

# NATIVE PLANTS

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*includes* SAGEBRUSH-OBLIGATE WILDLIFE

An eclectic forum for dispersing practical information about planting and growing native plants.

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**PUBLISHING**

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During late July and early August, I had the opportunity to complete a plant collection excursion into some of the mountain ranges along the northern border of the western United States. I traveled with a University of Idaho colleague, Tony McCammon, a county educator from Twin Falls, Idaho. Our varied destinations included the Cabinet Mountains of Montana, the Scotchman Peaks of northern Idaho, and the northern Cascade Range in Washington. Collection of 130 specimens for the Stillinger Herbarium, and 68 seed and live plant samples for my native plant domestication project, gave evidence of success.

During the excursion, opportunities presented themselves to see some spectacular scenery and to observe habitat conditions across a range of publicly managed lands. Generally, conditions were harsh, given extreme drought and resulting parched plant communities. Ecosystems in many places were still thriving and appeared to be functional and balanced, in spite of the dry summer. In other places, especially the north Cascade Range, beetle-ravaged pine trees, dominant stands of invasive plant species, and human-caused disturbances provided evidence of declining ecological health.

Simply observing degenerating ecosystems on many of our public wildlands is a far cry from understanding the causes and cures. Are we seeing early evidence of disruption due to climate change? Are we seeing the long-term impacts of improper fire management? Is the widespread presence of exotic native plants causal or simply part of the symptomology? Can we successfully employ short-term protocols that will lead to long-term recovery? Can we afford to do nothing? These are complicated questions. Answers will come only from you, the researchers and practitioners of ecosystem sciences.

Sharing what we learn with colleagues is a critical component of success in our field of work. We make progress by building on the knowledge and work of others. *Native Plants Journal* is an important cog in this process. Keep sending in your articles and adding to the store of knowledge essential to making a difference.

As we wrap up this last issue of 2015, I need to thank some very special people who make this journal possible, namely the Associate Editors. These colleagues give freely of their time to assist each of us with our publication needs and to keep the quality of the journal high. I wish to personally thank Mack Thetford, Steven Smith, Daniela Shebitz, Larry Rupp, Deb Rogers, Rosemary Pendleton, James Muir, Heidi Kratsch, Diane Haase, Kas Dumroese, and Robert Cox. And I can't go without thanking our Managing Editor, Candace Akins, who is always pulling me out of the proverbial fire. Although I cannot take the space to name them all, I also want the reviewers to know that I truly appreciate their service. Thanks to each of you.



**Stephen Love**  
Editor-in-Chief

**On the cover:** Healthy sage-grouse (*Centrocercus Phasianidae*) habitat in the sagebrush steppelands of Oregon near Burns. Photo by Alan St John

Have a great idea for an article but don't have time or need help writing?  
Please e-mail. We can help.

#### Two types of manuscripts are welcome:

*General technical articles* are not research per se (lack strict experimental design and statistical analysis), but have important information for growers and planters of North American native plants. Articles could include new planting techniques, useful equipment, cultural techniques, habitat restoration, restoration techniques, production trends, technical information, descriptions of new species or cultivars entering nursery production, and so on. *Propagation protocols* are short, concise general articles detailing the specific methods used to propagate a particular plant. *Germplasm releases* are short articles that follow a standard format (see past issues) and announce the release of new plant materials for conservation use.

*Refereed research articles* (and scientific reviews or commentary) must have sound application of scientific method, appropriate statistical analysis, and state how the research is important to growers and planters of North American native plants. Accepted papers will be published with a "Refereed Research Article" designation.

All submitted manuscripts will be peer-reviewed by 2 referees to ensure the objective of *Native Plants Journal* is met.

