



Xerces Update

Donor Newsletter of the Xerces Society

September 2016

Dear Friends,

With summer winding down we hope you ventured out on nature walks, or relaxed in your garden to enjoy the beauty of the natural world. For invertebrate lovers, summer is a wonderful time to observe your favorite animals. It is a time when dragonflies hunt for prey around pond edges, butterflies nectar on prairie flowers, and tiger beetles zip along coastal dunes—or a lady beetle might simply sun itself in your garden.

As nature surrounds us, it is important to reflect on why these creatures are so important to you and to the entire ecosystem. It is a time to think forward and ask ourselves what we can do to help ensure their survival in this dynamic world. Because of your support and your passion for invertebrates, these animals remain the focus of our everyday attention here at Xerces. Your confidence in our work gives this movement the strength it needs to grow, evolve, and remain focused on the right path. Thank you for all of this.

“When one tugs at a single thing in nature he finds it attached to the rest of the world.”

– John Muir



Working in the shadow of construction equipment, Xerces Society scientists teamed up with volunteers from Portland, Oregon's Crystal Springs Partnership to rescue nearly 3,500 freshwater mussels from a stretch of Crystal Springs Creek that would be disturbed by replacement of a culvert under a road. The creek bed was surveyed and mussels carefully lifted out and moved to a safe section of the creek. Freshwater mussels are one of the most at-risk groups of animals in North America, with 71% of species considered endangered, threatened, or of special concern. (Photo: The Xerces Society/Justin Wheeler.)



Connect, learn, discover

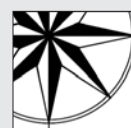
Our website contains a wealth of information about our work and what you can do to help invertebrates. Articles and updates are posted to our blog and you can sign up for our e-newsletter. You can also connect with us on Facebook, Twitter, and now Instagram too!

xerces.org

628 NE Broadway, Suite 200
Portland, OR 97232

(855) 232-6639

xerces.org



★★★★
CHARITY NAVIGATOR
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Annual monarch count reveals long-term declines

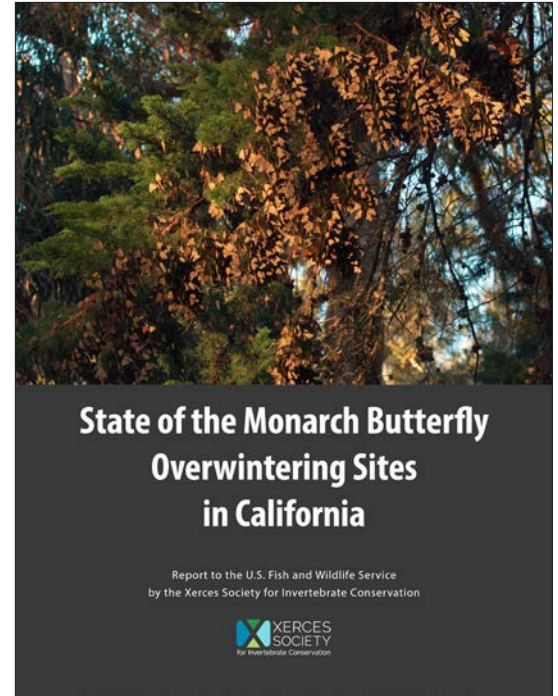
A new report, *State of the Monarch Butterfly Overwintering Sites in California*, released by the Xerces Society shows that in less than two decades the number of monarchs which overwinter along the California coast declined by an alarming 74%. This significant loss of butterflies mirrors the troubling trend seen in monarchs in central Mexico in recent years.

In addition, the report presents a list of the 50 monarch overwintering sites in California that are most in need of conservation attention, so that land managers and policy makers can make the best use of limited conservation resources. The report also identifies important knowledge gaps about monarchs in the West and identifies conservation issues and general management recommendations for overwintering groves.

Dozens of overwintering sites in California have been lost in previous decades to housing developments; many sites continue to be threatened by encroaching development. Grove senescence, pests, and disease, as well as a lack of active management, have degraded the delicate micro-habitat monarchs require for overwintering at many additional sites. Together, these stressors put monarchs overwintering on the coast at risk.

The report was based on data collected since 1997 by volunteers from the Xerces Society's annual Western Monarch Thanksgiving Count (WMTC), who track the California overwintering population size and habitat conditions each fall during a three-week period centered on Thanksgiving. The WMTC, now led by the Xerces Society and Mia Monroe, is the longest-running effort to monitor overwintering monarchs in California.

The report was completed with funding from the US Fish and Wildlife Service and Xerces Society members. You can download the report at <http://bit.ly/29vMmSx>



We want you to be involved—and you are!

This spring we polled our donors to find out how our work inspires you to initiate change. The good news is that many of you have made conservation a priority in your everyday lives, and we greatly appreciate your efforts. We learned that...

97%

of you have read Xerces publications

67%

of you have applied Xerces conservation recommendations to your yard, farm, or community

46%

of you have participated in Xerces citizen science projects

If you haven't had a chance to get involved yet or want to do more, please visit xerces.org, where you can find useful tips on how to protect invertebrates in your community, download all of our conservation guidelines and regional plant lists for free, and learn how to participate in our citizen science programs.

A huge *THANK YOU*, for all that you do.

MONTHLY GIVING

No renewal notices,
convenient payment options,
a continued connection

...and our deepest gratitude.

