



*Inspiring Americans to protect wildlife for our children's future*

**National Wildlife Federation®**

11100 Wildlife Center Drive • Reston, VA 20190 • [www.nwf.org](http://www.nwf.org)

**Washington State University**

**Pullman, Washington**

**Spring 2006, Habitat Restoration**

**Magpie Forest: Restoring Endangered Palouse Prairie**

## **BACKGROUND**

### **Campus Profile**

Washington State University (WSU) is one of the top 50 public research universities in the United States, with its flagship campus in Pullman; three urban campuses in Spokane, the Tri-Cities (Richland, Pasco, and Kennewick), and Vancouver; and 10 regional learning centers throughout Washington state. WSU offers more than 250 fields of study in 10 colleges, including a nationally recognized University Honors College and a large graduate school. Founded in Pullman in 1890, WSU is the state's land-grant research university enrolling more than 18,000 students at the Pullman campus, with more than 21,000 students statewide, including growing numbers in distance education programs.

Set among the rolling hills of the former Palouse Prairie, WSU is one of the largest residential campuses west of the Mississippi River. About half of the student body lives on the 620-acre Pullman campus, which is situated against the nearby backdrop of Moscow Mountain and the wooded foothills of the northern Rockies bioregion. Students interested in conservation biology, wildlife ecology, endangered species conservation, environmental science, and natural resources find ample opportunity for education and field studies with more than 1,300 faculty members by using the extensive on-campus research facilities and nearby outdoor ecological laboratories, including a Palouse Prairie ecological preserve system.

### **Contacts**

Rod Saylor, PhD

Associate Professor

Conservation Biologist

Phone: 509-335-6167

Email: [rdsaylor@wsu.edu](mailto:rdsaylor@wsu.edu)

## **GOALS AND ACCOMPLISHMENTS**

### **Goals**

Following an Earth Day celebration in 2005, WSU purchased and protected a remnant of Palouse Prairie from encroaching urban development and has embarked on a collaborative effort with local citizen groups and university students to conserve and restore native prairie habitats.

Magpie Forest, a natural area that is long valued by university researchers and the public, is the local name given to a unique 33-acre land parcel on the edge of Pullman. Rapidly expanding housing developments threatened to destroy Magpie Forest as one of the few remaining remnants of native Palouse Prairie, a highly endangered grassland ecosystem, of which 99 percent has been destroyed. At the urging of faculty members and community groups, WSU stepped in and

purchased that land with the goal of creating an outdoor ecological laboratory and nature preserve for use by researchers and the public.

The site harbors hawthorn thickets, quaking aspen trees, and a wide variety of native shrubs, grasses, and flowering herbaceous plants, including two rare Palouse wildflowers: the lady's slipper orchid (*Cypripedium montanum*) and the Palouse milk-vetch (*Astragalus arrectus* – state status: sensitive). In spring, the site is thickly covered with yellow glacier lilies (*Erythronium gradiflorum*), which produce corms that were once used as food by Native Americans.

Magpie Forest is near another Palouse Prairie remnant conserved by WSU, the Smoot Hill Ecological Reserve, on which the giant Palouse earthworm (*Driloleirus americanus*) was rediscovered in 2005 by researchers. Capable of growing to nearly three feet in length, the white colored giant Palouse earthworm is reported to emit a scent of lilies and was noted by the Lewis and Clark expedition. Not one of those worms has been seen since the 1980s and scientists had begun to wonder if they were extinct. Thus, Magpie Forest and other Palouse Prairie sites may harbor the last few members or populations of this unique and mysterious species.

### **Accomplishments**

WSU has launched Adopt Magpie Forest as a public campaign to enlist the help of both university students and community volunteers in establishing and patrolling trails, placing interpretive signs and markers to guide public use, and keeping the forest clean of debris. Magpie Forest is now being used by various university classes, including students undertaking botany and plant systematic studies, as well as restoration ecology courses. Trees, shrubs, and flowers to be used in habitat restoration activities are being grown in a campus native-plant nursery.

### **Challenges and Responses**

One of the biggest challenges facing the immediate future of Magpie Forest is to make a broader segment of the public aware that paintballing, camp fires, wood-cutting, and similar uses are no longer allowed that the area has now been purchased to become a nature preserve and university research site

## **ENGAGEMENT AND SUPPORT**

### **Leaders and Supporters**

Magpie Forest has long been valued as an important natural history resource by scientists at WSU, the nearby University of Idaho, and members of the local conservation community because of its historic ecological and conservation value. It is unique in being one of the few undeveloped and unfarmed natural areas close to the growing cities of Pullman, Washington, and Moscow, Idaho. The Pullman Environmental Quality Commission identified Magpie Forest as one of the city's most important and endangered critical areas, assuming that it would eventually become part of Pullman.

### **Community Outreach and Education**

The location of Magpie Forest on the city's edge presents a unique conservation challenge to WSU and the local community. The two must design and implement a habitat restoration plan to protect biological resources in an urban nature preserve. WSU is working closely with the

Pullman Civic Trust, Pullman Chamber of Commerce, Palouse-Clearwater Environmental Institute, Palouse Prairie Foundation, the city of Pullman, and Whitman County to develop future management plans, which will include restoration of farmland around the forest.

WSU has also launched Adopt Magpie Forest as a public campaign to enlist the help of both university students and community volunteers in establishing and patrolling trails, placing interpretive signs and markers to guide public use, and keeping the forest clean of debris.

### **Climate Change**

The restoration of Magpie Forest does not directly address climate change. However, healthy forests can act as carbon sinks, thus reducing carbon dioxide in the atmosphere.

### **CLOSING COMMENT**

The initial campaign to raise awareness of the unique value of this Palouse Prairie remnant and to develop community partnerships has been met with enthusiasm. The potential to protect and restore this prairie site makes it a valuable and practical part of WSU's educational mission and our commitment to sustainability practices.