
Tortoise Tracks

The Desert Tortoise Preserve Committee, Inc.

Spring 2002 22:1



Desert tortoises use a variety of cover sites for protection from temperature extremes. These cover sites vary geographically and can include soil burrows, rock shelters, and small depressions dug under desert shrubs. This tortoise seeks shelter in a small cave on the banks of a wash in the Tiefert Mountains of Fort Irwin. More on tortoise cover sites on page 5. **Photograph by Mark Massar**

27th Annual General Meeting and Awards Banquet Held in Palmdale

For the third successive year, the Annual General Meeting and Banquet was held at the Holiday Inn in Palmdale on January 12, 2002. Seventy DTPC supporters turned out for the afternoon and evening events, which included featured speaker Dr. Phil Leitner.

Afternoon activities began with Mark Hagan, President of the Board of Trustees, welcoming 26 attendees to the Annual General Meeting. After introductions, the business meeting began with the distribution and presentation of the Preliminary Annual Financial Statement by the Treasurer, Dr. Kristin Berry. The Treasurer was followed by BLM Ranger Ed Petrovsky. Ranger Petrovsky reviewed his work patrolling the DTNA and the Rand Mountains, and expressed his warm thanks to DTPC

General Meeting—(Continued on page 2)

YEAR 2001 DTPC AWARDS

Golden Tortoise Honoree

Dr. Elliott Jacobson

For his research that has greatly expanded our knowledge of disease epidemiology in the desert tortoise.

Award Recipients

Chuck Hemmingway—*For his countless hours of volunteer work at the DTNA.*

Ed Patrovsky—*For his tireless work to help protect the DTNA and educate the public on wise use of the desert.*

Becky Jones—*For her work to protect the desert tortoise as both an agency biologist and as a volunteer.*

Phil Leitner—*For his extensive research on the rare Mohave Ground Squirrel.*

Special Recognition

To DTPC board members Karen Spangenburg and Roger Dale for their many years of hard work on the DTPC.

General Meeting—(Continued from page 1)

volunteer, Chuck Hemmingway.

Executive director Michael Connor reviewed the nuts and bolts of DTPC operations such as land inventory, parcel maps, and fundraising efforts. The DTPC website had a 35 percent increase in hits over 2000, while our newsletter goes to over 1150 organizations and individuals. DTPC volunteers contributed over 3000 hours in 2001. Mike reviewed his work with regional planning efforts such as the West Mojave Plan, where he represents tortoise interest groups. He thanked Bob Parker and Jeff Aardahl of the BLM Ridgecrest Field Office for securing a grant from the National Fish and Wildlife Federation (NFWS) to support tortoise conservation at the DTNA. The DTPC needs to raise additional funds to match this grant, dollar for dollar.

Contractor Jun Lee reviewed DTPC's land acquisition and mitigation projects. The Chuckwalla Bench is a new acquisition target area. In 2001 DTPC fulfilled its agreement with the City of Palmdale to acquire 100 acres of habitat at the DTNA. Other agencies working with DTPC include CalTrans which is investing \$2.1 million in habitat acquisition and management at the DTNA. Jun thanked individuals from various agencies who work in cooperation with the DTPC.

Reports on DTPC programs followed. Mark Massar reviewed the Harper Lake Road project. Sixty percent of the fence is complete and an engineering firm is working on a culvert design. Laura Stockton reviewed the volunteer and agency work that contributes so much to successful stewardship at the DTNA and Pilot Knob. Mike Connor reviewed Public Policy/Advocacy

focusing on the NECO, NEMO and West Mojave Plans, and the proposed Fort Irwin expansion. Rae Packard reviewed DTPC's environmental education and outreach activities during the past year. Jun Lee announced that a Mojave Desert Discovery Center kiosk was now installed at the California Living Museum in Bakersfield. Dr. Berry talked about Dr. Phil Leitner's new report on 3-years of Mohave ground squirrel surveys that suggests that squirrel numbers have declined substantially. She also reviewed her work on tortoise health assessment.

