

## DESERT TORTOISE COUNCIL

## NEWSLETTER

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## The Desert Balloon Project

By Danny Williams

Long before casinos illuminated the Las Vegas night sky, desert tortoises slept soundly in the dark. It's quite possible that the tortoise that saw the glow from the first neon light is still walking our desert today. That tortoise isn't alone. Sixteen-year-old Christian Daniels also roams the desert. He is an avid outdoor enthusiast who spends a lot of time watching our native wildlife, especially tortoises.

Christian lives behind his binoculars. Inevitably, while scanning the landscape, a bright reflective glimmer catches his eye. He says this happens "not every now and then, but on every hike and every time I look." That glimmer is from mylar balloons that get stuck in Joshua trees and bushes everywhere. The release of balloons

is common at birthdays and all kinds of celebrations. Christian noticed that the bright colors resemble the native wildflowers, a staple of the desert tortoise diet. When he learned that desert tortoises can confuse the two, he started retrieving the balloons. "I have found a number of tortoise shells where I find the balloons. I've also seen where mylar balloons are dragged into the tortoise burrows." He continued, "I think the balloons also trap water that may attract wildlife."

Christian continued to pick up so many balloons that he thought he better do something to stop the releases. "I wanted to start a Facebook page to inform people not to release balloons in the first place." So, the Desert Balloon Project was born. The posts



*Christian Daniels, founder of The Desert Balloon Project.*

are designed to show the sheer number of balloons that have landed in our desert. They also inform and educate people about the issue. "I post pics of my adopted desert tortoise, Walter, and pics and videos of other tortoises to show people how special they are and why

we need to watch out for them."

To date, Christian has hiked hundreds of miles and picked up thousands of balloons. Even more impressively, he has amassed an army of follow-

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## Letter from the Editor

I hope this New Year's 2022 Issue 46[1] of the Desert Tortoise Council Newsletter finds you warm, comfortable, and brumating—I mean, enjoying the holiday season!

In this issue, you'll find articles showcasing how individuals and organizations are working to educate the public to keep tortoise habitats healthy and intact through a myriad of diverse, impressive efforts.

A feature on our Introductory Course and Field Workshop describes how the Council is moving

forward with an important educational program in changing times, and a two-page bibliography of recent publications gets us up-to-date on relevant publications since Fall 2019.

This issue spotlights Board Member Cristina Jones, who has an extraordinary resume of working to protect our desert ecosystems.

To conclude our final issue of 2021, our back page announcements detail upcoming events, including a grant announcement and 2022 Symposium specifics.

As always, follow us on social media to stay up to date on all things desert tortoise, including Council actions, courses offered, annual symposia, recovery efforts, and more (like our new [job announcement page](#))!

Cheers,

*Halle*

Halle Kohn  
[newsletter@deserttortoise.org](mailto:newsletter@deserttortoise.org)

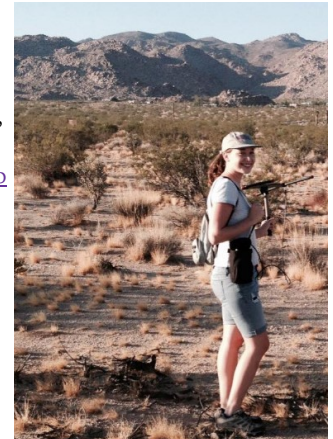


Photo by Paul Delaney

## 20 Years of Commitment to Tortoise and Turtle Conservation

By Rick Hudson, President, [Turtle Survival Alliance](#)

**“Zero turtle extinctions in the 21st century”—a bold pledge by a bold group of conservationists.** Turtle Survival Alliance (TSA) is now in its 20th year of this commitment to the more than 300 tortoise and freshwater turtle species and the six continents on which they reside. Created in 2001 in response to the “Asian Turtle Crisis,” the name given to the rampant and unsustainable harvest of Asian turtles, TSA has since expanded to create a global chelonian conservation network across 13 countries.

