Nursery Manual for Native Plants

A Guide for Tribal Nurseries

R. Kasten Dumroese, Tara Luna and Thomas D. Landis, editors
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Preface

In 2001, the Forest Service, U.S. Department of Agriculture (USDA), through its Virtual Center for Reforestation, Nurseries, and Genetics Resources (RNGR), invited Native Americans from across the United States to attend the Western Forest and Conservation Nursery Association annual meeting. About 25 tribal members, representing 20 tribes, attended the meeting at Fort Lewis College in Durango, Colorado. The following year, a similar meeting was held in Olympia, Washington, and tribal members initiated a Tribal Nursery Council and requested that RNGR facilitate the organization. During 2003, RNGR requested information from 560 tribes across the United States, seeking specific information on tribes’ needs for native plants, facilities, training, and so on. Results from the responding 77 tribes were incorporated into the Tribal Nursery Needs Assessment. Based on the results of that questionnaire, and input from tribal members attending the 2003 Intertribal Nursery Council meeting in Coeur d’Alene, Idaho, it was agreed that a nursery handbook was needed. That fall, planning began for writing the manual, loosely based on Agriculture Handbook 674, The Container Tree Nursery Manual, but with special attention to the uniqueness of Native American cultures.

The team consisted of Thomas D. Landis, recently retired after 30 years with the Forest Service (the last 25 of those years as Western and National Nursery Specialist), lead author of the seven-volume Container Tree Nursery Manual, author of numerous other technology transfer publications, and currently principal of Native Plant Nursery Consulting in Medford, Oregon; Tara Luna, a botanist, who has grown native plants 20+ years in the Western United States and worked extensively with the Confederated Salish and Kootenai Tribes (Montana), the Blackfeet Nation (Montana), the Hopi Tribe (Arizona), and the Confederated Tribes of the Umatilla Indian Reservation (Oregon) in their native plant nurseries; Kim M. Wilkinson, who founded a nursery for native and culturally important plants on the Island of Hawai’i and managed it for 10 years, and has authored several books on ecological restoration and cultural renewal; Douglass F. Jacobs, Associate Professor of Regeneration Silviculture with the Hardwood Tree Improvement and Regeneration Center in the Department of Forestry and Natural Resources at Purdue University, who has extensive research in nursery production and seedling quality of forest tree species for reforestation and restoration; and R. Kasten Durnroese, Research Plant Physiologist in the Forest Service’s Rocky Mountain Research Station, who with 24 years experience growing and researching native plants is the current National Nursery Specialist and editor of the Native Plants Journal.

The vision was to provide a handbook that covered all aspects of managing a native plant nursery, from initial planning through crop production to establishing trials to improve nursery productivity into the future. The handbook is divided into four main sections: Getting Started, Developing a Nursery, Growing Plants, and Problem Solving.

During development of the handbook, and with input from the Intertribal Nursery Council, the production team decided to split the handbook into two volumes. This first volume, Nursery Management, contains 17 chapters devoted to that topic, whereas the second volume will include nearly 300 protocols for propagating native plants important to, and identified by, the tribes for cultural, medicinal, and restoration purposes. Together, these two volumes should provide a solid foundation for Native Americans and others interested in producing native plants to do so.
Photos were contributed by Terrence Ashley, Confederated Salish and Kootenai Tribes; Michael A. Castellano, USDA Forest Service, Pacific Northwest Research Station; Efren Cazares, Oregon State University; Kingsley Dixon, Botanic Parks and Garden Authority, Australia; John L. Edson, Hawai‘i Reforestation Nursery; Mike Evans, Tree of Life Nursery; Richard Hannan, USDA Agricultural Research Service; Bev Hills, Ktnuaxa-Kinbasket First Nation; J. Chris Hoag, USDA Natural Resources Conservation Service; JFNew Nursery; Kate Kramer, USDA Forest Service, Region 5; Joyce Lapp, U.S. Department of the Interior, National Park Service; Ben Luoma, Oregon State University; Charles Matherne, State of Louisiana Dept. of Agriculture, retired; Terry McGrath Photography; USDA Forest Service, Missoula Technology and Development Center; Joseph F. Myers, USDA Forest Service, Region 1; Ronald P. Overton, USDA Forest Service, Northeast Area; William Pink, Temecula Band of Luiseno Indians; Jeremiah R. Pinto, Navajo Nation and USDA Forest Service, Rocky Mountain Research Station; William Sayward, ITASCA Greenhouses; Nancy Shaw, USDA Forest Service, Rocky Mountain Research Station; David Steinfeld, USDA Forest Service, Region 6; Stuewe and Sons, Inc.; Dawn Thomas, Confederated Salish and Kootenai Tribes; University of Idaho Library, Special Collections and Archives; and Chuck Williams, Redwood Valley Band of Pomo Indians. Illustrations were prepared by Jim Marin Graphics and Steve Morrison. Early drafts were reviewed by Peggy Adams, Jamestown S’Klallam Tribe; Haley McCarty, Makah Indian Tribe; Jeremiah R. Pinto, Navajo Nation; Max Taylor and Priscilla Pavatea, Hopi Tribe; and Gloria Whitefeather-Spears, Red Lake Band of Chippewa Indians. Timber Press, Inc. and Bruce McDonald allowed use of their copyrighted material. Design and layout was prepared by Grey Designs. Sonja Beavers and Candace Akins edited and proofed various versions of this volume. Karl Perry reviewed images. Richard Zabel and the Western Forest and Conservation Association, through an agreement with the Southern Research Station, were instrumental in producing this handbook. We thank everyone for their generous and professional support.

Acknowledgments

Funding for this volume came from the Forest Service. Primary funding was provided by State and Private Forestry, Cooperative Forestry, Larry Payne, former Director, through the Virtual Center for Nurseries, Reforestation, and Genetics Resources. Additional support provided by State and Private Forestry, Joel Holtop, former Deputy Chief; Southern Research Station, Peter J. Roussopoulos, former Director; and Rocky Mountain Research Station, George “Sam” Foster, Director.
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Nursery Management