Mark Hagan briefly reviewed the goals for 2002 and then introduced Jeff Aardahl who reviewed BLM actions directly related to DTPC activities. In August 2001, the BLM issued a final decision denying a third party application to graze cattle at Pilot Knob. The Ridgecrest and Barstow Field Offices designated an interim route system over much of the Fremont-Kramer Critical Habitat Unit and introduced spring and fall restrictions on grazing as part of the legal settlement with the Center for Biological diversity. The closures will remain in effect until the West Mojave Plan is finalized. Jeff finished with suggested ways to secure matching funds for NFWF grants such partnerships with CDFG.

The last item of business was the election of members of the Board of Trustees. Kristin Berry and Rae Packard were nominated by the Board, and were approved unanimously by the attending members.

The business meeting was followed by a viewing of the Earth Images Foundation video "Tanks in the Mojave," a cocktail hour, and the Banquet which featured award presentations and a fascinating slide-illustrated, after dinner talk by Dr. Phil Leitner on the threatened Mohave ground squirrel. Dr. Leitner explored some possible explanations for the rapid and mysterious decline of this species.



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The Desert Tortoise Preserve Committee, Inc.

Michael J. Connor Executive Director

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2001 Annual Review of Desert Tortoise Preserve Committee Accomplishments & Activities

The Desert Tortoise Preserve Committee's mission is to promote the welfare of the wild desert tortoise (*Gopherus agassizii*) and the species that share its habitat through land acquisition, habitat management, education, and research programs. The year 2001 saw great progress made in all these areas. The Committee took title to 80 acres of habitat at the Desert Tortoise Natural Area, made significant progress in developing and implementing habitat management plans, took a leading role in guiding efforts to further tortoise conservation desert-wide, produced and disseminated a major research study of the rare Mohave ground squirrel, and reached out to hundreds of thousands of members of the public through various educational programs, including the DTNA naturalist, Mojave Desert Discovery Center, website, and newsletter.

Public Policy

Significant interaction and coordination with government agencies is essential to the DTPC's mission because the desert tortoise, the California State Reptile, is listed as threatened under both the Federal and state Endangered Species Acts. The DTPC holds an annual coordination meeting with the Bureau of Land Management, and the Board President holds informal meetings with resource staff on a regular basis. The Executive Director is a member of the Bureau's Ridgecrest Resource Area Steering Committee, which meets monthly.

The DTPC has been working to protect the interests of the desert tortoise and its habitat in the desert southwest through the United States Department of Interior, Bureau of Land Management's desert planning efforts. The DTPC is an active participant in the NECO (Northern and Eastern Colorado) planning process. The DTPC Executive Director represents desert tortoise interests on the West Mojave Habitat Conservation Plan Steering Committee and its various task groups.

Environmental Education and Outreach

A. Mojave Desert Discovery Centers

The Mojave Desert Discovery Centers are multi-media interpretive kiosks that the DTPC designed

and fabricated to educate the general public in tortoise and desert conservation. Each kiosk features an interactive CD-Rom web site, videotape presentations about the desert and its wildlife, and customized maps and brochures to guide visitors to featured desert attractions. In 2001, the DTPC installed a third kiosk in California at the California Living Museum in Bakersfield, joining kiosks at the California Welcome Center at Tanger Outlet Mall in Barstow and the Cottonwood Visitor Center in Joshua Tree National Park.

B. Educational Materials

Two thousand copies of the DTPC's educational brochures *The Threatened Desert Tortoise* and *The Desert Tortoise Natural Area* were distributed to the public in 2001. Other educational materials distributed included the *Desert Tortoise Life Cycle* poster to schools in California.

C. Web Site

The Desert Tortoise Preserve Committee web site at <<http://www.tortoise-tracks.org>> features information on the Mojave Desert, Desert Tortoise Biology, and Desert Tortoise conservation, and a virtual tour of the DTNA. In 2001, this highly educational site had over 465,000 hits, a 29 percent increase in visitation over 2000 (see figure). The web site attracts large numbers of students and others researching the desert tortoise.