During its first four years, TSA operated as a task force for the International Union for Conservation of Nature’s Tortoise and Freshwater Turtle Specialist Group. In 2004, TSA became an independent 501(c) (3) nonprofit, initially with a home base in Texas at the Fort Worth Zoo. With growth also

came the need for a facility to house and provide assurance colonies for some of the world’s most endangered turtles and tortoises. Thus, TSA constructed the Turtle Survival Center, now home to more than 700 specimens, in rural coastal South Carolina.

TSA provides breeding programs, assurance colonies, field research, culturally appropriate conservation initiatives and public outreach, and shares new research and techniques throughout the worldwide turtle and tortoise conservation community. Through collaborations with zoos, aquariums, universities, private turtle enthusiasts, veterinarians, government agencies, and conservation organizations, TSA is widely recognized as a catalyst for turtle conservation, with a reputation for swift and decisive action.



Turtle Survival Alliance continues to be a global force in the effort to protect tortoises and freshwater turtles from their most significant threats. Habitat loss, poaching, and pollution continue to wreak havoc on turtle and tortoise populations worldwide. TSA is committed, now more than ever, to fight for the preservation of these animals. TSA’s work in 2021 demonstrated that.

**This year has been a banner year across multiple Turtle**

**Survival Alliance partnerships for reintroducing turtles and tortoises to the wild.** From India to Madagascar, to Colombia, Belize, and Texas, TSA and our partners were able to further our vision of *Zero Turtle Extinctions* by carefully, thoughtfully, and safely repatriating turtles and tortoises to their wild habitats.

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## *The Desert Balloon Project (continued)*

ers who have picked up the cause and lots of balloons themselves.

“People tell me all the time that they didn’t know releasing balloons could be harmful, and they have stopped letting them go,” he explained. The page attracts an eclectic group of hikers, hunters, off road enthusiasts and all kinds of conservation groups. Christian enjoys receiving pictures when others pick up balloons and he often shares them on his Facebook page. He is proud that The Desert Balloon Project has reached enough people to stop some mass balloon releases.

Christian said he enjoys hiking and picking up balloons more than anything. “I love being out in the desert, there is so much life in the desert. I hike all over and sometimes see horses, deer, elk, coyotes, bobcats, and my favorite: desert

tortoises.” Unfortunately, he also sees lots of trash and abandoned cars. When asked what’s the strangest thing he has found, he recalled “I recently found a mortar shell that the people at the Desert National Wildlife Refuge had to call the Air Force to pick up.”

Christian’s goal is to educate the public on why balloon releases are harmful. “I’ve learned they not only harm wildlife, but the reflective material can cause power outages when they come in contact with power lines and transformers.” Nevada Energy took notice of his efforts and created his educational brochures. “They are awesome people who really care about our community. They even adopted a desert tortoise of their own named Watts. He has an incredible habitat right in the middle of their building!” Heli-



*The colors of the balloons resemble those of native wildflowers.*

um is also a finite resource. “It seems like such a waste to put it in balloons when it is needed in the medical field,” Christian said. The Protectors of Tule Springs asked the Desert Balloon Project to set up a booth at their Pleistocene Palooza. “I was able to talk to people about not releasing balloons and give out our educational brochures. I even brought Walter who was a big hit.” Christian plans to speak to more groups about the project and organize group hikes to experience the desert as he sees it.

What’s next for the Desert Balloon Project? Christian wants to get the attention of legislators to outlaw the mass release of balloons. “I’m always trying to find ways to increase the number of followers and page likes. The more people we have involved, the more likely we can get the attention of our politicians.” Christian was noticed by Congressman Horsford who gave him a certificate of recognition for his environmental work.

The Desert Balloon Project recently posted that they have merchandise that was donated to help get their name out: “We have stickers, water bottles and now these great t-shirts!” The proceeds will help fund educational efforts and to continue their #tiedandinside initiative. Christian wants to continue to partner with other outdoor groups, because “we all have the same goal, we want to protect our environment and the animals in it. We just do it in our own ways, which is so cool!”

Check out the Desert Balloon Project on Facebook at the link below:

<https://www.facebook.com/desertballoonproject/>

Make sure to “like” and “follow” the page and give this young man and the desert tortoises the support they need.

