
Tortoise Tracks

The Desert Tortoise Preserve Committee, Inc.

Fall 2005 25:3



Desert Tortoise #602, Desert Tortoise Natural Area, March 15, 2005

This large male tortoise was dining on leaves of Bluedicks (*Dichelostemma pulchellum*), the long spaghetti-like strands hanging from his mouth. He was carefully and deliberately picking out the *Dichelostemma* from a dense pasture of Goldfields (*Lasthenia chrysotoma*), Filaree (*Erodium cicutarium*), and other plants.

Photograph by Michael J. Connor

SPRING FLOWERS BRING RECORD VISITOR SEASON TO THE DESERT TORTOISE NATURAL AREA

Michael J. Connor

The abundant rainfall in southern California during the 2004-2005 season resulted in a profuse spring wildflower bloom at the Desert Tortoise Natural Area that made for spectacular viewing. Even the sandy and compacted hiking trails were carpeted with a luxuriant growth. March and April saw many visitors from around the state who had included the DTNA in a sweep of desert spots. This was often focused on Death Valley National Park which had had a widely publicized "once in a lifetime" showing

of wildflowers. Many DTNA visitors commented that they were here to view and enjoy the wildflowers as well as catch a glimpse of one of the area's resident desert tortoises.

This spring, the Desert Tortoise Preserve Committee had a Naturalist on duty at the DTNA from March 16, 2005 to June 7, 2005 to answer questions about the tortoises and other wildlife, and to help visitors appreciate the desert environment. The Naturalist performs various educational and

monitoring tasks including leading scheduled tours, interacting with visitors, collecting visitation data, monitoring activity at the Interpretive Center, performing routine sign and trail maintenance, providing security against poaching and dumping of tortoises, and representing DTPC on site. The Naturalist Program is one of the DTPC's most visible and well known programs. DTPC has staffed a Naturalist at the DTNA each spring for over 16 years. This year's Naturalist, Jan Kaur, was headquartered at the DTNA Interpretive Center in the DTPC's "Desert Tortoise Discovery Center" motor home that was positioned between the parking lot and the main trail-head, where she was available to interact with visitors for 6 days each week. This was Jan's second tour of duty as the Naturalist. This was fortunate indeed, because her experience came in good stead in what turned out to be an incredibly busy season.

During the 74 days that Naturalist Kaur was on duty, 1686 individuals in 594 visitor groups were recorded at the interpretive center. She made contact with 538 (91%) of the 594 visitor groups for a total of 1536 (91%) individuals. Average visitation was 22.8 visitors/day, the highest since 1995 and well above the fifteen-year average of 17.1 ± 4.63 visitors/day. This was despite heavy rain on two of the usually high visitation weekends and the inclusion of 7 days in June, typically a low visitation month, whereas in most years,

monitoring ended by June 1.

About 87% of the visitors were from California. The other 13% were from out of state. Out of state visitors came from Arizona, Colorado, Connecticut, Illinois, Minnesota, Nevada, New Jersey, New York, Ohio, Oregon, Texas, and Washington, and nine foreign countries including Australia, Austria, Belgium, Canada, France, Malaysia, New Zealand, Scotland, and Switzerland.

Not surprisingly, most visitors were very sympathetic to the desert tortoise and were interested in learning how they might help save the species. Most visitors were also highly supportive of DTPC and BLM efforts to protect the DTNA. Many visitors mentioned that they owned or used to own pet desert tortoises and had very personal interests in the plight of the species. Several visitors helped the Naturalist by working to improve the interpretive materials available. One couple began a year-long project to record video footage of the DTNA each month to illustrate how the local desert changes with the season. Another regular visitor from California City provided some excellent close up photographs of resident tortoises that made a wonderful addition to the Discovery Center exhibits.

Visitor surveys indicated that the DTNA was the sole destination for the day's outing for 39% of the visitors. Because of the location, most visitors reached the DTNA by travelling through California City. Tourist income from visitors to the DTNA who stop in California City and the nearby community of Mojave helps contribute to the local economy.

