

**Conserving Native Plants
Conservation Report
Fall 2003**

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A discussion of the role of WNPS in conservation is underway, and we would like members to be part of the planning process as well as engaged in the resulting work. Every member can help make a difference by being aware of what is happening, and by working with others to resolve important environmental issues. Let's not simply continue the status quo where conservation is concerned.

Once disturbed, it is difficult, costly, and indeed impossible, to restore a plant community to its original state. People conducting large construction projects (departments of highways come to mind) are required by the National Environmental Policy Act (NEPA) and Section 404 of the Clean Water Act to "mitigate" for destroyed or disturbed wetland areas by either protecting or constructing comparable areas. However, there are too many species, known and unknown, too many specific interactions among species, too many specific soils and moisture regimes established over a long period, to successfully replicate a particular habitat elsewhere, or even to restore it once it has been disturbed. "We simply don't know how to restore or construct all types of wetlands," says Joy Zedler, a restoration ecologist at the University of Wisconsin. "Re-creating the complex chemistry of bogs and fens is beyond us."

While ecological restoration may need to be part of an overall conservation strategy, conservation is most successful when it is proactive—identifying threats a classes of threats to the environment, and taking effective action to annul those threats. The WNPS Conservation Committee can be more proactive by working, separately or with other groups, to monitor and influence agencies as they develop new operating rules and management plan and by tracking and commenting on new or amended legislation of environmental importance. This will require the active participation of a good number of people.

The WNPS Board has agreed that it will focus its attention on the management of invasive plants, and the conservation of two habitat types which do not receive much attention from other groups: the shrub-steppe habitat of eastern Washington, and Garry oak woodlands and associated prairies west of the Cascades.

Invasive plants

Invasive plants compete with natives by occupying space, changing the structure of the plant communities causing physical and chemical alterations of the soil, and covering and shading native plants. Invasive plants interfere with animal life by altering the structure of their habitat and by eliminating favored food plants through competition. Invasive plants are spread both by human activity and by animals that eat them and carry their seeds. Each of the plant communities identified by WNPS for special focus is threatened by invasive plants.

Shrub-steppe

Shrub-steppe grasslands and shrub-lands in the lower reaches of the great Columbia River drainage are critical habitat for many of our native plant and animal species. The main initial threat to these vegetation types was the introduction of European livestock and seeds, which initiated a long-term and perhaps irreversible vector of ecological change, including the denuding of soils formerly protected by a complex microbiotic crust; introduction of exotic invasive plants, especially *Bromus tectorum*; and more frequent fires, carried farther with greater heat by continuous carpets of cheatgrass. Because many bunch- grass habitats have fertile soil and lie on relatively level ground, they have suffered extensively from conversion to agricultural, commercial, and residential uses. Conversion of Trust Lands under Washington Department of Natural Resources (DNR) jurisdiction has been a particularly difficult problem in recent years, as DNR complied with its mandate to profit from such lands by leasing or selling them to fruit and wine-grape growers. The few remaining areas of good steppe habitat are separated from one another, which makes it difficult for the species in them to maintain genetic continuity and

to evolve in ways that they did in the past. We must take effective steps to secure greater protection of these lands.

Garry Oak

Garry oak (*Quercus garryana*), also called Oregon white oak, is Washington's only native oak species. This oak, along with the rest of its native woodland and associated prairie plant communities, harbors a fascinating suite of dry-site plants. It is a distinct habitat for wild life, including listed species. According to fire ecologists Jim Agee and Dave Peter, the Garry oak woodlands and associated prairies we see today are considered remnants of what was once a vast landscape of these habitats, which Native Americans maintained through burning. While some areas of oak woodland and prairie meadow habitat probably occurred naturally, Native Americans set fires to create and maintain open habitat of this type, from which they harvested food, including acorns and camas bulbs. Comparison with early land surveys indicates that these ecosystems have been drastically reduced in size, and historical information suggests that interruption of Native American land management practices after the arrival of Europeans, including the use of fire, is largely responsible for the recent encroachment by surrounding conifer woodlands. Other threats include invasion by exotic species and agricultural and urban development.

Logistics

How do we decide which issues rise to the top? I think the committee should first set guidelines to assess the importance of topics that come to its attention, and decide if they fall under the scope of our mission by determining whether or not it is a native plant issue. Then, identify whether it is a regional (chapter as lead) or state-wide (State as lead) issue. And, finally, identify ways WNPS can be proactive to prevent future occurrences. If necessary, issues will be assigned for research by a member having the appropriate background. To be effective, we should coordinate our quest with the conservation committees of other environmental organizations and maintain contacts in state and county agencies, in major city governments, and in the legislature.

Actions

WNPS can work in many ways to address the issues raised here. Some suggestions:

- Use WNPS publications and the media to increase the awareness of our members and the general public of the ecological values of Garry oak and shrub-steppe habitats, to highlight their special cultural and ethnobotanical heritage, and to support ongoing conservation, restoration, and education projects in Washington, Oregon, and Canada.
- Work to develop and publicize viable weed control projects with partners already involved in this work. Non-profit groups such as National Audubon and The Nature Conservancy have embarked on initiatives in this area, and the county Weed Boards and many state and federal agencies have responsibility for and interest in controlling exotic weeds.
- Write and submit guest columns for local and regional press. Involve the press in on-site dialog.
- Join groups which include or advise public land managers, such as the Shrub-steppe Working Group.
- Work with grower groups such as organic growers, and educate them about the value of natural landscapes; for example, that natural landscapes serve as reservoirs for beneficial insect predators and pollinators.
- Write comments for the WNPS on proposed land sales and exchanges by public agencies which would compromise the status of habitats of concern to us.
- Ask DNR to publish a multi-year plan for conservation or development of steppe lands and Garry oak woodlands under their jurisdiction, to conduct an EIS for the plan and to provide for public review and comment.
- Support targeted research by graduate students and others with WNPS grants.

- Initiate WNPS projects that could be supported by grant funds. We could publish brochures, offer taxonomic training, conduct inventories of sites to document their importance for conservation, initiate invasive control projects, provide speakers, and even sponsor or organize a conference or symposium.
- Secure grant funds for this work from outside sources.

And do all of the above with integrity, good factual bases, and the best available science. Henry David Thoreau wrote: "A man is rich in proportion to the number of things he can afford to leave alone." We can all afford this wealth, and offer it to others. If you are willing to be of help with this work, please contact me at swamp@blarg.net or (206) 281-8976.