You can also reach Christian by emailing:

[desertballoonproject@gmail.com](mailto:desertballoonproject@gmail.com)





## 20 Years of Commitment to Tortoise and Turtle Conservation (continued)



*An Asian Giant Tortoise. Photo by Dan Roselli*

We have been able to reintroduce turtles to the wild in three primary ways:

**1. Rescuing animals confiscated from illegal wildlife trade, rehabilitating them, and reintroducing them to their native habitat,** like the 1,000 Radiated Tortoises reintroduced to a community-managed forest in southern Madagascar in July, the 27 Alligator Snapping Turtles seized from poachers and returned to several sites in Texas in June after new genetic analysis revealed their home waterways, and the nearly 300 Indian Roofed Turtles and Pink-ringed Tent Turtles flown across India in October to return to the wild in Uttar Pradesh.

**2. Captive breeding and reintroduction of threatened turtles and tortoises,** like TSA's multinational program to breed and release threatened large river turtle (*Batagur*) species across Asia back into the wild, our 10-year partnership with BFREE to

breed Central American River Turtles at the Hicatee Research and Conservation Center in Belize, and our tri-national program in India, Bangladesh, and Myanmar breeding Asian Giant Mountain Tortoises for eventual repatriation.

**3. Protecting wild breeding populations and their nests, headstarting juveniles, and reintroducing headstarted animals to the wild,** like our longstanding partnership in Colombia with Wildlife Conservation Society and local communities to protect Giant South American River Turtles and Magdalena River Turtles along the Meta and Sinú rivers, with thousands protected and released this year.

Among a year of many other highlights for TSA and our partners in 2021, we also developed new programs and projects in Africa and Mexico through partnerships and financial and logis-

tical support, hired a full-time coordinator for a new American turtle program—providing a home for the AZA SAFE program and expanding our focus on native species, particularly those targeted by illegal wildlife trade, and launched construction at our Turtle Survival Center in South Carolina of a new Assurance Colony Expansion facility. Additionally, we witnessed a record-breaking year of reproduction for the critically endangered Burmese Roofed Turtle in Myanmar and assisted in confirming the existence of a female Swinhoei's Giant Softshell Turtle

(*Rafetus*) in Vietnam, the only one now known to exist.

**We owe a debt of gratitude** to all those around the world who not only support our vision but continue to enable TSA to maintain the staff and resources to keep this work going—despite political instability, natural disasters, and climate change—persevering to create solutions for each turtle and tortoise species that are win-wins for both turtles and local communities, ensuring that turtles and tortoises survive far into the future.



*Top: A Radiated Tortoise is inspected. Photo by Rajo Adolphe Landry Andrianiana*

*Bottom: Ping-ringed Tent Turtles. Photo by Shailendra Singh*



# *The New Normal: DTC Introductory Training Programs*

By Dr. Margaret Fusari

In 2020 we offered our first online introductory course, and this year (in 2021) we expanded and offered two complementary programs:

1. Introduction to the Mojave Desert Tortoise: A two session, online lecture course.
2. Field Techniques for the Mojave Desert Tortoise: An onsite, one day, field workshop.

1. For the second year we held an online lecture course in the afternoon of October 29 and the morning of October 30. There were over 130 attendees (agencies, non-profits, environmental businesses, academia, and individuals). Each will receive a letter certifying their attendance and each will provide an online evaluation of the course so that we may continue to improve.

We heard from Dr. Kristin Berry, Dr. Michael Tuma, Dr. Kristina Drake, Dr. Alice Karl, Peter Woodman, Rachel Woodard (via video), Ray Bransfield, and Ed LaRue. They spoke on topics covering tortoise biology, ecology, habitat, diet, threats, approaches to real issues such as translocation, surveying and tortoise fieldwork, working with agencies and working with clients.

For a relaxing interlude we provided a quiz on the first evening, using Kahoots, related to the topics covered on the first day. The prizewinners were Isaac Lord, Jennifer Prado and Tanner Lichty.