D. DTNA Naturalist Program

The DTPC staffed a Naturalist at the DTNA Interpretive Center from March 15, 2001 to June 1, 2001. During this time, the naturalist encountered about one thousand visitors in several hundred visitor groups. Most visitors were from California, but there were visitors from seven other states and two foreign countries.

E. Environmental Presentations & Outreach

Environmental outreach programs were presented at the following locations during 2001:

Annual Review—(Continued from page 3)

20 Jan 01—DTPC Annual Banquet Presentation, Palmdale

16 Feb 01—California Turtle and Tortoise Club, Chino Chapter, Presentation, Chino

19 Feb 01—Del Air Rock hounds, Presentation, Reseda

6 Mar 01—San Fernando Valley Gem Fair, Tabling, Los Angeles

16-18 Mar 01—Desert Tortoise Council Symposium, Display and Presentation, Tucson, Arizona

23 Mar 01—California Turtle and Tortoise Club, Foothill Chapter, Presentation, Arcadia

20 Apr 01—Marine Corps Air to Ground Combat Center, Earth Day Tabling, Twenty-nine Palms

21 Apr 01—Earth Expo 2001, Universal City Walk, Earth Day Tabling, Los Angeles

21 Apr 01—Cal State University, San Bernardino, Earth Day Tabling, San Bernardino

5 May 01—Joshua Tree Turtle Days, Tabling, Yucca Valley

21 Jun 01—Monrovia Rock hounds, Presentation, Monrovia

27 Jun 01—Friends of Mojave River Valley Museum, Presentation, Barstow

5 Nov 01—California Turtle and Tortoise Club, Low Desert Chapter, Presentation, Palm Desert

9 Nov 01—San Diego Turtle & Tortoise Society, Balboa Park, Presentation, San Diego

Volunteerism

Volunteers devoted over 3590 hours of time to help the Desert Tortoise Preserve Committee in the year 2001. Volunteer activities included producing and distributing *Tortoise Tracks*, membership mailings, board meeting attendance, monitoring and conducting surveys at the Pilot Knob allotment and DTNA, product sales, research, regular patrols of

the DTNA perimeter fence, and the spring and fall work parties.

Habitat Holdings and Acquisitions

A. Land Holdings

As of December 31, 2001, the DTPC owned 1,584 acres of desert tortoise habitat in 105 parcels. During 2001, DTPC took title to 85 acres of habitat, sold 30 acres of habitat to the Bureau of Land Management, and entered into escrow on a further 184 acres of habitat.

B. Acquisitions

Location	Township	Section	Acres	APN
DTNA	T31S, R38E	13	10	334-152-12
DTNA	T31S, R38E	13	10	334-152-13
DTNA	T31S, R38E	13	10	334-152-15
DTNA	T31S, R38E	16	10	334-180-11
DTNA	T31S, R38E	9	5	334-030-50
DTNA	T31S, R38E	21	20	334-050-29

C. Habitat in Escrow

Los Angeles County: Donated 2.5-acre lot (APN 3326005081) inside the southern boundary of the Fremont-Kramer Critical Habitat Unit.

Riverside County: DTPC entered into escrow for three parcels totaling 80 acres of prime tortoise habitat in the fragmented Chuckwalla Bench Area of Critical Environmental Concern in the NECO planning area on December 28, 2001. This area once held the highest known densities of desert tortoise in California's Colorado Desert.

San Bernardino County: Three donated parcels totaling 15 acres in southwest San Bernardino County (APN 46143109, APN 46143111 and APN 46143112). These parcels lie close to the County line and are in the southern end of the Fremont-Kramer Critical Habitat Unit.

Kern County: DTPC entered into escrow for two parcels in the DTNA totaling 15 acres on December 28, 2001. DTPC entered into escrow for one parcel east in critical habitat east of the DTNA totaling 161.3 acres.

