

SPRING
2026
Edition 46:1



Tortoise Tracks

Newsletter

ANOTHER SUCCESSFUL SPRING WORK PARTY

Volunteers are the lifeblood of the DTPC, and the spring and fall work parties at the Desert Tortoise Research Natural Area are where our volunteers really shine. Saturday, March 14, was a sunny, beautiful day, neither too hot nor too windy, with plenty of wildflowers still blooming. An enthusiastic group of almost twenty hardy folks showed up, kitted out with sunscreen, hats, and work gloves (and fortified with chocolate chip cookies), joined by DTPC board members and employees and friends from the Bureau of Land Management.

Volunteers hand-pulled and bagged hundreds (thousands?) of red brome plants, an unfortunately widespread Mediterranean invasive grass that crowds out native plants, causes mouth sores in tortoises that eat its sharp awns (the bristle-like outgrowths on the seed heads), and dries to become a dangerous fire hazard. Others worked on replacing/repositioning signage along our border fences, and as a bonus got to see (and hear) a Mojave rattlesnake! A huge thank you to all who came out and helped get our 2026 spring naturalist season off to a fantastic start.



Red brome (*Bromus madritensis*)

Photo: Tom Astle



Mojave rattlesnake (*Crotalus scutulatus*)
Heavily-cropped photo taken from a safe distance!

Photo: Liam Connelly

ANNUAL MEETING RECAP

Hosted on Zoom by outgoing president Roger Dale on January 24, 2026, the DTPC annual meeting lasted an as-scheduled two hours (virtually to the minute) of DTPC news, presentations, financial updates, and member questions. Present were members of the board; Jun Lee, DTPC Director of Land Acquisition; Philip DeSenze, Field Manager, BLM Ridgecrest Field Office; plus guest speakers, award recipients, and of course many DTPC members.

The meeting featured two guest speakers. Tim Shields of Ornilogic, LLC gave a fascinating presentation on raven control efforts, highlighting several ingenious technologies he and his colleagues have pioneered, tested, and now use to great success. Louis Sahagún, former Los Angeles Times writer and longtime tortoise conservation advocate, gave a profound and touching talk on the shifting baselines he has witnessed in southern California's human communities and in the state of environmental conservation over time.

Louis Sahagún was also the recipient of the Golden Tortoise Award, the DTPC's highest honor. He received an engraved plaque and a framed print of a desert tortoise by artist Celia Howell.

Four people received recognition for their contributions to the DTPC, and were awarded framed Celia Howell prints with small plates attached to them with their names and the award date:

- *Steven Asbury* for helping with the updated DTPC brochures
- *Steve Davis* for his many years of service as our bookkeeper
- *Tom Meader* of PIP Printing for their many years of service as our printers
- *Priscilla Navarro*, valued partner at BLM Ridgecrest

There have since been a few changes to the board, which were ratified immediately after the annual meeting. After many years as Treasurer, Laura Stockton has moved into the role of Assistant Treasurer; previous President Roger Dale is now Vice President and Treasurer; Larry Nelson is now Secretary, replacing departing board member Rachel Woodard; and Tom Astle takes over the role of President.

For those of you who missed it, a recording of the Zoom meeting is available for viewing on our website at <https://tortoise-tracks.org/2026-annual-meeting/>

JUDGE ISSUES OHV PLAN DECISION

Since 2003 the Center for Biological Diversity has sought improved protection of the desert tortoise and desert resources through litigation with the U.S. Bureau of Land Management (BLM) over failure to protect the desert tortoise and other desert resources from off-highway vehicles (OHV). Between 2004 and 2014, tortoise populations declined ~50% in critical habitat in the western Mojave Desert. Additionally, designated critical habitat continued to deteriorate from authorized and unauthorized OHV use on dirt roads, trails, routes, and by cross-country travel. In 2019, the BLM issued the West Mojave Route Network Plan with over 6,000 roads, routes, and trails for OHV use; a substantial amount of the vehicle use was in designated critical habitat for the tortoise and the endangered Lane Mountain milkvetch. This new plan did nothing to protect the tortoise in critical habitat, an additional blow to the tortoise and Lane Mountain milkvetch populations.