We must thank the presenters, Turtle Survival Alliance and David Hedrick for sponsoring and managing the Zoom for us, and Jered Homes, the Director of Education



*Students of the field techniques workshop soak up the knowledge of our volunteer field instructors.*

for the Bamberger Ranch Preserve in Johnson City, Texas, who led us in the world of Kahoots.

2. We revived the field training, formerly given as part of an onsite introductory course, by offering a full day, outdoor only workshop. We held two sessions in Ridgecrest, CA on November 5<sup>th</sup> and 6<sup>th</sup>. Attendees learned how to locate tortoises in the field, and handle, process and protect them during development projects. Each attendee did transects to get a brief taste of just how demanding the work is. The opportunity to interact with some of our most skilled field biologists was probably the most rewarding experience of all.

The field exercises have been led by Peter Woodman for the 30 years of our introductory training program. This year the field instructors were Alice Karl, Rachael Woodard, T.G. Jackson, and Cynthia Furman. They were assisted by Ed LaRue and Joe Probst, who also brought DTC

merchandise for sale. All of them were fully vaccinated and we insisted that all attendees practiced strict Covid protocols including wearing masks, even though they were outdoors.

Change is hard. But this year the Council took advantage of the situation to expand and improve the ways we offer training to people who would add themselves to the ranks of those who believe in and support our mission of protecting the desert tortoise and the desert habitats.

Anyone with comments or questions can direct them to:

[intro-course@deserttortoise.org](mailto:intro-course@deserttortoise.org)



*Demonstrations during the field workshop. Photos by Ed LaRue*

## Recent Publications, Fall 2019-2021

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## Recent Publications, Fall 2019-2021 (continued)

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## Board of Directors Spotlight

### Cristina Jones

Cristina's lifelong interest in reptiles was cultivated through the numerous outdoor adventures throughout Arizona where her parents taught her that nature is wondrous and worthy of study. Her passion for turtles was ignited when she encountered her first Sonoran desert tortoise on a hike at age four – launching her fascination with desert reptiles.

Cristina earned her B.S. in wild-life science and M.S. in wildlife ecology at The University of Arizona, where she evaluated prevalence of *Mycoplasma agassizii* in wild and captive Sonoran desert tortoises in Arizona for her thesis. Cristina held the position of Turtles Project Coordinator with the Arizona Game

and Fish Department from 2006 – 2021 while also leading multiple intra-agency/inter-organizational working groups. She collaborated with turtle biologists and citizen scientists within Partners in Amphibian and Reptile Conservation (PARC) and the Turtle Survival Alliance (TSA) to identify, coordinate, and conduct priority research and implement conservation actions for turtles in Arizona and the southwest.

In 2021, Cristina accepted a position as a Biologist with the US Fish and Wildlife Service within the Southwest Region, where she leads Species Status Assessment Teams to gather, analyze, and report on the best available scientific information for use in making decisions on listing protection

under the Endangered Species Act. Cristina is a co-chair and founding member of Southwest PARC, and a co-founder and co-chair for the PARC Turtle Networking Team.

She joined the DTC Board of Directors in 2014 and chairs the Agency Coordinating Committee and Training Committee. She also serves on the TSA Board and is active on their Field Conservation Committee and is program co-chair for the annual Symposium on Conservation and Biology Tortoises and Freshwater Turtles. Her professional goal is to maintain a position in wildlife conservation and management which utilizes her knowledge, leadership, organizational skills, and enthusiasm to



encourage and promote innovative ideas to assure the survival of viable populations of native turtle species throughout their range.

## Mojave Desert Tortoise Critically Endangered

### Summary of the Literature

In September 2021, the International Union for the Conservation of Nature (IUCN), Tortoise and Freshwater Turtle Specialist Group, published "[Gopherus agassizii, Mojave Desert Tortoise Assessment](#)" (Berry, et al, 2021).



Photo by Corey Mitchell

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	EW	EX

This Assessment concluded that the Mojave desert tortoise is critically endangered "based on population reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis)."

The IUCN ranking scale includes categories from "least concern" to "extinct," as pictured in the image above from their website.