One hundred and ninety two visitor groups (37%) including 580 individuals (39%) reported seeing at least one tortoise. Forty two percent of visitor groups contacted by the Naturalist reported seeing at least one tortoise in March, 35% in April,

NEW DTPC LIFE MEMBERS

CTTC Inland Empire Chapter
Barbara Oddone



Telephone: (951) 683-3872
Fax: (951) 683-6949
e-mail: <dtpc@pacbell.net>
<http://www.tortoise-tracks.org>

The Desert Tortoise Preserve Committee, Inc. Founded 1974

Executive Director
Michael J. Connor, Ph.D.

Board of Trustees

President	Mark Hagan
Vice President	Stephanie Pappas
Treasurer	Laura Stockton
Recording Secretary	Mark Massar
Board Member	Kristin Berry, Ph.D.



Jan Kaur
DTPC Naturalist 2004-2005
Photograph by Michael J. Connor

34% in May and 23% percent in June. During the season, fifty two visitor groups (165 individuals) saw 2 or more tortoises. This is the highest number of spring visitors reporting seeing more than one tortoise on record.

Visitors stayed an average of 87 ± 91 minutes. The number of tortoises seen correlated positively with the length of visitor stay. The longer the visit, the more likely was a visitor to encounter a tortoise.

Eleven individual marked tortoises (#467, #596, #599, #602, #789, #983, #999, #1055, #1056, #1065, #1151) and at least 16 different unmarked tortoises were observed. The most frequently seen tortoises were adult females #599 and #789 that were seen on 12 and 11 different days respectively, and an unmarked juvenile male tortoise that was also seen on 11 different days. The latter tortoise visited the kiosk regularly and was seen by a number of short-stay visitors who may not otherwise have seen a tortoise. Tortoise #789 spent much of the season near the Discovery Loop and was observed being courted and mounted by an unmarked male right at the opening of the season. Tortoise #599 was located on the same stretch of the Animal Loop trail that she occupied in 2004. She was also the most frequently seen tortoise in 2004.

The Naturalist and visitors observed tortoises on 50 out of 74 days (68%). The Naturalist and visitors sighted tortoises on 11 days in March, 19 days in April, 15 days in May, and on 5 days in June. On May 15, visitors and the Naturalist saw 7 different tortoises in one day.

Several other animal species were observed that are rare, have not been seen in recent years or



Young Tortoise At the Trail Head,
Desert Tortoise Natural Area. June 7, 2005
Photograph by Michael J. Connor

were new to the inventory. New additions were the Blue-gray Gnatcatcher, *Poliptila caerulea* and Lawrence's Goldfinch, *Carduelis lawrencei*. There were a number of sightings of breeding pairs of the diminutive Burrowing Owl, *Athene cunicularia*. As in 2004, a second owl species - the Short-eared Owl, *Asio flammeus* - was seen in April. Again, as in 2004, there were several sightings of the Roadrunner, *Geococcyx californianus*. An Osprey, *Pandion haliaetus* was seen soaring across the DTNA in March and in April. Other sensitive species such as LeConte's Thrashers (*Toxostoma lecontei*) and Loggerhead Shrikes (*Lanius ludovicianus*) are locally abundant, breeding residents that were seen daily. Visitors reported seeing Mohave Ground Squirrels near the Animal Loop trail on a number of occasions, with 4 confirmed sightings being made by the Naturalist in April and May. Like the desert tortoise, the rare Mohave Ground Squirrel is listed as threatened under the California Endangered Species Act.

Visit DTPC's Website at <http://www.tortoise-tracks.org> to view the complete report "Observations and Activities of the Naturalist at the Desert Tortoise Research Natural Area, Kern County, California: March 16 through June 7, 2005 by M. J. Connor and J. Kaur".

NEWS FROM DTPC...

