Forest Management and Research Collaboration Today and in the Future: A Panel Discussion

Thomas M. Schuler and David Gwaze¹

Co-Moderators

Thomas Schuler, National Program Leader for Silviculture Research, USDA Forest Service, Washington Office, Research and Development; and David Gwaze, National Silviculturist, USDA Forest Service, Washington Office, National Forest System.

Panelists:

- Nehalem Clark, Science Delivery Specialist, USDA Forest Service, Rocky Mountain Research Station
- Mark Bethke, Planning Director, USDA Forest Service, Intermountain Region
- Elizabeth Larry, Research Assistant Director, USDA Forest Service, Northern Research Station
- Jarel Bartig, Ohio Interagency Liaison, USDA Forest Service, Wayne National Forest
- Toral Patel-Weynand, Director of Sustainable Forest Management Research, USDA Forest Service, Washington Office, Research and Development
- Eric Davis, Assistant Director of Forest Management, USDA Forest Service, Washington Office, National Forest System

PANEL SUMMARY

Research and management collaboration is essential to address changing forest conditions across the United States and to deliver expected benefits of healthy forests to the public. Collaboration across the research and management mission areas in the USDA Forest Service occurs at the project, regional, and national levels, and addresses multiple challenges such as specific management needs, resource allocation, and strategic planning. An increase in collaboration internally and externally was recently called for in "Toward Shared Stewardship across Landscapes: An Outcome-Based Investment Strategy²"introduced by Forest Service Chief Vicki Christiansen and Secretary of Agriculture Sonny Perdue in 2018.

¹ National Program Leader for Silviculture Research (TMS), Research and Development, USDA Forest Service, 201 14th Street, SW, Washington, DC 20250; and National Silviculturist (GW), Forest Management, USDA Forest Service, 201 14th Street, SW, Washington, DC 20250. TS is corresponding author: to contact, call (304) 994-1954 or email at Thomas.m.schuler@usda.gov.

² USDA Forest Service. 2018. Toward shared stewardship across landscapes: An outcome-based investment strategy. FS-1118. https://www.fs.usda.gov/sites/default/files/toward-shared-stewardship.pdf

Panelists were asked to share their insights about ongoing collaborations, with a focus on the science partner program from the intermountain west, leadership and project level successes in the eastern area, and national level projects. Two questions were asked of the panelists as follows:

Question 1: Please describe a successful research and management partnership that you were or are involved in and what contributed to the success? What were the challenges and what were the lessons learned?

There are many examples of Forest Service research scientists, managers, and program staff collaborating across the Eastern Region (R9) and Northern Research Station (NRS), shared by panelists representing the region. Panelists noted that the best projects are those where researchers and managers come together with shared context and purpose, and where they both take part in project design, implementation, analysis, and learning. This more naturally occurs when researchers are co-located with or near National Forests, when scientists and mangers are approachable and engaging, and/or when relationships engender respect and trust. However, place-based collaborations have limitations. Retirement projections are a concern and strategies are needed to mitigate the impact that anticipated retirements will have on long-term relationships. Another issue is that research scientists tend to remain in place for their career, whereas land managers tend to move to positions in new locations to advance professionally. This puts the onus of maintaining contacts in the hands of the research scientist, who must learn to value how building that relationship promotes not just the conduct of research but also the application of research in active land management decisions. In a long-term Ohio-based eco-mapping project, it took time to build relationships and find the most effective way to communicate. Lessons learned included using the relationship building as a time to learn about each other and to think more strategically.

To overcome the place-based model of success when potential partners are not located near each other, the science partner program in Rocky Mountain Research Station (RMRS) and the Intermountain Region (R4) actively pairs up scientists and managers to work on specific management-driven projects. Action plans are developed, meetings are facilitated, and travel funds are provided so that new partners can meet in the field or convene as a group. Annual workshops are held to share lessons learned, new knowledge, and form new partnerships. Leadership support for the science and management partnerships in R4 has been a critical part of the success. This new initiative benefited from modest funding to bring people together in person. There was also a willingness to try something different in R4 and RMRS. The result is better products from research and more effective management of National Forest System lands. The challenge is to sustain existing networks and continue to bring in new people to the collaborative groups. Another challenge is to be nimble enough to respond to management needs but to resist a significant change in focus without careful consideration (i.e., "the shiny object syndrome").

