

The 2019 National Silviculture Workshop: A Focus On Forest Management-Research Partnerships

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ABSTRACT.—The 2019 National Silviculture Workshop brought together nearly 300 forestry practitioners and researchers from across the United States and Canada. The theme of this year’s biennial Workshop was Forest Management-Research Partnerships.

Over a century ago, Raphael Zon, the founder of the USDA Forest Service’s experimental forest network, urged scientists to work with managers to find solutions to “immediate, practical problems” encountered every day in the woods. Following this theme to connect forest managers with scientists, the National Silviculture Workshop (NSW) was established in 1973 to connect emerging forest research with forest management. Since its beginnings, the NSW has worked to advance Zon’s vision by providing a forum for sharing silvicultural advances among USDA Forest Service field foresters in the National Forest System (NFS), program staff from State & Private Forestry (S&PF), and research scientists in Research and Development (R&D). In recent years, research scientists from universities, as well as other federal, state, and tribal agencies, have attended and contributed through presentations, panels, posters, workshop papers, and field tours.

The theme for the 2019 workshop was Forest Management-Research Partnerships, recognizing that it is through strong working relationships that forest managers and research scientists come together to identify priority issues, challenges, and solutions in National Forest management. Research direction and priorities are thus informed by managers, and hence are made more relevant and effective at solving practical problems. Research implementation occurs on National Forests, either on management units or experimental forests. This requires good partnerships and true collaborations by both management and research. Problems addressed on National Forests are often of broader interest to managers of state, non-governmental organizations, tribal, and private forest lands. The 2019 NSW provided a critical forum to discuss how we can enhance existing relationships, build new partnerships, and learn from successful collaborations already in place, to improve the condition of forests through innovative silvicultural research and active forest management.

The objectives of the 2019 National Silviculture Workshop (NSW) were to:

- Provide a forum to showcase successful partnerships and shared stewardship between forest managers and researchers.
- Enhance forest management and research relationships within the Forest Service and with external partners to meet shared goals and objectives.

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- Build on the Forest Service strategic objectives to improve the conditions of forests through innovative silviculture and active forest management.
- Identify emerging forest management needs to guide future research investment.

The 3-day NSW included 2 full days of keynote speakers, panel discussions, contributed oral and poster presentations, and a day-long field tour. The Workshop opened on May 21 with welcoming addresses from Forest Service Associate Chief Lenise Lago and Chippewa National Forest Supervisor Darla Lenz. Mike Smith, Tribal Elder from the Leech Lake Band of Ojibwe, welcomed Workshop participants to the Band's ancestral lands.

The NSW included several strategic keynote addresses to highlight partnerships between NFS and R&D, as well as the Forest Service with our university partners. We began the program with an invited joint keynote address from Washington Office (WO) staffs including Eric Davis, the Assistant Director of Integrated Vegetation Management (NFS), and Toral Patel-Weynand, the Director of Sustainable Forest Management Research (R&D). Davis highlighted the need for researchers and managers to work together to make informed management decisions, while Patel-Weynand spoke of a cross-deputy team assembling a national compendium of silvicultural treatments to support scenario planning, shared stewardship, and other landscape planning needs. Linda M. Nagel of Colorado State University and Brian J. Palik of the Northern Research Station delivered a joint keynote on the importance of partnerships between the Forest Service R&D, NFS, and universities. Together, they highlighted the wide breadth of operational scale experiments that “provide opportunities for multigenerational training and education between scientists and graduate students,” the National Advanced Silviculture Program (NASP), and importance of maintaining long-term field experiments on experimental forests (EFs). Paul I.V. Strong, Forest Supervisor of the Chequamegon-Nicolet National Forest, shared his insights from his view as a forest supervisor who has worked in both NFS and R&D (Chapter 6). Anthony W. D'Amato, professor at the University of Vermont, highlighted a regional approach for increasing resilience of black ash (*Fraxinus nigra*) wetlands to emerald ash borer (EAB) through research efforts, field studies, and demonstrations by scientists and managers to “determine effective ways for reducing the vulnerability of black ash forest types to EAB.” The evening awards ceremony was headlined by Richard Fitzgerald, WO NFS, and Russell Graham (given by proxy), Rocky Mountain Research Station, who provided insights from their over 100 combined years of experience in the field of silviculture research and management in the Forest Service. Together, they highlighted the importance of the National Silviculture Workshop in bringing together NFS silviculturists and research silviculturists since the first meeting held in Marquette, Michigan, in 1973. These broad insights from leaders within the Forest Service and universities provided Workshop attendees with lessons on existing successful partnerships and ideas to enhance relationships in their own regions.

