# Protecting Nature's Essential Service The Xerces Society's Pollinator Conservation Program

Pollinators are an essential component of a healthy envi-ronment.

Changes in our landscapes have led to declines in bees, butterflies, and other pollinating insects.

The Xerces Society is working with land managers, agency staff, policy makers, and researchers to increase understanding and take action to protect these vital animals and their habitat.



The Xerces Society works to protect the pollinators that are essential for crops and wildflowers.

The Xerces Society for Invertebrate Conservation is an international nonprofit organization named after the now-extinct Xerces blue butterfly, the first butterfly documented to go extinct in North America as a result of human activities. Founded in 1971, the Society is at the forefront of invertebrate protection worldwide, harnessing the knowledge of scientists and the enthusiasm of citizens to implement conservation programs.

The Xerces Society's Pollinator Conservation Program offers practical advice and technical support on habitat management for native pollinator insects. Since its' inception in 1996, the Program has protected at-risk bumble bees, successfully advocated for new conservation provisions in the Farm Bill, and trained thousands of farmers, gardeners, educators, and land managers to protect and manage pollinator habitat.

## **Key Accomplishments**

- Successfully advocated for the inclusion of specific pollinator conservation provisions in the 2008 Farm Bill, including \$20 million in research funds, and the mandatory inclusion of pollinator habitat in USDA-administered conservation programs.
- Protected and restored tens-of-thousands of acres of pollinator habitat in agricultural lands nationwide, including more than 11,000 acres of wildflowers and 57 miles of bee-friendly native tree and shrub hedgerows in California alone.
- Trained more than 10,000 farmers and agricultural agency staff on how to restore pollinator habitat at hundreds of workshops across the country.
- Conducted ground-breaking research through partnerships with the University of California Berkeley, Penn State University, Rutgers University, and the University of Wisconsin's Center for Integrated Agricultural Systems.
- Developed a *Red List of North American Pollinator Insects* to document current information on the ecology, distribution, and conservation of at-risk native bees and butterflies.
- Authored and provided feedback on management plans for pollinators to the Forest Service, the Bureau of Land Management, and many other federal, state, and municipal agencies.



The Xerces Society for Invertebrate Conservation

www.xerces.org

### **Program Expertise**

The Xerces Society's Pollinator Conservation Program employs five staff scientists and several consulting specialists. Collectively, these scientists have more than 50 years of experience in the management and ecology of pollinators, as well as the habitat restoration techniques that support those insects. Our staff have graduate-level training in ento-

mology, horticulture, ecology, and teaching, and come to the Xerces Society with professional backgrounds in restoration ecology, land management, crop consulting, commercial beekeeping, native seed production, outreach and education, policy development, advocacy, and academic research.

### **Protecting Pollinators in All Landscapes**

Pollination is needed by plant communities everywhere. Accordingly, the Society works with people from all walks of life to promote awareness of and action to protect pollinating insects. We have collaborated with farmers, ranchers, park managers, golf course superintendents, natural area biologists, gardeners, landscape architects, roadside managers, and agency staff at the federal, state, and city levels to create habitat. We also work with policy makers to influence the regulatory framework and secure funding for research and conservation.

A major component of the program's work focuses on conserving pollinators on farms. By demonstrating how native bees can improve crop production we engage farmers, increasing support for natural habitat within farm systems, and encouraging sustainable farming practices that benefit other wildlife.

The 2008 Farm Bill includes several provisions mandating the inclusion of pollinator habitat in most USDA-

administered conservation programs. The USDA Natural Resources Conservation Service, has established a joint, National Pollinator Technical Support position with the Xerces Society to ensure this mandate is implemented. In this role, we provide the agency with advice and support on the design, creation, and protection of pollinator habitat on farms, including drafting technical notes and training agency staff in over 35 states.

The Society's scientists also work with managers of natural areas, suburban parks, and roadsides, as well as gardeners, to reduce pesticide use and create habitat. Our pollinator staff have developed a range of targeted information materials—including conservation guidelines for farms, parks, golf courses, natural areas, and roadsides—and coauthored the *Pollinator Conservation Handbook*.

The Xerces Society maintains an online Pollinator Conservation Resource Center that provides a comprehensive, web-based source of pollinator conservation information.

#### At-Risk Bumble Bees

In the late 1990s, bee biologists started to notice a dramatic decline in several wild bumble bee species. The Society launched a special initiative, working with Dr. Robbin Thorp of the University of California at Davis to publish A Status Review of Three Formerly Common Species of Bumble Bee in the Subgenus Bombus. The status review documented steep declines in these species—and concluded that two of them teeter on the brink of extinction.

In early 2010, the Society led a coalition of conservation organizations to submit a petition to the USDA Animal and Plant Health Inspection Service requesting new regulations to protect wild bumble bees from disease. Specifically, that the movement of commercially-reared bumble bees outside of their native ranges is prohibited and that within their native ranges, bumble bees are certified as disease-free prior to movement.

## **Butterfly Conservation**

The Xerces Society has worked to protect at-risk butterflies since our founding in 1971. We use a combined approach of applied research, advocacy, outreach, and collaboration with state and federal agencies, including through the U.S. Endangered Species Act listing process. Our scientists are nationally recognized, especially for their work with butterflies of the prairies of the Pacific Northwest.

The Xerces Society is a steering committee member of

the Monarch Butterfly Joint Venture, a national partnership of federal and state agencies, nongovernmental organizations, and academic programs that are working together to protect the monarch migration. We are also developing an assessment and management plan for monarch overwintering sites in California, and working to increase the supply of seeds for locally native milkweed for habitat restoration in Southern and Southwestern states.

## For more information, visit: www.xerces.org/pollinator-conservation/