Tortoise Tracks

The Desert Tortoise Preserve Committee, Inc.

Winter 2007 27:4

DTPC Begins a Major Restoration Project at Camp "C"



In February 2005, the Desert Tortoise Preserve Committee, Inc. (DTPC) initiated planning efforts to acquire 31.72 acres of land from the City of California City. As a result of a federal legal settlement related to development by Hyundai Corporation of a test track in an area south of California City, the Center for Biological Diversity acquired and then donated to the DTPC in May 2005 three (3) parcels of land about 1 mile east of the Desert Tortoise Research and Natural Area (DTRNA).

Historically, the so-called Camp "C" served as a City-owned public recreation area that was frequently used by Off-Highway Vehicle users. Over the years, the habitat

in and around the campground experienced a significant degree of degradation. Today, about 35% of the land is almost completely devoid of vegetation and is highly compacted.

In April 2005, the U.S. Department of Agriculture's Natural Resources Conservation Service awarded the DTPC a Wildlife Habitat Incentives Program (WHIP) grant. The grant provided the DTPC with a total \$22,500 to be allocated to habitat restoration of Camp "C" over a maximum six (6) year period. The Defenders of Wildlife awarded the DTPC a \$6,000.00 matching grant in September 2005. The difference between grant funding and actual

costs will be funded by mitigation fees collected from Incidental Take Permittees.

In the Summer of 2007, the DTPC completed installing protective fencing around Camp "C". With that crucial step of the project completed the DTPC could then turn its focus to the next major task: Restoration. The challenges faced in restoring deserts are daunting. They include understanding the causes and effects of dry land degradation, developing simple, cost effective strategies and methods for restoration, and demonstrating sustainable resource management practices that can improve quality of life and minimizing adverse effects

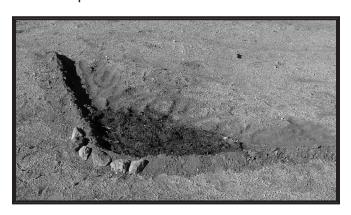
Continues on page 2

Major Restoration Project at Camp "C", Continued

of current and future activities.

On December 14, 2007, the DTPC working in conjunction with the Bureau of Land Management (BLM) and DTPC volunteers began the first five acres of restoration at Camp "C". There are two fenced areas of Camp "C" – a small southern section and a larger northern section. The first phase of restoration focused on the larger northern section. The restoration project has four primary components: (1) the construction of micro-catchment islands (2) the installation of vertical mulch (3) seeding (4) monthly watering and monitoring.

A total of 20 micro-catchment islands were constructed. The arms of each catchment created are eight feet in length and the total depth at each apex is six inches.



Catchment placement avoided a large wash that runs through the area and left a buffer near the gated entrance so that future restoration efforts in the area will not have limited access or maneuverability if large equipment is used. Catchments were placed on contoured land, using the natural topography to collect any precipitation at

the apex where seeds were planted. Theoretically, once these "islands" become established, they will function to spread seed and naturally restore the entire area.

Vertical mulching, or placing straw, sticks, or brush upright in the soil, has been used effectively in dry land restoration projects.



This method provides many benefits, including: slowing water movement; providing channels for water penetration into the deep soil; safe sites for seeds to catch and sprout; wind breaks to trap seeds and dust; shade and cover for seedlings; and providing a source of below-ground organic matter to help return the soil ecosystem to health. Experiments have shown that vertical mulch can increase soil moisture storage by as much as 20%, which may be critical in desert habitats. A total of 30 vertical mulch sites were installed on existing coppice mounds, areas of soil where large creosote bushes had existed previously. The soil at the coppice mounds was less compacted than surrounding areas which will promote germination and plant growth in the area of seeding. After the installation of vertical mulch, a total of six pits were constructed at each mound. Three pits were created on the north side of the mound and three pits were created



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

Preserve Manager and Office Administrator Melissa Nicholson

Board of Trustees

Kristin Berry, Ph.D.