(Continued on page 3)

OHV PLAN DECISION (continued from page 2)

In 2021, the Center again pursued litigation against the BLM and the U.S. Fish and Wildlife Service (USFWS) in association with the Sierra Club, Desert Survivors, California Native Plant Society, Defenders of Wildlife, and Desert Tortoise Council. On January 23, 2026, the Judge issued rulings for the tortoise and the Lane Mountain milkvetch. The Judge found that the BLM and USFWS had violated the Endangered Species Act; the BLM also had violated the Federal Land Planning and Management Act and directed that critical habitat in the West Mojave be closed to OHVs and recreational use. The findings are specific to the Fremont-Kramer, Ord-Rodman, and Superior-Cronese critical habitat units. The northern part of the DTRNA is within the Fremont-Kramer critical habitat, and the Pilot Knob holdings are in Superior-Cronese critical habitat units. The ruling is very positive for the desert tortoise and Lane Mountain milkvetch and has high potential to help recovery efforts, if enforced.

SPECIES SPOTLIGHT:**Crotch's Bumblebee (*Bombus crotchii*)**

by Madison Eklund

This newsletter we're debuting "Species Spotlight," a new and (space permitting) regular column in which we plan to profile some of the many creatures that share a home with desert tortoises. Starting us off is an endangered insect, Crotch's bumblebee (*Bombus crotchii*):



Male Crotch's Bumblebee on Creosote Bush (males are told by their larger eyes, longer antennae, and lack of pollen "baskets" on hind legs).

Photo: Alexia Svedja

Named after entomologist George Robert Crotch, this bumblebee is near-endemic to California, with only a few sightings in Nevada and Mexico, so is also known as the Golden State bumblebee. They frequent grasslands and shrublands, and live in small ground colonies. Crotch's bumblebee tends to use abandoned rodent burrows for their nesting locations. On occasion, they will also use rock or debris piles or cavities in old trees. These bees are

nonmigratory, with mated queens overwintering underground or in leaf litter until spring, when they emerge to found new colonies. While some native bees are specialists only on one or a few plant species, these bumblebees are generalists, visiting many kinds of flowers for nectar and/or pollen, including *Asclepias* (milkweeds), *Chaenactis* (pincushions), *Lupinus* (lupines), *Medicago* (medicks), *Phacelia* (phacelias), *Salvia* (sages), *Clarkia* (clarkia), *Eschscholzia* (poppies), and *Eriogonum* (wild buckwheats).

(Continued on page 4)

SPECIES SPOTLIGHT (continued from page 3)

Bumblebees are important pollinators, especially for the many plants that honeybees (which are non-native, domesticated, European insects) cannot pollinate (in your garden, that includes tomatoes and peppers). The bumblebees' trick is called "buzz pollination." Bumblebees grab hold of flowers and vibrate their flight muscles; the high-frequency "buzz" helps shake loose otherwise firmly-attached pollen.

One of four bumblebee species listed as "Endangered" under the California Endangered Species Act, Crotch's bumblebee is threatened by several anthropogenic (human-caused) issues. Urban sprawl, habitat fragmentation and degradation, climate change (wildfires, droughts, flooding), and agriculture are the most notable threats. Increased use of household and agricultural pesticides, specifically neonicotinoids, has been cited as a major reason for their decline. A 2019 report from the Xerces Society shows a 98% decline in relative abundance of the species over the last decade.

Another issue affecting Crotch's bumblebee conservation is their genetics. All *Bombus* species are haplodiploid – a system of gene inheritance where fertilized eggs become female offspring, and unfertilized eggs become males. This process favors female offspring when times are good, and ensures that an influx of males will hatch when the adult male population is too low to sustain the overall population. However, when habitat is fragmented and overall populations are chronically low for ongoing periods of time, this system leads to higher rates of inbreeding. Queen bees will lay male eggs that will eventually become the only local mate, and their female offspring will continue the inbreeding cycle with their genetic fathers, brothers, and sons. Ensuring adequate habitat and food sources are critical steps to boost bumblebee population numbers – a fact that is a prime example of why the DTRNA is important not only for desert tortoises, but also for other animals within this critical habitat.

