. **\$394,364**
 - 2 Moore, M.M., Bakker, J.D., Laughlin, D. and **A.J. Sánchez Meador.** 2008. Controls on historical and contemporary tree regeneration patterns (1909-2009) and implications for future stand development (2010-2060) in southwestern forests. USDA National Research Initiative (NRI) Competitive Grants Program, USDA. 2008-2012. **\$399,774**
 - 1 Moore, M.M., Bakker, J.D., and **A.J. Sánchez Meador.** 2005. A conceptual framework of vegetation dynamics in ponderosa pine forest ecosystems of the Southwest. Integrative Environmental Research Program, Merriam-Powell Center for Environmental Research, NAU. 2005-2006. **\$1,717.**

Not Funded

Total submitted and not funded since 2012 as PI or Co-PI: \$14,501,694
Total submitted and not funded since 2012 as lead PI: \$350,000

- 17 Han, H., Kim, Y., Montague, I., Nicholls, D., Sessions, J., Anderson, N., Bilek, T., Chambers, C., Gallagher, T., Halbrook, J., Houtman, C., Kizha, A., Link, T., McAvoy, D., Page-Dumroese, D., Rappold, P., Rudie, A., **Sánchez Meador, A.J.**, Smith, J., and Spinelli, R. *Pending.* Achieving a Sustainable Bioeconomy through Forest Bioenterprise Supply Chain Innovation in a Business Cluster Framework. USDA Agriculture and Food Research Initiative Competitive Grants Program/ Sustainable Agricultural System. 2019-2023. **\$10,000,000.**

- 16 Kim, Y.S., **Sánchez Meador, A.J.**, and D. Auty. 2016 Waste to Wisdom II: Development of a Woody Biomass Feedstock Supply Chain for Bioenergy and Bioproducts in the Southwestern US. Humboldt State Univ., via AFRI CAP (Agriculture and Food Research Initiative, Coordinated Agricultural Projects) Sustainable Bioenergy and Bioproducts Challenge Area. 2017-2019. **\$1,765,928.**
- 15 Waltz, A.E., Huffman, D.W., **Sánchez Meador, A.J.**, and T.N. Wasserman. 2015. Developing scaled landscape resiliency metrics and evaluating effectiveness for practitioners. United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2016-2018. **\$317,752.**
- 14 Huffman, D.W., Fulé, P.Z., **Sánchez Meador, A.J.**, and R.T. Strahan. 2014. Effects of prescribed fire on long-term dynamics of ponderosa pine forest understory communities. United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2016-2017. **\$292,175.**
- 13 **Sánchez Meador, A.J.** 2014. Assessing remote sensing derived forest structure and fire behavior in the East Clear Creek Watershed: Implications of ecological restoration treatments on CC Cragin Reservoir. McIntire-Stennis, Mission Research. 2015-2019. **\$175,000.**
- 12 Huffman, D.W., **Sánchez Meador, A.J.**, and A.E.M. Waltz. 2013. Do wildfires managed for resource benefit achieve desired conditions in forests of the Southwest? United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2015-2017. **\$443,997.**
- 11 **Sánchez Meador, A.J.** 2013. Assessing LiDAR-derived potential vegetation dynamics and fire behavior on the Kaibab Plateau: Implications for ecological restoration and forest management. McIntire-Stennis, Mission Research. 2014-2018. **\$175,000.**
- 10 Oberle, M., Boyack, G., Rathbun, L., Cormier, K., Jones, K., and **A.J., Sánchez Meador.** 2013. Enhancing two phase sampling: Can UAV acquired aerial photography be used to cost-effectively estimate woody biomass? United States Department of Agriculture, Forest Service, Integrating remote sensing/geospatial technologies into resource management program. 2014-2016. **\$100,000.**
- 9 Rollins, K.S., Christman, L.S., **Sánchez Meador, A.J.**, and M.H. Taylor. 2012. Economic returns to fuels treatments measured as wildfire suppression costs avoided. United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2013-2015. **\$354,309.**
- 8 Huang, C., and **A.J. Sánchez Meador.** 2012. The Economics of Fuel Treatment Effectiveness in the Southwest Forest. United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2013-2015. **\$433,997.**
- 7 Huffman, D.W., **Sánchez Meador, A.J.**, and A.E.M. Waltz. 2012. Using landscape metrics to compare effectiveness of managed wildfire and mechanical thinning for restoring southwestern ponderosa pine forests. United States Department of the Interior, Bureau of Land Management, Joint Fire Science Program. 2013-2015. **\$443,536.**
- 6 **Sánchez Meador, A.J.**, Sánchez Meador, K.M., and C. Stewart. 2011. Southern Sacramento Mountains Restoration Project. Collaborative Forest Landscape Restoration Program, USDA Forest Service. 2011-2021. **\$7,972,144.**
- 5 Abella, S., **Sánchez Meador, A.J.**, Denton, C.W., Brewer, D.G. and M. Manthei. 2009. Assessing fuel treatment longevity in ponderosa pine forests: Using untapped silvicultural resources. National Interagency Fire Center, Joint Fire Science Program, 2009-2011. **\$317,600**
- 4 Abella, S., **Sánchez Meador, A.J.**, C Denton, W., Brewer, D.G. and J. S. Bradybaugh. 2009. Developing a comprehensive guide to forest thinning for fuel reduction in frequent-fire ponderosa pine and mixed conifer forests. National Interagency Fire Center, Joint Fire Science Program, 2009-2010. **\$140,100**
- 3 **Sánchez Meador, A.J.**, Matney, T., and E.B. Schultz. 2007. Development and Delivery of a National Woody Biomass Estimator Library (NWBEL). National Interagency Fire Center Joint Fire Science Program, 2007-2008. **\$119,400**
- 2 Moore, M.M., **Sánchez Meador, A.J.**, Bakker, J.D., and D.C. Laughlin. 2006. Controls on historical and contemporary tree regeneration patterns (1909-2009) and implications for future stand development (2010-2060) in southwestern forests. USDA CSREES National Research Initiative Program. Pre-proposal accepted; final proposal in December 2006. **\$400,000**
- 1 Moore, M.M., Bakker, J.D., **Sánchez Meador, A.J.**, and D.W. Huffman. 2005. A multi-scaled assessment of temporal and spatial patterns in southwestern forests: long-term dynamics and

