

OREGON WHITE OAK

BACKGROUND

Changes in land use, control of fire, and invasive species have resulted in significant loss and degradation of native oak savanna and prairie habitats. These habitats have become some of the rarest in the Willamette Valley - less than 1% remain. Mt. Pisgah is home to what may be the largest block of oak habitat in public ownership in the Willamette Valley.

FBP is exploring ways to effectively protect and enhance this habitat for future generations through its Oregon White Oak Pilot Project. Habitat management strategies demonstrated here are also being used by public and private agencies to manage remnant white oak habitats in other parts of the Willamette Valley.

SIGNIFICANCE

- Approximately 200 species of birds, mammals, reptiles, and amphibians use oak habitat
- Rare and sensitive species will benefit from conserving oak habitats such as:
 - Acorn woodpecker
 - Northern pygmy owl
 - White-breasted nuthatch
 - Western bluebird
 - Western meadowlark



SUGGESTED READING

- Harrington, Constance & Warren Devine, *A Practical Guide to Oak Release*, United States Forest Service: PNW-GTR-666, February 2006
- Thompson, J.; *Move Over, Douglas Fir: Oregon White Oaks Need Room to Grow*, Science Findings, December 2007

PROJECT SUPPORT

FUNDING

- Friends of Buford Park & Mt. Pisgah
- Oregon Department of Fish & Wildlife
- Bonneville Power Administration
- Forest Restoration Partnership

