

Information Crossfile

BY ANDREW BUNN

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The importance of research archives in national parks

MANY NATIONAL PARKS CONTAIN detailed records of historical land uses and events. Dedicated historians and archivists compile and archive these records, which helps further the National Park Service's mission. However, one area in Park Service records to which researchers may not have systematic access is the early scientific research done in and around parks. Martin Wilmking and Jens Ibendorf present a short journal article that details the rediscovery of experimental plots used to test theories of tree-line advance in what is now Gates of the Arctic National Park (Alaska). Wilmking and Ibendorf describe their search for Bob Marshall's ecological research plots established in the 1930s. Marshall sowed white spruce (*Picea glauca*) seeds in these plots north of the current latitudinal tree line. Using field notes and personal communications with others interested in Marshall's scientific legacy, Wilmking's team rediscovered Marshall's plots, though the trees are no longer living. The plots contain living trees planted by Sam and Billie Wright in 1968, when the plots were last visited.

Wilmking and Ibendorf's article gives an account of the search for the plots and measurements of the trees as well as a short explanation of tree-line advance theories in Marshall's time and our own. The explanation is interesting in its own right. However, even more striking is the article's description of a small but fascinating piece of historical research that Wilmking re-created by reading journals and biographies and through interactions with primary sources. Long-term research is consistently identified as a major lacuna or gap in understanding ecological changes; easy

access to historical research and experiments is critical. Indeed, in this case, both documents and natural resources served as valuable archives. The national parks have a real opportunity for making these documents accessible to today's scientists.

Reference

Wilmking, M., and J. Ibendorf. 2004. An early tree-line experiment by a wilderness advocate: Bob Marshall's legacy in the Brooks Range, Alaska. *Arctic* 57:106–113.

Martin Wilmking was a 2000 Canon Scholar from the University of Alaska, Fairbanks. He is a research group leader at University Greifswald in Germany and an affiliate research professor in the Forest Sciences Department of the University of Alaska, Fairbanks.

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Simply put, all models are not created equal; understanding a model's assumptions and what questions a particular model is good at asking is very difficult for the uninitiated.