effects of restoration treatments. USDA CSREES National Research Initiative Program. Submitted in December 2005. **\$400,000.**

TEACHING EXPERIENCE

School of Forestry, NAU

Fall 2002-2004, Fall 2012-Present

FOR 599 – Applied Spatial Statistics in R; Spring 2018

COM 541/FOR 651 - Data Metaphors and Visualization; Fall 2016, 2017

FOR 313 - Silviculture (Forest Resource Sampling); Fall 2002, 2003, 2004, 2015, 2016, 2017

FOR 323W - Forest Management I (Forest Biometrics); Spring 2014, 2015, 2016, 2017, 2018

FOR 325 - Forest Management III (Integrated Nat. Resources); Spring 2017, 2018

FOR 313/314C - Ecosystem Assessment I & II; Fall 2013, 2014, 2015, 2016, 2017

FOR 606 - Ecological Data Analysis; Fall 2013, 2014, 2015, 2017

FOR 313/315/316 - Principles/Applications of Silviculture; Fall 2003, 2004, 2012

FOR408/485 - Field Work Experience/Undergraduate Research; Fall 2012 (Wade), Summer

2013 (Brown), Spring 2014 (Black), Summer 2014 (O'Reilly), Fall 2014 (O'Reilly, Webster,

Michl), Spring 2015 (O'Reilly), Fall 2015 (Rapp); Spring 2016 (Dixon), Fall 2016 (Barton),

Spring 2017 (Azpeleta)

Mentoring and Advising

Postdoctoral Scholars

Donager, J

Graduate students

Blackburn, R. (Ph.D.), Stotts, C. (M.S., Forestry), Jaquette, M. (M.S.), Molinas, L. (M.S.

2018; R6, Willamette NF), Rochimi, D. (M.S. 2018; Indonesia, Ministry of Forestry), Rapp,

M. (M.S. 2017; Wisconsin, Aldo Leopold Foundation), Nepal, S. (M.S. 2017, Univ. of British

Columbia), Bryant, T. (M.S. 2016; R6 Regional Office), Rodman, K. (M.S. 2015; Univ. Of

Colorado, Boulder), Johnson, M. (M.S. 2015; Berkeley)

Graduate Committee Member

Ridenour, C. (Ph.D., SICCS), Singleton, M. (Ph.D., Forest Science), Vaughan, D. (Ph.D.,

Forest Science), Azpeleta, A. (Ph.D., Forest Science 2019), Donager, J. (Ph.D. SESES, 2018),

Mockta, T. (M.S., Forestry 2018), Whitehair, L. (M.S., Forestry 2018), Massey, R. (Ph.D.,

SESES, 2017), Young, K. (M.S., Forestry 2017), Mike, J. (M.S., Forestry 2017), Fitch, R.

(Ph.D., Forest Science 2015), Bagden, B. (Ph.D., Forest Science 2015), Ouzts, J. (M.S.,

Forestry 2014)

NAU Hooper, ERI, and Cline Library Undergraduate Research Programs

Chamberlain, C. (x2), Barton, T., O'Reilly, M., Black, G., DeBlois, B., Dyer, J., Michl, S.,

Romney, K., Wade, T., Kawamoto, Q., and Brown, W.