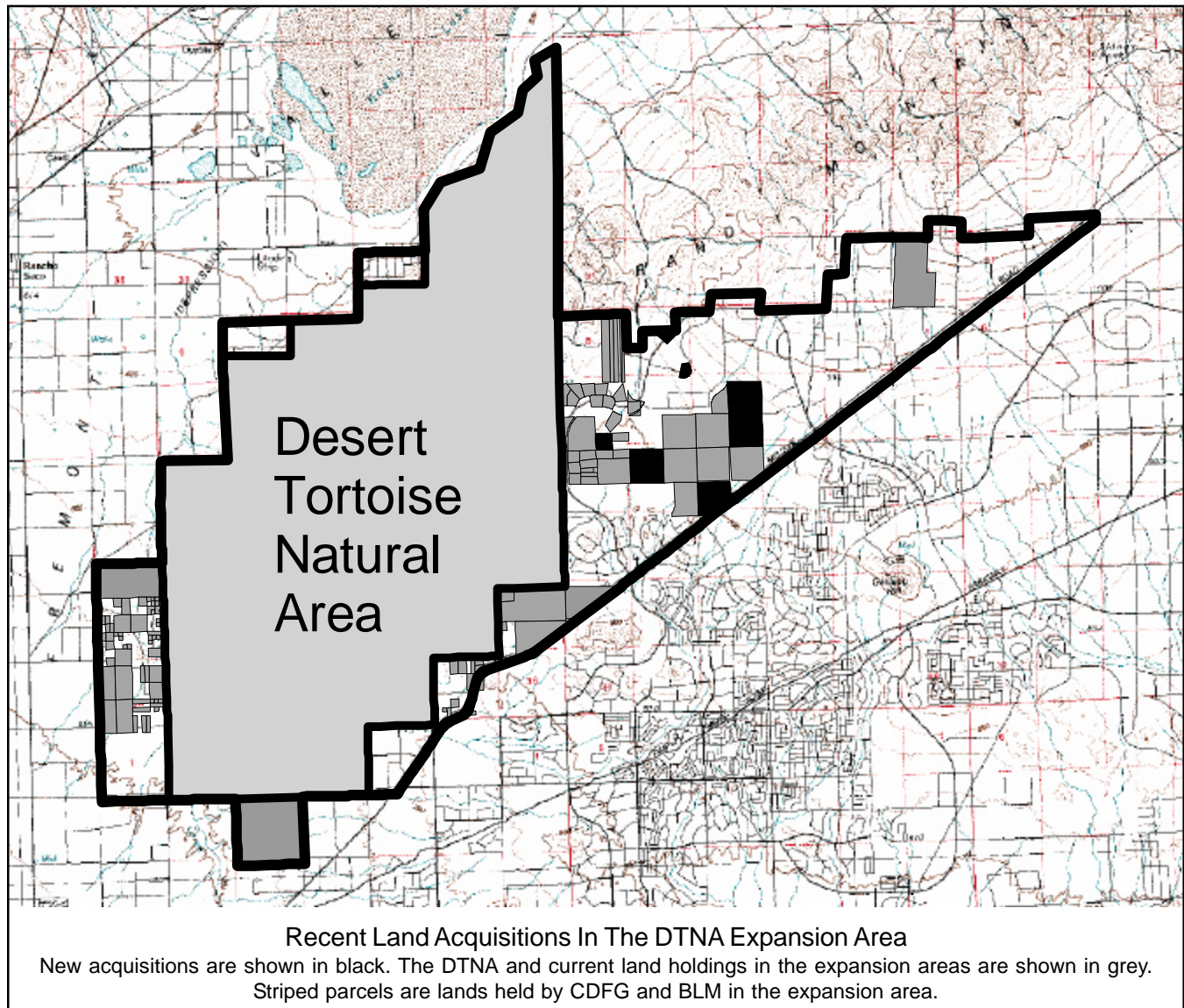
RECENT LAND ACQUISITIONS

DTPC continues to make good progress in its preserve land acquisition program, particularly in the 27 square mile DTNA expansion area.

DTPC has taken title to 96 acres of habitat in 2005 and has placed 708 acres into escrows that should close soon. This 1.25 square miles of acquisitions are shown in black on the map below. The acquisitions are all inside the DTNA or within the DTNA eastern expansion area. Funding for these acquisitions has been made possible by the support of our members and donors. Leverage of this support allows DTPC to operate its mitigation land banking program to

maximize effectiveness.