Due to the heavy fall rains in 2025 and the good spring conditions so far this year, wildflowers have been abundant at the DTRNA. Our biologists have reported seeing many phacelias, pincushions, and wild buckwheats so far this season, along with other flowering species. Come take a walk on our trails and see if you can spot a Crotch's bumblebee, or possibly some of their favorite food sources!

(NEW) PRESIDENT'S MESSAGE

by Tom Astle

When Roger Dale, then-president of the DTPC, asked me to consider taking over the job of president of the board, I was honored but also surprised. I'd been on the board only a little over a year, and certainly didn't have the deep institutional knowledge and experience of many other board members. But I've been coming to the DTRNA for over three decades; in fact, I remember my very first visit vividly, back in the mid 1990s. After seeing an article about the DTRNA in the Los Angeles Times, my wife and I drove out with our two young children, ages 4 and 1, to see the spring bloom. It was my introduction to what are now my two favorite desert annual flowers (Mojave aster, *Xylorhiza tortifolia*, photo below; and thistle sage, *Salvia carduacea*, photo on page 7), and I especially remember the thrill of photographing (on slide film!) a beautiful sidewinder rattlesnake.

All of this is to say that I have long known the DTRNA to be a special place, and the DTPC to be a special organization. Over the years I've volunteered as much as I could, attending spring and fall work parties, teaching a photography workshop (which I'd love to do again), taking official photos for the DTPC 50th Anniversary event, and eventually joining the board. With help from the wonderful folks on the board and the many other dedicated people who work for and with us, I hope to continue the DTPC's vitally important efforts on behalf of desert tortoises and the amazing flora and fauna that share their habitat.

Bee fly on Mojave aster (*Xylorhiza tortifolia*)

Photo: Tom Astle

THE TIMES THEY ARE A-CHANGIN'

You may have heard the (probably apocryphal) curse that goes, "May you live in interesting times." This year, the desert has had interesting weather, and it remains to be seen what all the impacts are. Desert plants and animals are adapted to a harsh, dry environment with seasonal, intermittent moisture. This year, the western Mojave received a lot of early rain, much of it all at once. The resulting widespread flash flooding caused road washouts and, as mentioned in the last newsletter, damaged fencing and trails in and around the DTRNA.

But beyond the physical damage from the storms, the timing of the rains seems to have affected the timing of the spring bloom. People who live in the desert or visit it frequently have noticed desert flowers appearing ahead of the typical schedule. For example, Joshua trees started blooming in November and December, rather than during their normal season of late February through April. In fact, the Yoder Lab at Cal State Northridge, which studies Joshua tree biology, put out a call to the desert-visiting public to report sightings of early-blooming Joshua trees, to document the phenomenon. They encouraged people to then go back to the same plants to see if the plants had formed fruit, meaning the flowers had been successfully pollinated. Since Joshua tree flowers are pollinated by single specialist moth species, the yucca moth, the presence or absence of fruit could indicate whether or not the moths' emergence was able to synch up with their host plant's unusual bloom period.

(Continued on page 6)

CHANGING TIMES (continued from page 5)

You might think, what's wrong with early rain? It just means we get a nice early spring. The problem is that in many ecosystems, timing is everything. Plants need to bloom at the same time pollinating insects emerge, and insects need to be abundant at the same time birds are raising their young. In a stable climate, in most years that's how it is, and if now and then there's an "off" year, animals and plants can handle the fluctuation. But in a changing climate, off years happen more often. Not all species will be able to thrive during a more erratic new normal.



Joshua tree (*Yucca brevifolia*) flower bud

Photo: Tom Astle

Just as a personal observation, as someone who photographs insects, I noticed that while there were plenty of early flowers, the pollinators I am used to seeing emerge at the same time as those flowers – native bees, flies, beetles, and moths – were not as abundant as in a typical good-bloom year. This could be because some pollinators use cues other than moisture to trigger emergence, such as temperature and day length. In other words, if early rains cause flowers to appear early, but their associated insect pollinators arrive on the "normal" schedule based on day length, it can cause a cascade: fewer plants may get pollinated, meaning plants may produce fewer seeds; when insects do emerge they will find fewer food resources, meaning less insect reproduction; and if there are fewer insects, nesting birds will have less food for their nestlings.