Habitat Management & Stewardship

In Kern County, the Desert Tortoise Preserve

Committee owns 849 acres of desert tortoise critical habitat and manages 240 acres under conservation easement, largely in and around the Desert Tortoise Natural Area. The Committee works cooperatively with the Bureau of Land Management and the State of California in managing and protecting the 39.5 square mile Desert Tortoise Natural Area.

Stewardship activities included holding two work parties at the DTNA, and regular fence patrols by DTPC volunteer Chuck Hemingway. In 2001, for the twelfth year in a row, the Committee recruited and staffed a naturalist at the DTNA during the spring visitor season.

During 2001, DTPC began developing a new management plan for the DTNA and the surrounding area. The DTNA expansion area is tortoise habitat that is a mixture of private and DTPC-owned land that lies between the current DTNA boundary and the Randsburg-Mojave Road, and east of the current DTNA boundary to the Randsburg-Mojave Road.

The Desert Tortoise Preserve Committee currently owns 720 acres of desert tortoise habitat in San Bernardino County, largely in the Superior Cronese Critical Habitat Unit, but with some in the Fremont-Kramer and Ivanpah Critical Habitat Units. Since 1995, the Committee has controlled the 42,000-acre Pilot Knob grazing allotment and the associated structures at Blackwater Well and has been managing the allotment for the benefit of the desert tortoise.



B. Harper Lake Road Fencing Project

The DTPC has installed tortoise-proof fencing along 11.4 linear miles of Harper Lake Road, Hinkley, California, pursuant to a Memorandum of Understanding between the DTPC and the California Energy Commission. Desert tortoise-proof fencing has now been erected along 66 percent of both sides of the stretch of road. An engineering company was commissioned to draft plans for under road culverts for construction in 2002.

Research

A. Mohave Ground Squirrel Status

In 1998-2000, DTPC with support from the California Energy Commission funded a research project to survey several sites on the Pilot Knob allotment for the state-threatened Mohave ground squirrel. In 2001, a report of these surveys was prepared and distributed. The report is *Leitner, P., 2001 California Energy Commission and Desert tortoise Preserve Committee Mohave Ground Squirrel Study Final Report 1998-2000. Orinda, California. 33 pp. plus appendices.*

B. Desert Tortoise Council Annual Symposium, Tucson, Arizona

Presentation by the DTPC Executive Director at the 26th Annual Desert Tortoise Council Symposium held in Tucson, Arizona: Michael J. Connor. "Planning" to Save the Tortoise in the California Deserts.

Michael J. Connor

Desert Tortoise Natural Area Ranger Patrols

By Ed Patrovsky, BLM Ranger, Ridgecrest

I have been assigned the DTNA as part of my patrol sector for about 1 1/2 years. From my initial assessment, it appeared that the DTNA was in need of patrol attention, and I quickly decided to make it a priority.

Patrolling with a marked law enforcement vehicle is in itself something of a deterrent to various illegal activities which go on inside and around the DTNA. Working with DTPC Volunteer Chuck Hemmingway, we initially patrolled the 40 mile perimeter of the DTNA, which is protected by a fence. We found approximately 30 breaks in the fence, mostly in the north and west boundary areas which are in rugged, more inaccessible areas Chuck can't get to in his personal vehicle. Most of these fence breaks were made to allow illegal motorcycle access into the Natural Area. We repaired these breaks to help reduce the motorcycle trespass problem. I have yet to actually apprehend a motorcyclist riding in the DTNA, but will redouble my efforts.

While on patrol, I attempt to contact as many motorcycle and ATV riders as I can who are operating near the DTNA. When safety and licensing problems are observed, I handle them according to the State Vehicle Code. I also attempt to gain friends for the DTNA, explaining the reasons for and the value of the Natural Area.

Occasionally, there is real criminal activity in the area, and we try to deter it, and take action if necessary. For instance, Chuck and I have found and reported a few stolen vehicles which were dumped either on or near the DTNA.