When completed, the DTNA expansion will increase the preserve area by nearly 70% and will provide a significant habitat corridor to Federally designated critical habitat to the east. This habitat is home to both desert tortoises and other imperiled wildlife such as the Mohave ground squirrel. The DTNA expansion will facilitate recovery of the desert tortoise by reducing threats to the resident tortoise population, by establishing more readily defended boundaries, and by enhancing the DTNA's integrity and long-term viability.



NEWS FROM DTPC... WHIP GRANT

As we reported in the last issue of Tortoise Tracks, DTPC has been being awarded a Wildlife Habitat Incentive Program (WHIP) grant by the National Resource Conservation Service, United States Department of Agriculture. The \$45,500 grant is for "Restoration Of Disturbed Habitat In The DTNA Expansion Area".

Specifically the funds will be used to help restore DTPC's recent "Camp C" acquisitions.

Located 1 mile east of the current DTNA boundary, Camp "C" has long been a major staging area for off-road vehicle activity and sheep grazing on surrounding private land and on public land in the Western Rand Mountains to the north. Its closure and restoration will reduce direct threats to the area's tortoises and habitat that are posed by off-road vehicles, trash, the ravens that feed on the trash, vandalism, seasonal grazing by sheep, and uncontrolled dogs. These threats are all related to human activity and are manageable through use of appropriate fencing and other measures.

The goal of this project is to restore the habitat values on these properties to levels that are suitable for desert tortoise and Mojave ground squirrel occupation. This will be achieved through a series of activities that include:

- Map/document current conditions of land through existing aerial photographs and map locations of existing shrubs for future monitoring

and trends. Survey boundary of the restoration area.

- Install protective fencing, signs and access gate around project area while rehabilitation and restoration actions are in effect.

- Remove compaction of soil through mechanical ripping or boring, and stabilize surfaces where needed to reduce fugitive dust.

- Purchase locally collected seed from native annuals and seed 5 acre units in the fall of each year with seed mix. Preferred seed plants are high PEP plants that are important to tortoise nutrition and that have been depleted by decades of sheep grazing.

- Establish base-line photo-monitoring sites on the property to be rephotographed in concert with existing long term monitoring sites in and around the DTNA.

- Coordinate with the Bureau of Land Management and California Department of Fish and Game to monitor the effectiveness of rehabilitation and restoration actions in the area and document findings.

The grant is a 75:25 matching grant . DTPC has just received the exciting news that Defenders Of Wildlife has awarded DTPC a grant of \$6,000 to cover the first years match. DTPC will need to raise an additional \$8,000 in matching funds over the next 5 years.

If you would like to help support this project, please mark your donation "WHIP grant match" and mail to: DTPC, 4067 Mission Inn Avenue, Riverside, CA 92501



Unusual Desert Sight

Thanks to all those heavy rains, as is evident in this photograph taken from the Pilot Knob allotment, Cuddeback Dry Lake really was a lake this spring.

DTPC Spring Work Party attendees had to drive around to the north end of the Lake to reach Blackwater Well. It was a truly glorious and exciting drive. Made glorious by the dazzling and colorful displays of coreopsis, Lacy Phacelia, and a host of other blooming annuals. Made exciting by the road conditions themselves with frequent washouts, rockslides and other hazards.

Photograph by Michael J. Connor

Natural History Notes

Although they can vary in appearance, desert tortoise eggs are typically the size and shape of ping-pong balls. The eggs are hard shelled, unlike the more pliable eggs of sea turtles.

Sometime during mid-May through July, a female desert tortoise will prepare a nest for her eggs. The nest is typically placed near the entrance of the female's burrow, but can also be placed underneath a desert shrub or just out in the open. The female tortoise will construct a funnel shaped nest (wider at the entrance than in the nest chamber) by excavating a hole with her hind legs. When completed the nest cavity will have a depth between 8-25 centimeters. Once the eggs are laid, the female will use her hind legs to fill in the nest with dirt.

Clutch size is directly proportional to the size of the female, with larger females laying more eggs per clutch than smaller females. An average size female will lay 5-7 eggs. Large females can lay up to 15 eggs per clutch.

