

Dr. Kristin H. Berry. Photo by Tom Astle Photography.

n 1971, the Division of Highways

(later Caltrans) asked me to help move tortoises from the path of construction for widening of Highway 58. They were not interested in fencing. To determine where to place the translocated tortoises, I reviewed land ownership patterns in the western Mojave Desert, where tortoises were then quite common. I was surprised and disappointed to learn that no area was free of sheep and cattle grazing, mining, and off-road vehicle recreation.

I followed by asking the major land administrator, the U.S. Bureau of Land Management (BLM), specifically Lou Boll, District Manager for this part of the desert and the State Director, J. R. Penny, to establish a preserve for the desert tortoise in the western Mojave Desert, free of livestock grazing, mining, and off-road use. With the support of academicians, non-profit organizations, and individual citizens, the BLM placed a desert tortoise preserve in a 1973 management plan for recreation vehicles.

After that success with the BLM, I started the Desert Tortoise Preserve Committee with several like-minded people and we continued to press forward with proposals for protective fencing, land acquisition of inholdings, and facilities for visitor enjoyment and education. That objective was met partially in 1980, with the formal Congressional designation of

Reflections: Past and Present

Remarks presented by Dr. Kristin H. Berry at the DTRNA 50th Anniversary Celebration on 25 March 2023

a fenced Desert Tortoise Research Natural Area, a place without sheep grazing, vehicle use, and mining.

This is truly a wonderful area, on the far western edge of the Mojave Desert, an area where desert meets the floras of the Sierra Nevada, southern Central Valley, Great Basin, northern and western Mojave, an area that will persist for a long time because of higher rainfall patterns compared with some other parts of critical habitat for the tortoise.

The DTRNA stands as a showcase for continuing government and non-profit partnerships and a success in conserving wildlife habitat, tortoises, and other species. It is also a showcase for studies and research, for students seeking masters and doctoral degrees, and post-doc research.

Here, several critical issues were identified and addressed: Tom Campbell identified hyper-predation of raven populations more than 40 years ago. Upper respiratory tract disease was first observed, and Drs. Elliot Jacobson and Mary Brown followed by identifying 2 species of *Mycoplasma*. The discovery of this disease set in motion the first research on health of desert tortoises and epidemiology of disease.

Dr. Ken Nagy, who is here today, and his students (Brian Henen, Chuck Peter Peterson, and Ian Wallis) accomplished remarkable work with Dr. Mary Christopher, research that set a pattern for turtles across the globe. Research comparing abundance of lizard, bird, small mammals, plants, and seed banks inside and outside the protective fence were undertaken by Dr. Matt Brooks, and preferences of tortoises for specific plant species by Dr. Bryan Jennings.

My publications and the papers of Matt Brooks have shown that fencing is essential in this part of the desert to protect wildlife habitat, tortoises, and other species from human activities. We found that densities of adults inside the Natural Area were on an improving trend compared with 2002, after the epidemic of upper respiratory tract disease, and that densities inside were 2.5 times higher than outside. Importantly, densities of adults were 2.3 to 5.5 times higher than in 16 of the 17 TCAs or critical habitat units within the geographic range.

I want to recognize Peter Woodman, who worked here 50 years ago and Tim Shields' efforts on the surveys beginning in 1979, Laura Stockton, whose most recent accomplishment was leadership on the new panels for the kiosk. For Jun Lee's long persistence of >30 years in management, real estate, and legal matters, Roger Dale for many years of service and for returning, Greg Lathrop for his foresight to establish an endowment, Ron Berger, who has served many years as President, and I could go on to tell you about Rachel Woodard, Larry Nelson, Steve and Marlene Ishii, Becky Jones, Ed LaRue, Jane McEwan, and so many others.

Some of the finest people I know are associated with the Committee and have provided support over the years. That could be said for BLM employees too. Each of us has gained immeasurably through the relationships and being here. Mercy Vaughan wrote last week that being a Naturalist in 1993 set her on a path to focus on global conservation efforts for chelonians.

Lastly this place helps to renew one's spirit, to see the beauties of the desert and the views. Here, regardless of time of year, is to think of improving tortoise populations, the paper Mary Logan, a former Preserve Manager, published on the Mohave ground squirrel, the outstanding work of Denise La Berteaux and her finding of the Barstow woolly sunflower, a