On 2 occasions during the last year or so, the large BLM entrance sign to the DTNA visitor center has been shot up—the last time occurring at night a few months ago. I determined by footprints that two individuals were involved, and found several ammunition boxes which had been purchased at a local store. Chuck and I visited the store, whose owner was cooperative as we attempted to find out who made the large ammunition purchase. Unfortunately, there were no credit card receipts, and the clerk on duty didn't remember who made the purchase. Hopefully, if this occurs again, we will be successful in making the case. Chuck and I removed the sign and took it to his garage, where he filled in the bullet holes and restored the sign to good condition.

In future issues of the Tortoise Tracks, I'll keep readers up to date with other goings-on at the Desert Tortoise Natural Area.

UF Veterinary Researcher Honored for Work with Desert Tortoises

By Sarah Carey

Elliott Jacobson, D.V.M., Ph.D., a professor in the University of Florida College of Veterinary Medicine, has received the 2002 Golden Tortoise Award from the Desert Tortoise Preserve Committee for his role in defining the diseases that threaten the survival of that species in the American Southwest.

Over the past ten years, Jacobson and his UF colleagues worked as a team to determine the causes of an upper respiratory tract disease believed to be responsible for a die-off of desert tortoises in the Desert Tortoise Research Natural Area and elsewhere in the western Mojave Desert. Jacobson involved in some of the earliest efforts to determine the cause of the die-off.

"After you assessed the situation, you returned to UF, where you organized a group of research veterinarians and scientists to identify the pathogen, determine how the disease was transmitted and recommend potential methods of treatment," wrote committee president Mark Hagan in a letter informing Jacobson of the award. "You have made wildlife and land managers, other scientists and the general public aware of the many facets of tortoise diseases and what needs to be done to enhance recovery efforts of the U.S. populations."

The award, given only on occasions when someone is deemed worthy, was presented during the committee's annual meeting in January.

Jacobson, who was awarded the UF Research Foundation professorship in 1997, is a world-renowned expert in diseases of reptiles and amphibians. He is particularly interested in infectious diseases of free-ranging and captive reptiles, including the upper respiratory disease affecting the desert tortoise and a similar disease affecting the Florida gopher tortoise.

The preceding article has been reprinted from the University of Florida, Gainesville newspaper (February 2, 2002 issue).

DESERT TORTOISE PRESERVE COMMITTEE

Membership/Donor Form

Name _____ Date _____ New Renewal

Address _____

City _____

State _____ ZIP _____

- Individual membership \$15 annually
- Family membership \$20 annually
- Sponsor membership \$30 annually
- Benefactor membership \$75 annually
- Patron membership \$100 annually
- Life \$500

Membership Dues \$ _____

Additional Donation \$ _____

Total Enclosed \$ _____

The Desert Tortoise Preserve Committee is an IRS recognized tax exempt 501(c)(3) nonprofit corporation. All contributions above the basic \$15 annual membership dues are tax deductible to the full extent allowed by law.

All members and donors receive the quarterly newsletter *Tortoise Tracks*.

Membership and donor information are kept confidential and will not be disclosed to third parties.

Please make checks payable to: **DTPD**

And mail to: **DTPC, 4067 Mission Inn Avenue, Riverside, CA 92501**

Natural History Notes

Desert Tortoise Cover Sites

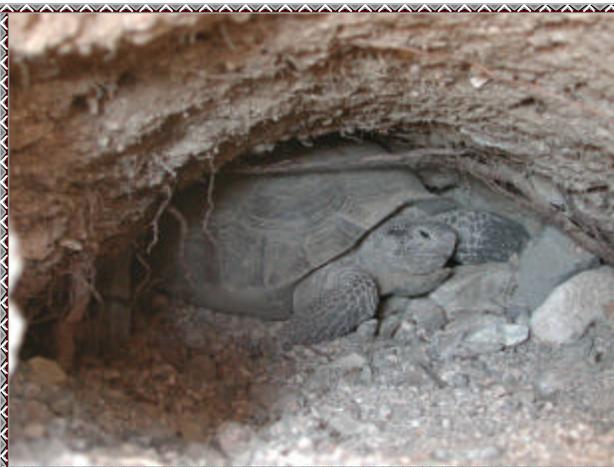
Desert tortoises use a variety of cover sites to seek refuge from temperature extremes and to wait out periods of low resource availability during mid-summer and winter. Hibernating in winter and estivating in summer, tortoises spend the vast majority of their lives—up to 93 percent—sequestered in their cover sites. Tortoises must regulate their body temperatures behaviorally by moving in and out of cover sites. During summer, when air temperatures of 105 F would be lethal, temperatures deep inside tortoise burrows are a comfortable and constant 70 F. Ground temperatures (the temperature the tortoise would actually experience) can be 20 degrees hotter than the air temperature.