Join the movement at
xerces.org/donate



Banded alder borer, a species of long-horned beetle native to western North America. (Photo: The Xerces Society/Matthew Shepherd.)

NATURAL HISTORY NOTES

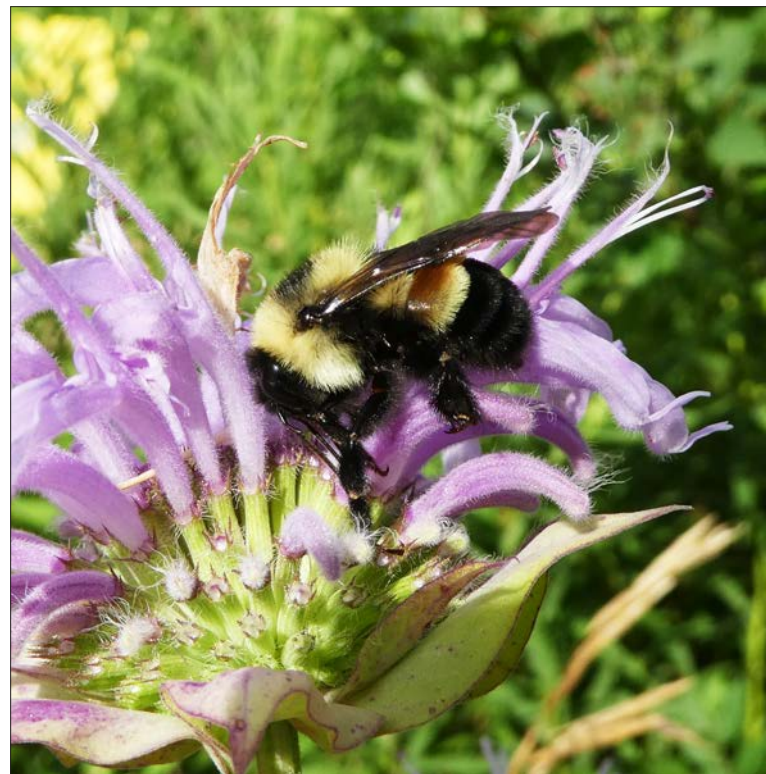
Rare bumble bees found in Minnesota

Known to Dakota people as Oheyawahi, “the hill much visited,” Pilot Knob Hill in Mendota Heights, Minnesota, lived up to its name when citizen scientists and eager volunteers gathered on the hill in early July to hunt for some rare Minnesota species. Sarah Foltz Jordan of the Xerces Society, Elaine Evans of the University of Minnesota Bee Lab, and Great River Greening ecologists led volunteers on a “catch and release” bumble bee survey. Designed to monitor the abundance, diversity, and foraging patterns of bumble bees—including searches for the rusty patched bumble bee and other rare Minnesota species—this ongoing monitoring project is helping the Xerces Society and Great River Greening evaluate the tie-in between restoration practices and pollinator management. Training citizens in pollinator conservation is another key objective of this project. The project is made possible with support from the Minnesota Environment and Natural Resources Trust Fund.

More than one hundred bumble bees comprising six different species were recorded during the survey. The vast majority of bees were found visiting wild bergamot (*Monarda fistulosa*), a native flower in the mint family that is well known for its attractiveness to pollinators, especially bumble bees.

The most abundant bumble bees were the two-spotted bumble bee (*Bombus bimaculatus*) and the black and gold bumble bee (*Bombus auricomus*), but most exciting were the American bumble bee (*Bombus pensylvanicus*) and the rusty patched bumble bee (*Bombus affinis*). Neither of these had previously been documented at this site, and both are imperiled species that have recently suffered rapid declines. The presence of these species at the Pilot Knob Hill restoration site is of great significance to both the conservation community as they assess the distribution and needs of these species, and to the site’s managers as they make decisions on the ground to best protect and benefit the wildlife at the site.

A rusty patched bumble bee on wild bergamot. Though only one of these bees was found during the Knob Hill survey, the rarity of the species made it an especially significant find. (Photo: The Xerces Society/Sarah Foltz Jordan.)



Your donor newsletter from the Xerces Society!

A Ghost in the Making: Searching for the Rusty- Patched Bumble Bee



Photo © Clay Bolt

"A wonderful and poignant short film
about our disappearing bumble bees . . .
a must-see."

Dave Goulson, author of *A Sting in the Tale*

Watch it online at
rustypatched.com/the-film

Xerces in the media

The Washington Post, 5/11/2016

A Common Pesticide may be a Menace to Pollinators

"In our home gardens, we have an amazing array of beneficial insects — lacewings, assassin bugs, for example — that help us maintain pest levels," said Aimee Code, pesticide program director at the Xerces Society for Invertebrate Conservation. "Neonics can be extremely harmful, particularly because they are so long-lived and toxic."

SF Gate–San Francisco Chronicle, 4/19/2016

Gardeners can Help Protect Butterfly Populations

"But the situation isn't hopeless," says Scott Hoffman Black, executive director of the Xerces Society for Invertebrate Conservation, in Portland, Oregon. "Anybody — gardeners or butterfly lovers — can make an oasis in their landscape for these important animals."

Detroit Free Press, 5/11/2016

Declining Wild Bee Populations Threaten State's Fruit Industry

"The rusty patch bumble bee is missing from 87% of what was historically its habitat, and only small pockets of the bees in the Midwest remain," said Rich Hatfield, a senior conservation biologist with Xerces.