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The second page should contain the title, abstract, and key words. Abstracts should be double-spaced and brief and emphasize results, usefulness, and practicality to growers and planters of North American (Canada, Mexico, and US) native plants. Authors are strongly encouraged to make the first sentence of their abstract describe the most important finding of their work. Include 3 to 7 key words not in the title. Use the PLANTS database as the source for nomenclature (see below). Print an abbreviated title and page number in the upper right corner of this and all subsequent pages. Use line numbering. Construct tables using the table feature of word processing programs.

Follow the second page with the "Introduction, Materials and Methods, Results, Discussion, Conclusion, References," or some other logical system as headings, followed by figure captions

and tables. For matters of style, we generally follow *Scientific Style and Format, The Council of Biology Editors Manual for Authors, Editors, and Publishers*, 6th edition (ISBN 0-521-47154-0).

Use metric (SI) units with US units in parentheses and abbreviate all units, except those without numerical value (for example, "we measured parts per million and found 250 ppm nitrogen"). Use numerals for any countable amount (for example, 3 replicates, 2 populations).

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In the text, please list citations by date, and then alphabetically by author (for example, Smith 1986, 1997; Jones and Smith 1992; Smith and Jones 1992; Doe and others 1998). In the references section, list references alphabetically by author(s) and please do not abbreviate the name of the referenced journal. Examples:

*Journal article:* Arnold MA, Struve DK. 1989. Growing green ash and red oak in CuCO<sub>3</sub>-treated containers increases root regeneration and shoot growth following transplant. *Journal of the American Society for Horticultural Science* 114:402-406.

*Entire book:* Davidson H, Mecklenburg R. 1981. *Nursery management: administration and culture*. 2nd ed. Englewood Cliffs (NJ): Prentice-Hall Inc. 450 p.

*Article in proceedings:* Dumroese RK, Wenny DL. 1997. Fertilizer regimes for container-grown conifers of the Intermountain West. In: Haase DL, Rose R, coordinators and editors. *Symposium proceedings, forest seedling nutrition from the nursery to the field*; 1997 Oct 28-29; Corvallis, OR. Corvallis (OR): Oregon State University Nursery Technology Cooperative. p 17-26.

*Internet source:* [USDA NRCS] USDA Natural Resources Conservation Service. 2011. The PLANTS database. URL: <http://plants.usda.gov> (accessed 20 Jan 2011). Greensboro (NC): National Plant Data Team.

*Government article:* Barnett JP, Brissette JC. 1986. Producing southern pine seedlings in containers. New Orleans (LA): USDA Forest Service, Southern Forest Experiment Station. *General Technical Report SO-59*. 71 p.

*Thesis or dissertation:* Wang Z. 1990. Effects of cupric carbonate on container-grown seedlings of ponderosa pine during greenhouse production [MSc thesis]. Moscow (ID): University of Idaho. 67 p.

*Personal communication:* Hoss GA. 2002. Personal communication. Licking (MO): Missouri Department of Conservation, George O White State Forest Nursery. Nursery Superintendent.

#### NOMENCLATURE

Use common names with scientific names (including authorities and family names) in parentheses the first time used in the abstract and body of the manuscript (if scientific names with authorities and families are summarized in a table, they need not be repeated in the body of the manuscript). All subsequent use can be either the common or scientific name. Example with common name: whitebark pine (*Pinus albicaulis* Engelm. [Pinaceae]). Example without common name: *Phacelia rattanii* Gray. (Hydrophyllaceae). The standard source of plant nomenclature is the PLANTS database (<http://plants.usda.gov>). Authors may use common names found in PLANTS or the local vernacular. Other nomenclature sources may be used only if justified. The nomenclature source should be included in the references.

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**Photo credits opposite page:** (top) Greater Sage-Grouse habitat in the Virginia Mountains of Nevada by Steven Schwarzbach, US Geological Survey; (middle) long ribbon-like leaves of Texas wildrice (*Zizania texana* Hitchc. [Poaceae]) by Jeffrey T Hutchinson; (bottom) blooming eastern pasqueflower (*Anemone patens* L. [Ranunculaceae]), courtesy of Wild Rose Consulting Inc.

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