One interesting year does not make a pattern, and (up to a point) desert plants and animals are built to handle the boom-and-bust nature of desert ecosystems. Still, a year like this is a chance to pay attention to the complex relationships among the many species in our local deserts, and the changes that may be happening over the coming years.



Dedicated to the recovery and conservation of the Desert Tortoise (*Gopherus agassizii*) and other rare and endangered species inhabiting the Mojave and western Sonoran deserts.

The Desert Tortoise Preserve Committee, Inc.
Founded 1974

Board of Directors

Tom Astle	President
Roger Dale	Vice President and Treasurer
Laura Stockton	Assistant Treasurer
Larry Nelson	Secretary
Greg Lathrop	Investment Chair
Dr. Kristin Berry	Board Member
Ron Berger	Board Member
Tina Erway	Board Member

Staff

Jun Y. Lee
Director of Land Acquisition

Alexia Svejda
Outreach Coordinator

Tom Astle
Newsletter Editor

Telephone:
(442) 294-4258
Email: dtpc@tortoise-tracks.org
www.tortoise-tracks.org

Tortoise Tracks is published four times a year.



UPCOMING EVENTS AT THE DTRNA

This year, our spring naturalist season runs from March 15 to May 31. We'll have naturalists at the DTRNA every day to give advice, answer questions, and assist with tortoise-spotting when possible. But we're also planning many other events during the season, from guided hikes and wildflower walks to nature journaling, astrophotography, nighttime star parties, and black-lighting for nocturnal insects (aka "mothing").

For up-to-date information and signup links, go to our Eventbrite page <https://www.eventbrite.com/o/desert-tortoise-preserve-committee-108284102681>, or watch our Facebook page or the "Events" page on our website.



Thistle sage (*Salvia carduacea*) and goldfields (*Lasthenia* sp.)

Photo: Tom Astle



Tortoise Tracks

NONPROFIT

U.S. POSTAGE PAID

PRINTMYSTUFF.COM

THE DESERT TORTOISE PRESERVE
COMMITTEE PO BOX 940
RIDGECREST, CALIFORNIA 93556

Address Service Requested

Thank you for being a member!

FOLLOW US ON SOCIAL MEDIA!

www.Facebook.com/DTPC.inc

www.Instagram.com/tortoise_natural_area



If you would prefer to receive **ONLY** an electronic copy,
notify us by email at dtpc@tortoise-tracks.org

DTPC MEMBERSHIP/CONTRIBUTION FORM

1. YES, I want to help save the endangered desert tortoise and its habitat! Here is my tax-deductible **membership** contribution of:

☐ \$40 Individual

☐ \$100 Sponsor

☐ \$400 Patron

☐ \$75 Family

☐ \$200 Benefactor

☐ \$2000 Life/Corporate

2. My membership is current but here is an additional donation of \$_____. Please use it for:

☐ Fencing

☐ Land Acquisition

☐ Where Most Needed

☐ Other:_____

3. I'd like to help you grow the DTPC **Donor Endowment**. Please accept an additional donation of:

☐ \$250

☐ \$1,000

☐ \$5,000

☐ \$500

☐ \$2,500

☐ Other \$_____

☐ Marketable Securities (Stock): Contact DTPC Investment Chairperson Greg Lathrop at
2redgrey@gmail.com or (415) 637-7187 for assistance

Let's grow the Donor Endowment!

☐ I would like my contribution to remain anonymous

I would like to receive *Tortoise Tracks* **electronically ONLY** ☐
(please include email address); by **mail ONLY** ☐; or **BOTH** ☐

Name:_____

Address:_____

City:_____ State:_____ Zip:_____

Email Address:_____

Please make your check payable to **DTPC** and mail to:

**Desert Tortoise Preserve Committee
PO Box 940
Ridgecrest, CA 93556**

Thank you.

The Desert Tortoise Preserve Committee is an IRS tax-exempt 501(c)
(3) California tax-exempt nonprofit corporation. Contributions and/or annual
membership dues are tax-deductible, to the extent allowable by law.
Contributor information is kept confidential and is not disclosed to third parties.

If you would like to renew your membership or donate online, please visit
www.tortoise-tracks.org