The Program Committee developed six interactive panels to engage attendees in thought-provoking discussions related to forest industry (Chapter 6), NASP (Chapter 8), tribal management (Chapter 7), Experimental Forests (Chapter 8), forest products modernization (6), and a capstone panel to highlight “lessons learned, challenges ahead, and opportunities for enhanced collaboration and alignment between managers and researchers” (Chapter 10). The thoughts and stories shared from the panel discussions were captured and summarized to provide a record of our success, critiques for improvement, and ways to develop or enhance effectively working together as we move forward.

The day 2 field trip showcased long-term and large-scale silvicultural experiments maintained by the Grand Rapids, MN, and Delaware, OH, Forest Service R&D laboratories. These

included The Common Sense Study, started in 1927 by Raphael Zon, the Creating Dutch Elm Disease-tolerant Site-Adapted American Elm study, and the Adaptive Silviculture for Climate Change (ASCC) experiment, the largest forest adaptation experiment on the planet. Foresters, scientists, and decisionmakers from agencies, tribes, and organizations across North America viewed and discussed research that has generated solutions to a variety of pressing problems, including how to maintain ecosystem function in the face of emerald ash borer invasion to approaches that provide a range of silvicultural options for adapting northern forests to climate change. This outreach effort demonstrated the power of long-term research for solving the problems facing our forests, an outcome made possible by the long-running partnership among Forest Service R&D, the NFS, S&PF, university collaborators and other stakeholders.

Contributed oral presentations and posters continued to highlight local, regional, and national partnerships in science and management. Concurrent session themes included:

- Silviculture Partnerships
- Forest Management and Planning
- Services, Products, and Getting it Done
- Fire
- Lessons Learned from Long-term Soil Productivity
- Silviculture, Adaptation and Monitoring
- Genetics, Forest Threats and Reintroductions
- Shared Stewardship and Collaborative research
- Partnerships in Restoration

Much of what was shared and contributed by attendees, that made the 2019 NSW a success, is captured in this General Technical Report, along with several special sections of the *Journal of Forestry*, guest edited by Daniel C. Dey and Thomas M. Schuler (Dey and Schuler 2020). These publications capture much of the presented agenda, but it is often the hallway conversations between sessions and the shared seats on the bus during the field trip that bring us together from around the country, facilitating new forest management-research partnerships and re-igniting old relationships. It is the latter that is a truly important outcome of the NSW helping to ensure that, as Raphael Zon urged, “scientific research must be tempered with common sense.”

LITERATURE CITED

Dey, D.C.; Schuler, T.M. 2020. **2019 US Forest Service National Silviculture Workshop: Forest management and research partnerships.** *Journal of Forestry*. 118(3): 215-218. <https://doi.org/10.1093/jofore/fvaa014>.

The content of this paper reflects the views of the authors, who are responsible for the facts and accuracy of the information presented herein.

CITATION: Pile, Lauren S.; Deal, Robert L.; Dey, Daniel C.; Gwaze, David; Kabrick, John M.; Palik, Brian J.; Schuler, Thomas M. 2020. The 2019 National Silviculture Workshop: A focus on forest management-research partnerships. In: Pile, Lauren S.; Deal, Robert L.; Dey, Daniel C.; Gwaze, David; Kabrick, John M.; Palik, Brian J.; Schuler, Thomas M., comps. The 2019 National Silviculture Workshop: a focus on forest management-research partnerships. Gen. Tech. Rep. NRS-P-193. Madison, WI: U.S. Department of Agriculture, Forest Service, Northern Research Station: 2-4. <https://doi.org/10.2737/NRS-GTR-P-193-paper1>.