I hope that this Update shows you that Xerces staff are making headway on several fronts—expanding habitat, reducing pesticides, protecting freshwater mussels, understanding declining species, educating landowners, building support for insect conservation—but more is needed, and you can help!

Insect conservation is something that can be done in small spaces, and the seemingly insignificant actions of individuals will have a direct benefit for butterflies, bees, and the many other species that enrich our lives. With spring approaching, this is a great time to take stock and think about what we each can do in our community.

Thank you for being part of the Xerces family—and for everything you do to help the “little things that run the world.”

— Matthew Shepherd, Communications Director

“
It is not enough to understand the natural world; the point is to defend and preserve it.
”

— Edward Abbey, naturalist and author

Bee Better Certified: Sran Family Orchards, the world’s largest grower of organic almonds, is also now the first grower to become Bee Better Certified! Jason Hickman and his team at Sran’s orchards in California’s San Joaquin Valley have planted miles of hedges, which create nearly 24 acres of permanent pollinator habitat, and 116 acres of flowering understory plantings between rows of almond trees. “By being Bee Better Certified we are assured that we are being guided by the highest standards of the very best possible program in place for bees’ future,” said Hickman. (Photo: Mason bee on almond bloom, by Derek Artz, USDA–ARS.)

Connect, learn, discover

Our website contains a wealth of information about our work and what you can do to help invertebrates. Articles and updates are posted to our blog and you can sign up for our e-newsletter. You can also connect with us on Facebook, Instagram, and Twitter!

www.xerces.org
Unblinded by Science

The Xerces Society is well-known for its publications, trainings, and for the acres of habitat our staff has worked to protect and restore. What is often less visible is the scientific work that underpins these efforts. Nearly two-thirds of our staff are scientists with diverse backgrounds and expertise, many of whom are actively contributing to the body of knowledge that supports invertebrate conservation.

Conservation biologists Emma Pelton, Emilie Blevins, and Sarina Jepsen helped author peer-reviewed studies published in fall of 2017. Emma’s work concerned the status of monarch butterflies in the western U.S., and Emilie’s and Sarina’s the status of freshwater mussels from Alaska to Mexico. The projects were done with research partners at universities and agencies, pulling together data from across several decades and multiple sources to enable a clear assessment of long-term population declines.

The Xerces Society has been a leader in developing best practices for establishing habitat on farms and other working lands, but just as important is understanding the efficacy of this work and its impact on supporting pollinators. Eric Lee-Mäder, of our pollinator program, recently co-authored a study which is the first to evaluate habitat created to recover the endangered Karner blue butterfly through the USDA Conservation Reserve Program. The assessment found that such habitat may be suitable for recovering the species, and provides straightforward recommendations on how these habitats can better meet the needs of the Karner blue and other sensitive butterflies.

In the newly published Encyclopedia of the Anthropocene, Vol. 2, Xerces’ Executive Director Scott Hoffman Black contributed a chapter entitled “Insects and Climate Change: Variable Responses Will Lead to Climate Winners and Losers.” Drawing upon peer-reviewed research, Scott reveals how changing temperatures will affect insect populations.

Our staff’s ongoing engagement with research partners in many institutions allows us to ensure that our conservation work is evidence-based and builds our position as a trusted source of conservation guidance. As always, this work is made possible through your support. Together, we can conduct the science-based conservation work that leads to meaningful outcomes.

Working from coast to coast

From left to right: Surveying for rare butterflies in Oregon; a training day in Iowa; new prairie in Kentucky; pollinator strip in New Jersey.

Floater mussels (Anodonta sp.) are found in water bodies with muddy or sandy sediment. A recently published study assessed the health of their populations in western North America. (Photo: Roger Tabor, USFWS.)
IMPACT

Creating Lasting Change

The most newsworthy event of 2017 resulting from Xerces work was undoubtedly the addition of the rusty patched bumble bee to the US endangered species list. This action resulted in over 1,500 media articles that reached hundreds of millions of people. While it’s lovely to see an insect getting such attention, a great deal of work happens without such fanfare. Thanks to the ongoing support of our donors—individuals, foundations, agencies, companies—Xerces’ conservation team draws together experts in farming, teaching, native plant restoration, and endangered species conservation—and it continues to grow. A partnership between General Mills and the USDA Natural Resources Conservation Service allowed us to hire a half dozen pollinator conservation specialists last year. The new staff are based in states from California to Maine, working daily with farmers and agency staff to protect pollinators.

Our work with farmers has created expansive networks of wildflower field borders, hedgerows, and flowering cover-crop systems that supply an abundance of food for bees and other pollinators as well as support other beneficial insects that naturally suppress pests and provide climate-resilient migration corridors for wildlife. Almost 680,000 acres of habitat have been restored or protected on U.S. farmland thanks to Xerces efforts over recent years, with thousands more in development.

We also work with individuals and organizations well beyond farms. We have helped 23 local communities pass policies that protect pollinators from neonicotinoid insecticides. Through workshops, field days, conferences, and invited talks, we connect with thousands of people across the country each year, sharing information about protection and conservation of invertebrates in all landscapes, from remote mountains to urban creeks and suburban gardens. In the past year, we have published best management practices for protecting freshwater mussel during construction projects, conservation guides to managing monarch overwintering sites in California and to growing and using native thistles, and numerous fact sheets giving advice on plant selection for pollinators and organic site preparation methods.

This is only possible due to your generosity. Thank you.
Winter-blooming plants help bees overwinter in your yard

Male willow plants, maples, apple, crabapple, native cherry. “I’d start with these shrubs,” said Mace Vaughan, pollinator program director for The Xerces Society for Invertebrate Conservation in Portland, Oregon. “Native plants selected to feed bees are definitely part of the solution.”

A different dimension of loss: inside the great insect die-off

Sarina Jepsen is the director of endangered species and aquatic conservation at the Xerces Society, a Portland, Oregon-based non-profit focusing on invertebrates. She told me that for insects, “often small patches of land can make a huge difference,” unlike what is needed for, say, wolf or tiger conservation. “We don’t necessarily need hundreds of thousands of acres to make a difference with these species.”

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Count marks sharp drop in monarch butterflies wintering in California

The latest tally of 200,000 monarchs in forested groves in California’s central coast has dropped from the 1.2 million counted two decades ago, indicating the number of butterflies found west of the Rocky Mountains, or the so-called western population, continues to sharply decline, the Xerces Society for Invertebrate Conservation said in a report.