The Assessment considered distribution, population trend for adults and recruitment, life history, and threats, which are numerous. "The majority of desert tortoise populations are currently considered non-viable because of the low density of adults and their existence in isolated and fragmented pieces of habitat." "Many threats are cumulative in nature and interact synergistically with others." The Assessment identified conservation actions needed. Many

were identified in the first recovery plan for the tortoise, released by the U.S. Fish and Wildlife Service in 1994, and prioritized using a methodology in the revised recovery plan, released in 2011. Unfortunately, few have been implemented.

For more information and to access the full assessment, visit the [Mojave Desert Tortoise page on the IUCN website](#).

## Back Page Announcements

### *Request for Proposals: Innovations for Improvement/ Restoration of Desert Tortoise Habitat*

The Desert Tortoise Council announces a request for proposals (RFP) for research projects targeted at developing innovations or methods designed to improve desert tortoise habitat restoration techniques or a habitat restoration effort designed to improve desert tortoise habitat. An

award of \$9,000 is available for the research project or restoration effort. The project must be one year in duration and conducted in the Mojave Desert within the Southern California Edison (SCE) service area (see attached map). Applicants should submit the attached grant request cover form and include a pro-

posal that includes a project description, a detailed budget, professional references, and resumes of key project participants (see checklist). Appropriate projects include, but are not limited to, removal of *Shismus* and *Bromus* grasses, restoration of native forbs and grasses, research on diet use and type by desert tortoises, or other efforts related to improvements

or restoration of desert tortoise habitat. The project should be implemented over the 2021-22 winter growing season. A report of research outcomes must be submitted to the Desert Tortoise Council within 30 days following conclusion of the project.

Proposals must be received (PDF to [grants@deserttortoise.org](mailto:grants@deserttortoise.org)) by January 31, 2022.

## *2022 Annual Symposium Announced*

The Desert Tortoise Council's 47th Annual Symposium will again be a virtual event in 2022 and it will be held on Tuesday and Thursday mornings and Friday afternoons from February 15 through 25, 2022. Registration is now open and we anticipate the 2022 symposium will be

just as enlightening as the 2021 symposium.

Make sure to renew your membership prior to registering for the symposium to get the member discount. If you register for the symposium prior to the end of 2021 without renewing your membership, please remember to

renew your membership when the reminder lands in your email inbox at the end of 2021 so you will be able to keep the member discount for the symposium.

The information about registration, submitting an abstract, becoming a sponsor, and entering photographs in the photo con-

test can be found on the Desert Tortoise Council's webpage. Information about the program will be added after abstracts are received so keep checking back to find out more!

Please visit the [Annual Symposium page](#) for more information.

## Follow the Desert Tortoise Council:



## *Council Mission*

*The Desert Tortoise Council was established in 1975 to promote conservation of the desert tortoise in the deserts of the southwestern United States and Mexico. The Council is a private, non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for desert tortoises in the wild and a commitment to advancing the public's understanding of the species. For the purposes of the Council, desert tortoise includes the species complex in the southwestern United States and in Mexico, currently referred to as *Gopherus agassizii*, *Gopherus morafkai*, and *Gopherus evgoodei*.*

## *Board of Directors & Staff*

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# Back Page Announcements

## *In Gratitude to Our 2021 Symposium Sponsors*

The Desert Tortoise Council would like to extend our gratitude to those people and organizations who partner with us and sponsor our symposium year after year. We could not do this important work without you.

**It is not too late to sponsor**

**the 2022 symposium!** Please consider sponsoring the annual Symposium of the Desert Tortoise Council. This one-time donation will go directly to defraying the costs of the 47th Annual Symposium.

For additional information on sponsorship and to download the

sponsorship form visit the [sponsorship page on our website](#). On this page you can also find our nonprofit partners.

Thank you to those who sponsored our 2021 symposium, whose organizations and corresponding websites have been linked below to conclude this

issue.

Your generous donations, sponsorships, and partnerships are integral in every way to making this world more habitable, wonderful, and rich with biodiversity for future generations.

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