Forest Management Service Center, US Forest Service Washington Office-Detached, Fort Collins, CO Forest Vegetation Simulator (FVS) and Forest Product Measurements Training; Advanced Check Cruiser and Forest Vegetation Simulator Trainings - April 2007-July 2010 (3-4 National Sessions/Year)

PROFESSIONAL SERVICE

Northern Arizona University, School of Forestry, & Flagstaff Community

School of Forestry Faculty Status Committee, (Fall 2019-Present)

School of Forestry Strategic Plan Ad Hoc Committee, (Fall 2019-Present)

University Library Committee, (Spring 2013-Spring 2019)

Board of Advisors, Above DaaS, Inc., above-uav.com (May 2019-Present)

Board Member, Greater Flagstaff Forest Partnership, gffp.org (July 2019-Present)

School of Forestry Information Technology Committee, (Fall 2014-Present)

Chair, School of Forestry Lecturer Search Committee, (Summer 2019)

Society of American Foresters Quiz-Bowl - NAU Student Team Advisor (Fall 2013-Spring 2015)

Advisory Board, Greater Flagstaff Forest Partnership (Spring 2016-Summer 2017)

School of Forestry Adjunct Faculty Review Ad Hoc Committee, (Spring 2017-Summer 2018)

School of Forestry Natural Resources Program Ad Hoc Committee, (Spring 2016)

School of Forestry Diversity Committee, (Fall 2014-Spring 2015)

School of Forestry Society of American Foresters Accreditation Review Ad Hoc Committee (Fall 2012-Spring 2013)

Society of American Foresters

Board Member, Society of American Foresters, (January 2017-December 2018)
Chair, Forest Science and Technology Board (FSTB), (January 2017- December 2018)
Program Committee Member, Nat. Convention (January, 2011-Fall 2013, Spring 2017-December 2019)
Board Member (Western Regional), FSTB, (January 2013-2017)
Board Member (Resource Measurements), FSTB, (October 2011-2013)
A1 Working Group Chair (Inventory and Biometrics), FSTB, (October 2008-October 2010)

International

Deputy Coordinator – Division 04 Unit 01-06 (Quantitative Forest Ecology) - International Union of Forest Research Organizations (March 2018-Present)
Coordinator and Instructor: Big Data Analytics in Forestry Workshop. Conducted two-week workshop on “Big Data”, Data Science and R application forestry for 18 visiting graduate students (MS and PhD) and six faculty from South Korea at NAU in coordination with the Center for International Education and Kyoungpook, Kangwon and Kookmin Universities. (January 2020)
Invited Volunteer and Instructor: USAID-Funded Farmer-to-Farmer Program. Conducted two one-week workshops on applied statistics in R for Nepal's Agriculture and Forestry University in Bharatpur and Hetauda, Nepal. (April 2014)

Service Related to My Profession

Technical Advisory Panel Member, USFS Collaborative Forest Restoration Program, <http://www.fs.usda.gov/goto/r3/cfrp> (April 2019-Present)
University/Academic Representative: Southwestern Region Silviculture Certification Panel, Forest Service (Spring 2010-Present)
Conference/Meeting Chair and Host: [2018 Western Mensurationists Meeting](#). Approximately 70 participants (including 20 presenters), field tour of Fort Valley Experimental Forest restoration/demonstration site and Grand Canyon National Park (23 participants), Flagstaff, AZ (June 2018)
Invited Panel Participant: 2011 Southwest Interagency Fuels Workshop, Southwest Fire Science Consortium (March 2011)
Invited Author/Participant: Old-growth writing workshop, “Managing old growth in frequent-fire forests of the West”, conducted by the National Commission on Science for Sustainable Forestry, the Ecological Restoration Institute, and the Southwestern Ecological Restoration Institutes (April 2006)
Student-Faculty Representative and Chair: NAU Forestry Graduate Student Association (August 2003-December 2004)
President: MSU College of Forest Resources Dean’s Council (August 1996-July 1998)
President: MSU Forestry Club (August 1995-July 1996)

Scientific Journal Reviews

Forest Ecology and Management (12), Forest Science (5), Restoration Ecology (4), Journal of Forestry (3), Canadian Journal of Forest Research (3), Ecological Applications (2), Forests (2), European Journal of Forest Research (1), Ecological Modeling (1), Frontiers in Ecology and the Environment (2), The Nature Conservancy (1), USDA Forest Service Rocky Mtn. Research Station GTR (2), USDA Forest Service Southern Research Station GTR (2), Ecological Informatics (2)

PROFESSIONAL MEMBERSHIPS

Society of American Foresters (1996-Present)
Xi Sigma Pi Honor Society (inducted in 1999)
Western Mensurationists (2005-Present)
Association of Fire Ecology (2006-2008)
Ecological Society of America (2002-2008)
Registered Foresters of Mississippi; #02078 (2000-2002)

CONSULTING

QuantitativeEcology.org: Provide statistical advice and assistance to various agencies, companies, research staff, students, and managers including consultation in experimental design, sampling, statistical modeling development and selection, software/programming design/implementation, instruction and remote sensing (January 2002-Present).

- Ecological Restoration Institute and NAU School of Forestry; Introduction to R Workshop (December 2016) [Download Agenda](#)
- Pinnacle Mapping Technologies, Inc; Consultation, development and delivery of three individual tree segmentation runs for a 4 km² LiDAR acquisition for Ft Campbell TN. (May 2016)
- Arizona Department of Game and Fish; Introduction to Ecological Data Analysis with R Workshop (February 2015) [Download Agenda](#)
- Ecological Restoration Institute and NAU School of Forestry; Introduction to FVS Workshop (January 2014) [Download Agenda](#)

CURRENT SUNDAY, FEBRUARY 02, 2020