The introduction of the California condor was presented as a model of a successful research and management collaboration, especially with respect to bringing in external partners to work with agency research scientists and land managers. Challenges included aligning different agencies and cultures, different federal and state legal requirements, and creating and maintaining a joint timeline for the project. The lessons learned included using each partner's skills and abilities to supplement the strength of the team and to achieve the desired outcome. Another noteworthy national collaboration includes this forum, the National Silviculture Workshop, which brings together researchers and managers from national, regional, and forest-level offices across the nation. Lessons learned include the importance of a long-term approach to information exchange relevant to evolving high-priority forest management

issues and the need to nurture the forest management and research partnership over time. The evolution of workshop themes over the last four decades outlines the changing priorities nationally. Current concerns include overcoming logistical hurdles and the time required to plan and implement a large national gathering.

Question 2: It is a given that strong relationships are needed to promote collaboration but what else is needed? What one or two changes do you recommend that can be implemented in the next two years and in the long-term to promote collaboration and change outcomes.

Panelists noted that there are often significant examples of science and management collaboration in each Region and Station despite the administrative, budget, organizational, and cultural differences between Forest Service mission areas. Supportive leadership is critical for facilitating how researchers and managers work together. Hiring, planning, budgeting, chartering new groups, and balancing the centralized versus the regionally autonomous nature of the agency are largely leadership dependent and are key to facilitating collaboration.

Specific suggestions by the panel to promote collaboration included:

- 1. Leadership must validate the investment needed to maintain and form collaborative efforts. Strategic communication, charters, and support for intra-agency personnel exchanges are some of the ways leadership can promote collaboration in the near term.
- 2. Utilize competitive funding models to encourage co-production of knowledge that is deemed a high priority by leadership such as the BeSmart program used in the Intermountain Region, a micro-grant program that that accepts proposals from scientists and managers working together and sets the stage for longer-term investments.
- 3. Continue the Regional Science Advisory Teams being piloted in Regions 1, 2, 3, and 4 with the Rocky Mountain Research Station. Science Advisory Teams include both scientists and regional staff, and report out to both Regional and Station leadership teams. These teams are envisioned as stable science consulting networks at a regional-level scale.
- 4. Hire and train with the intention to foster a culture of research and management collaboration. Identify candidates that will be more likely to embrace joint research and management problem solving. Train and inspire new line officers and scientists to look outside of their mission area for solutions and potential partners.
- 5. Recognize that collaboration takes place at local, regional, and national levels and take steps to enhance each platform and encourage networks amongst them. Add more bridge-building positions, liaison assignments, and temporary work details to help connect across Deputy Areas within the Forest Service and serve as points of contact with other external partners.
- 6. Identify collaboration success stories and feature them to share lessons learned at Region/Station meetings, Washington Office presentations, Capitol Hill visits, leadership training and forums, and training for new scientists and line officers.
- 7. Use subregional workshops as a feasible opportunity to learn from success stories, share new insights, identify problems, and build relationships. Participating in existing forest collaboratives can provide an effective pathway to better understanding the needs of diverse stakeholders and sharing relevant science. Use strategic planning to codify team charters, if needed, and use multi-year business plans to support them.

- 8. Fully credit researchers in their performance evaluations and panel reviews for management-oriented research to encourage them to collaborate with managers on research projects that directly influence land management. Re-introduce managers on scientist's performance evaluation panels.
- 9. Improve technical transfer of research results to managers. This may require science synthesis (short briefs for decisionmakers and managers), internal data sharing platforms, and pre-publication information.

CONCLUSION

It was clear in the panel that relationships built on trust and a common purpose are the foundation of successful and sustained research and management collaboration. Engaged leadership is essential for working through the associated challenges and supporting collaboration at national, regional, and local levels. The panel's recommendations should serve as a catalyst for further discussion in other venues about enhancing research and management collaboration. Our Agency's values remind us that our mission transcends fidelity to individual programs and directs us to find solutions that embrace collaboration with each other and the communities we serve. Our charge is to serve our conservation mission by always striving to be more inclusive in our approach and the service we provide to society.

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: Schuler, Thomas M.; Gwaze, David. 2020. Forest management and research collaboration today and in the future: A panel discussion. 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: 208-211. https://doi.org/10.2737/NRS-GTR-P-193-paper26.