

A community to which we belong

My wife, Sue, and I just returned from an event we have been a part of for over five years — helping with the annual butterfly survey at Lava Beds National Monument in Northern California, just south of Klamath Falls.

In fact, it was Sue who sparked the interest in keeping track of the butterflies of Lava Beds. We were regular visitors there when she obtained monarch butterfly tags from the University of Toronto back in the early 1990s. Our kids were just the right age to start working on butterflies, and that longlegged eldest son of ours, Reuben, could outrun and net the fastest butterfly on the monument.

In those days, Lava Beds was THE place to visit to see monarchs. The native narrow leaf milkweed on the monument and adjacent U.S. Fish and Wildlife Service refuge was/is the perfect food source for the monarch caterpillars, and native wildflowers for nectaring were very abundant. Most winters delivered plenty of water in the form of snow, and in summer, thunderstorms added their moisture.

Years later a lightning storm hit the monument resulting in a wildfire that destroyed much of the monarch breeding habitat. It took several years for the milkweed to regenerate. In spite of the recovery, many of the plants with larvae on them along the monument roads were being mowed down for "weed removal."

That led the butterfly people to plead with the road maintenance crew to stop mowing alongside the pavement. The summer rain runoff from the pavement was supplying the needed moisture for the milkweed that monarchs were utilizing to raise new butterflies.

However, even with the cooperation of the road maintenance crew to raise the sickle bar and leave the milkweed alone, the monarchs did not recover their numbers like they were in the old days.

Just this year, after finding no monarchs on the monument during the annual survey, I hit the panic button; "Houston, we have a problem!"

Thank goodness, a friend who is an exceptional entomologist, and once a member of the Xerces Society staff (an invertebrate conservation organization), was on the survey. She opened the door that provided what I believe is the answer to why no monarchs at Lava Beds this year, and why the population never regained its numbers after the wildfire of summer 2008: the monarch breeding habitat in coastal and central California is going downhill and the native milkweed is dying off, halting the monarchs from producing butterflies to continue their northern migration in spring.

Monarchs' annual migration is a widely known phenomenon — particularly the eastern populations that fly to Mexico and back north to Canada. In the western U.S., over one million monarchs from Arizona to Washington and north into British Columbia fly to more than two hundred groves along the California coast each fall.

These butterflies mate, then leave their overwintering sites in spring, and fly eastward to California's Central Valley, the Sierra Nevada foothills and north to Oregon, Washington, and British Columbia in search of milkweed on which to lay their eggs.

However, past and recent annual counts of overwintering monarchs on the California coast have revealed significant population declines. For example, in 1997, Natural Bridges State Beach near Santa Cruz had an estimated 120,000 monarchs. In 2009, only 1,300 butterflies overwintered. This past season showed an alarming loss of 95 percent of overwintering California monarchs.

This loss is reportedly due to urban and agricultural development and the application of herbicides in croplands, pastures, and roadsides. The protection and restoration of native plant communities in these areas is critical to reversing this trend.

We must place stronger controls on the use of herbicides, especially those neonicotinoids that are so deadly to every living invertebrate. Also set aside all the native milkweed locations as monarch conservation areas and make sure there's enough water allocated to their survival.

As an example, the State of Iowa has begun the Iowa Monarch Conservation Strategy, which seeks to establish approximately 480,00 to 830,000 acres of monarch habitat by 2038. Their habitat goals were released on March 12, 2018 by the Mid-America Monarch

Conservation Strategy which is made up of a group of 40 conservation organizations. If successful, Iowa's strategy estimates 127 to 188 million new milkweed plants will be established throughout the state in the next 10 years.

Here in Central Oregon, many people, schools and groups have created monarch waystations that have solid plantings of milkweed and native wildflowers for nectaring. Watching how these conservation areas operate has shown positive proof that monarchs are prospering in their use. But with very few monarchs getting past Central California's empty milkweed patches our waystations will have few respondents to their invitation.

One of the heroes of my childhood and still very important to my philosophy of living on this beautiful planet, Earth — our home away from home — is Aldo Leopold, the man who advocated protecting the land all

PHOTO BY JIM ANDER

Monarch butterflies migrating through Lava Beds National Monument.

his professional life.

His book, "A Sand County Almanac," opened up the world to me and got me to thinking far beyond my wife's kitchen garden and my honeybees. Water for life became so important to me I began to look at weather and water resources more deeply.

Leopold reminded us of what ecosystem diversity is all about when he said: "A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise."

And, to me, most important of all, he said: "We abuse land because we see it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."

It is way past time to start doing that.