The types of cover sites used by tortoises vary geographically within four general areas—Western Mojave Desert, southwestern Utah, Sonoran Desert in western Arizona, and Colorado Desert (a subdivision of the larger Sonoran Desert that lies west of the Colorado River in California). Cover sites include soil burrows, small caves, rock shelters, and shallow depressions dug under desert shrubs.

In the western Mojave Desert (in areas like the Desert Tortoise Natural Area) soil burrows predominate. Tortoises generally dig their own burrows in loamy or loamy sand soils, which are soft enough for the animal to dig, but not too soft that the burrows immediately collapse in upon themselves. These burrows—up to 10 feet long and commonly dug at the base of creosote bushes and other desert shrubs—have half-moon shaped profiles with domed roofs and flat floors, mirroring the profiles of the tortoises that constructed them. A tortoise may have many burrows within its home range. In the western Mojave Desert, tortoises generally den singularly.

In the northeastern Mojave Desert in Utah the situation is different, where tortoises use long, complex, colonial dens with multiple rooms or chambers. Cover sites here can be up to 20 feet long with as many as 30 tortoises per cover site. It is thought that the number of freezing days per year in a region dictates the length of tortoise cover sites, with Utah experiencing the greatest number of freezing days, and the Sonoran and Colorado deserts the least.

In the Colorado Desert tortoises dig out shallower burrows (or use existing small caves) in the banks of the many large desert washes which are prominent features of the landscape here. In the Sonoran Desert of western Arizona, tortoises occupy steep rocky hillsides with lots of boulders. Cover sites here are typically rock shelters—crevices and openings between and under boulders. Despite their awkward shape, tortoises are quite adept at climbing among rocks on steep slopes.



Desert tortoise finds shelter in a burrow on a summer after-



Tortoise Tracks

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DTPC CALENDAR OF EVENTS
16-17 March 2002
Desert Tortoise Preserve Committee
Spring Work Party
21-24 March 2002
Desert Tortoise Council
27th Annual Symposium
Palm Springs, California
12-13 October 2002
Desert Tortoise Preserve Committee
Fall Work Party

The Desert Tortoise Preserve Committee's Annual Spring Work Party will be held over the weekend of 16-17 March. We will assemble at the Desert Tortoise Natural Area on Saturday morning and later move along the historic 20 Mule Team Parkway to the Pilot Knob Allotment. Participants are invited to enjoy the traditional evening campfire and campout that is a most beautiful Blackwater Well site on the Pilot Knob Allotment.
Meeting Time : 9:00 AM, Saturday 16 March.
Meeting Place Interpretive Center Desert Tortoise Natural Area. This is located off the Randsburg - Mojave Road about 5 miles northeast of California City Boulevard.
What We Will Be Doing : **DTNA**—trail maintenance, fence repair, trash cleanup; **Pilot Knob** —trash removal, fence removal, trail maintenance, weed abatement.
What You Should Bring : Sunscreen, hat, work gloves, stout shoes or walking boots, drinking water, and food.
If you plan to stay overnight please bring camping equipment, flashlight, and food.
Please call Mike Connor at (909) 683-3872 or email dtpc@pacificbell.net to confirm.

DESERT TORTOISE PRESERVE COMMITTEE
SPRING WORK PARTY
16-17 March 2002