



## ***Western Forbs: Biology, Ecology, and Use in Restoration***

Corey L. Gucker<sup>1</sup> and Nancy L. Shaw<sup>2</sup>

Federal directives including the National Seed Strategy, the President’s Memorandum on Pollinators, and Greater Sage-grouse conservation plans emphasize the use of native species to recover ecosystems damaged by fire, mineral extraction, energy development, recreation, road construction, or other disturbances. Native forbs are essential components of resilient, biologically and functionally diverse plant communities. Recognition of their importance to pollinators and other wildlife, successional processes, and healthy communities is contributing to their increased use for restoration. Synthesis of research and practical experience is essential to the selection of appropriate native forb species and populations, management and increase of seed supplies, and development of strategies to improve success in establishing diverse wildland communities.

This online book, [\*Western Forbs: Biology, Ecology, and Use in Restoration\*](#), synthesizes all existing research and practical experience gained over the last 20 years, to aid seed collectors, seed growers, nurserymen, landowners, restoration contractors, and land managers as they increase the supply and use of native forbs. Each chapter features an individual species' biology, ecology, seed technology, and use in restoration. Sixteen chapters are available now with many more to be added.

Chapters are being added as completed, and the manual will eventually include at least 98 forb species. USDI Bureau of Land Management personnel provided the species list and prioritization based on the projected importance of each species for Great Basin sites in the greatest need of restoration.

<sup>1</sup>Great Basin Fire Science Exchange and University of Nevada-Reno, [cgucker@unr.edu](mailto:cgucker@unr.edu), Boise, ID

<sup>2</sup>USFS Rocky Mountain Research Station, [nancy.shaw@usda.gov](mailto:nancy.shaw@usda.gov), Boise, ID

## **Acknowledgements**

This book could not be developed without the help and cooperation of many individuals, agencies, and organizations. Funding for the [\*Western forbs: Biology, Ecology, and Use in Restoration\*](#) project is primarily provided by the USDI Bureau of Land Management, the Great Basin Native Plant Materials Ecoregional Program, and the efforts of Anne Halford, USDI BLM, Idaho State Botanist. The book receives additional support from the USFS Rocky Mountain Research Station, the Great Basin Native Plant Project, and the Great Basin Fire Science Exchange.

Many others have provided much needed and appreciated assistance as well. We are grateful to: Matt Fisk, USGS for GIS and mapping support; Kayla Herriman, USFS Bend Seed Extractory, for seed cleaning data and reports; Rachel Hosna, BLM Seeds of Success, for seed collecting data; Génie Montblanc, Great Basin Fire Science Exchange Coordinator, for administrative support; Stan Young, Utah Crop Improvement, for assistance with seed certification procedures; Victor Vankus, USFS National Seed Laboratory, for assistance with seed storage protocols; and Jake Soper, Evermore Prints, for chapter design and layout. We also thank the USFS RMRS, Fire Effects Information System, for use of their thoroughly key worded citation database, the Citation Retrieval System.

Please see the Acknowledgements sections in each chapter for recognition of content reviewers and other contributors.



GREAT BASIN  
FIRE SCIENCE  
EXCHANGE