Most adult females have at least one clutch of eggs each year. During high rainfall years,



Correction

This wonderful photograph of a Desert Tortoise was featured in the Spring 2005 Issue of Tortoise Tracks. Unfortunately, it was wrongly attributed in the printed edition of the newsletter. The photograph was actually taken by Mark Bratton. Our apologies to Mr. Bratton for this lapse.

Desert Tortoise Eggs By Mark Massar



Desert Tortoise Eggs & Hatchling

additional clutches are often laid, with up to three clutches per year being laid. The amount of rainfall in a particular year determines the number of clutches laid, not the size of an individual clutch. Surprisingly, the number of eggs laid per clutch appears to be independent of rainfall.

Because desert tortoises have temperature-dependent sex determination, the placement of the nests can be important in determining the sex of the hatchlings. Relatively more males are produced at cooler temperatures and relatively more females at warmer temperatures.

A number of desert animals are known to dig up desert tortoise nests and eat the eggs, particularly kit foxes and, in Arizona, Gila monsters. There have been a few documented cases of nest defense by female desert tortoises. In a number of incidences, female desert tortoises have chased Gila monsters from their nest, in one case biting the Gila monster on its tail.



DESERT TORTOISE PRESERVE COMMITTEE

MEMBERSHIP/DONOR FORM

NAME _____
 ADDRESS _____
 CITY _____
 STATE _____ ZIP _____

DATE _____
 RENEWAL
 NEW

- 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 \$ _____

DONATION ONLY
 Enclosed is my donation of \$ _____

Please make checks payable to **DTPC** and mail to:
DTPC
 4067 Mission Inn Avenue
 Riverside, CA 92501

The DTPC 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 contributors receive the quarterly newsletter *Tortoise Tracks*.

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

I WANT TO VOLUNTEER

My area of interest/expertise is:

My e-mail address is:

Spring Work Party Recap

The DTPC's Spring Work Party was the weekend of April 2-3, 2005, right in the middle of one of the wettest seasons on record. The 24 volunteers in attendance contributed 576 hours of their time to help DTPC at the DTNA and at the Pilot Knob grazing allotment.

Tasks accomplished at the DTNA including major weeding of the Main Loop trail from the start of the Discovery Loop down to interpretive post #3. The volunteers removed over 50 trash bags of filaree and fiddleneck making the trails both clearer for visitors as well as safer by reducing cover for rattlesnakes. Fences along washes on the south and west sides were repaired where the heavy rains had taken a toll.

Over at Pilot Knob, volunteers continued cleanup at the Blackwater Well cow camp and completed removal of most of the Crawford fence. The latter fence is a surplus range improvement that crosses the Grass Valley Wilderness. Over the years, vehicles have been driven along the fence line creating an illegal route that had become something of an attractive nuisance. Removal of the fence has facilitated habitat recovery, discouraged illegal incursion into the Wilderness, and benefitted the local flora and fauna.

WORK PARTIES

Fall Work Party November 5-6, 2005

The Desert Tortoise Preserve Committee work parties provide a wonderful opportunity for volunteers to become intimately acquainted with desert tortoise habitat. Tasks for this fall's work party include trail maintenance and trash removal at the Desert Tortoise Natural Area, and final clean up of the Blackwater Well site at the Pilot Knob grazing allotment. Work Party attendees staying for both days will be able to enjoy the traditional camp out and campfire at Blackwater Well.

If you are interested in joining the work party on one or both days, please register by calling Michael Connor at (951) 683-3872 or sending an e-mail to <dtpc@pacbell.net>.

For more information and updates, visit: the DTPC Website at <http://www.tortoise-tracks.org/dtpc/helpdtpc.html>.



Tortoise Tracks

NONPROFIT ORG.
U.S. POSTAGE
PAID
RIVERSIDE, CA
PERMIT NO. 3216

THE DESERT TORTOISE PRESERVE COMMITTEE
4067 MISSION INN AVENUE
RIVERSIDE, CALIFORNIA 92501

Address Service Requested



Annual general Meeting & Banquet
Desert Tortoise Preserve Committee's
January 28, 2006

Fall Work Party
Desert Tortoise Preserve Committee's
November 5-6, 2005

DTPC CALENDAR OF EVENTS