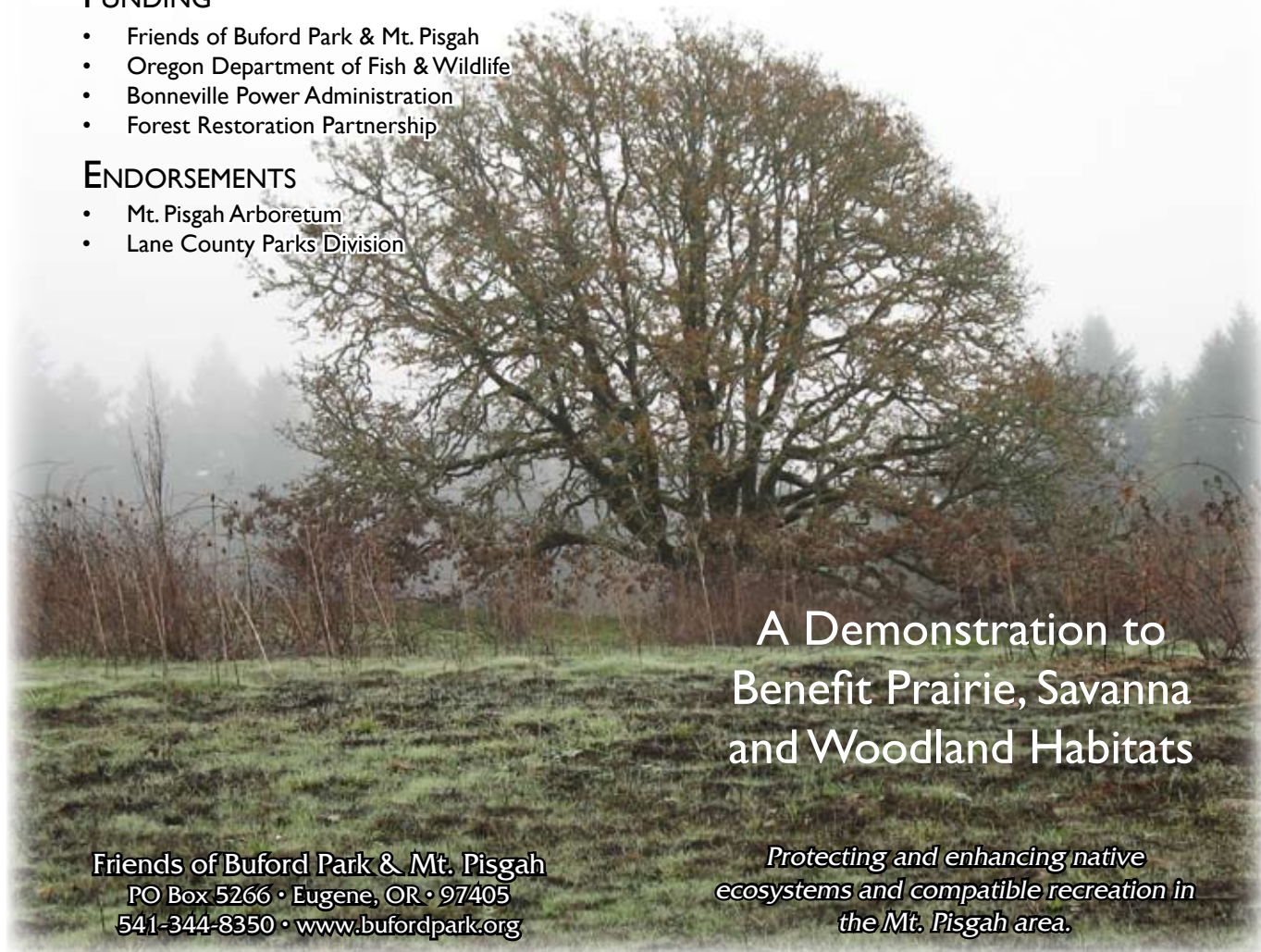
ENDORSEMENTS

- Mt. Pisgah Arboretum
- Lane County Parks Division



Friends of Buford Park
& Mt. Pisgah

OREGON WHITE OAK PILOT PROJECT



A Demonstration to
Benefit Prairie, Savanna
and Woodland Habitats

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*Protecting and enhancing native
ecosystems and compatible recreation in
the Mt. Pisgah area.*

OAK HABITAT RESTORATION STRATEGIES

- Arrest Douglas fir encroachment of white oak habitat. Thin firs and create snags for wildlife. Use large woody debris in stream restoration projects to enhance fish habitat in the park.
- Foster vigor, acorn production and larger canopies in oak trees. Thin selected, small diameter oak trees with sparse canopies to reduce competition for water, nutrients, and sunlight.
- Retain woody debris within understory to provide wildlife habitat. Pile slash to benefit small rodents, reptiles, and other wildlife. Scatter large limbs and branches to provide perch points and structure for insects, reptiles, and birds.
- Enhance native understory vegetation. Increase plant diversity for the benefit of native pollinators. Control invasive vegetation and plant a diverse mix of native shrubs, grasses and wildflowers.
- Conduct periodic controlled burns to reduce woody encroachment.

WHY THIN TREES FROM OAK AND PRAIRIE HABITATS?

- To conserve rare prairie and oak habitats
- To improve habitat for rare species
- To reduce woody fuels that could result in a destructive wildfire
- To prepare the site for beneficial, historically-based prescribed burning
- To demonstrate typical restoration methods

WHY IS IT CALLED “HABITAT RESTORATION?”

Because in this case, thinning trees restores habitats and thereby ecosystem functions necessary to support plants and animals once common throughout the Willamette Valley, species that are still present at Mt. Pisgah.

WHY INTERVENE IN THIS SEEMINGLY NATURAL PROGRESSION?

Oak savannas and prairies may disappear if no action is taken. They are already gone from about 99% of their historic Willamette Valley range. These habitats have been lost to development, agriculture, fire suppression, encroachment from evergreen trees, and invasion by exotic species.

Nearly all of our locally-rare species use the prairie and oak habitats, so if we lost those habitats, we lose those species. A few of the rare species that benefit from prairie-oak savanna restoration include western bluebirds, western meadowlarks, acorn woodpeckers, white breasted nuthatches, several bat species, Willamette daisy, wayside aster, the western pond turtle, and a host of native butterflies and pollinators that depend on the much wider diversity of flowers present in prairie-savanna habitats. According to a leading entomologist at Oregon State University, over three-quarters of our native bees that use these habitats have been lost in the Willamette Valley.

BUT WHAT ABOUT CLIMATE CHANGE?

With predictions for increased temperatures and more intense summer drought, it is likely that savanna and prairie ecosystems will become increasingly important for biodiversity. They may also help reduce the risk of destructive wildfires. Mt. Pisgah habitats can serve as a source of native flora and fauna to restore other sites, but only if we act to protect them now.

WHOSE IDEA WAS IT TO DO THIS PROJECT?

The idea originated with the Stewardship Technical Advisory Committee of the Friends of Buford Park & Mt. Pisgah (FBP, a nonprofit organization). The committee consists of 9 ecologists who volunteer their services because of their interest in preserving the historic cultural and natural landscape in the Mt. Pisgah area. The Lane County Parks Division, which owns the park, has approved this pilot demonstration project. The professional staff of FBP support and coordinate the effort.

HOW DO WE KNOW THIS WILL WORK?

These methods have been used successfully on the Ft. Lewis Military Reservation in Washington, at Bald Hill in Corvallis, along the City of Eugene Ridgeline Trail and many other locations in the Pacific Northwest.

Lessons learned from those projects will be applied to this project. For example, we will minimize soil disturbance to deter exotic weed colonization, and we will conduct follow-up surveys and may schedule additional work to assure the habitat objectives are achieved.

Lessons learned from this habitat enhancement project could be applied to other areas of Buford Park.