President Stephanie Pappas
1st Vice President Mark Hagan
2nd Vice President Jane McEwan
3rd Vice President Mark Bratton
Treasurer Laura Stockton
Recording Secretary Mark Massar

Board Member

on the east side of the mound. Pits measured six inches by six inches and were created with shovels. This design was implemented in order to test the difference in plant growth and success by sheltering the potential seedlings from either the direct wind or direct sun, respectively. Each vertical mulch site was randomly selected to be seeded with mixture of seeds that had been collected and pre-counted from the vicinity or with one shovelful of soil collected from beneath creosote bushes in the area. Micro-catchment islands were also randomly selected to be seeded with mixture of seeds that had been collected and pre-counted from the vicinity or with soil collected from beneath creosote bushes in the area. This experimental design will test plant growth and success using collected seeds versus the on-site seed bank.

Collected seed was donated by Ron Gartland of the BLM. The seed mixture included the following species: Creosote Bush, White Bursage, Cheesebush, Winterfat, and Goldenhead. With the help volunteers, the DTPC will water the site monthly. During each visit the area will be monitored for signs of seed germination and plant growth. Results from the first phase of restoration will help guide the DTPC's future restoration plans at Camp "C". A special thanks to all the individuals who participated in the project.

By Melissa L. Nicholson



Camp "C" Restoration
Work Crew

Photographs by Melissa L. Nicholson

The Draft Fish and Wildlife Service Desert Tortoise Recovery Plan

The U.S. Fish and Wildlife Service (FWS) released a draft recovery plan on October 17, 2007 for the threatened desert tortoise (*Gopherus agassizii*). According to a news release from the Center of Biological Diversity, ..."the new plan provides even less protection for the tortoise."

As many of you know, wild populations of the desert tortoise occurring north and west of the Grand Canyon/Colorado River were protected under the federal Endangered Species Act in 1990. The FWS published a Recovery Plan and designated critical habitat in 1994, eighteen years ago. Since that time, there have been tremendous advances in the understanding of desert tortoise biology, health, and ecology.

Ileene Anderson, a biologist for the Center of Biological Diversity said, "If the original Recovery Plan had been implemented, the desert tortoise would not be in the dire straits it's in now. What the desert tortoise desperately needs for recovery is on-the-ground action. This (new) plan takes giant steps backwards from the existing recovery plan."

According to the Center of Biological Diversity, the new draft of the recovery plan relies on unproven recovery strategy that is sparse on science and relies largely on adaptive management. It fails to tackle solutions to many of the scientifically recognized threats to desert tortoises, including disease, roads, off-road vehicles, grazing, weeds, increased fire risk, and other causes of habitat degradation.

"This draft plan focuses primarily on additional research and monitoring actions rather than ways to stop known causes of habitat destruction and tortoise death, including continued off-road vehicle use and grazing in designated critical habitat," says Lisa Belenky, staff attorney for the Center for Biological Diversity. "We know what threatens the desert tortoise, and the Fish and Wildlife Service should act immediately to address those threats."

Members of the Desert Tortoise Council and the DTPC also have expressed their disappointment in the draft recovery plan. However, there are still opportunities for change. When the Fish and Wildlife Service releases the final draft available for the legal commenting period, the DTPC will formalize and coordinate comments with the Desert Tortoise Council and other organizations.

Educational Outreach



On November 19, 2007 Stephanie Pappas, then 1st Vice President of the Desert Tortoise Preserve Committee, gave a Desert Tortoise presentation at the Brentwood Lower School in Los Angeles, California. For the students this presentation served as a rewarding end to a unit of study focusing on desert ecosystems. This event was especially important because it was the first time first graders at the Brentwood School had the opportunity to participate in this extremely informative, engaging, and interactive presentation.

The children were greeted at the door with an array of tortoise and desert wildlife stickers and the fun continued for the next hour. The presentation focused on the habitat in which the Desert Tortoise is found, the types of food the tortoise eats, the types of predators that eat the tor toise, and some of the problems facing tortoise populations as a result of human activities.

Students were encouraged to ask questions throughout the talk and were rewarded with a variety of prizes when they were able to answer questions correctly, including turtle nightlights, turtle coloring books, and tortoise patches. "The students loved the presentation! It was interactive, chocked full of information, and a lot of fun," said first grade teacher Sara Schecter. After the presentation students asked additional questions and spent time coloring realistic pictures of Desert Tortoises and other animals that share their habitat

The amount of information that many of the students already knew about desert habitats was astounding. They were able to shout out many of the answers with certainty and enthusiasm and wanted to know what they could do to help the Desert Tortoise. This fact helps to reaffirm the commitment of the DTPC to educational outreach. The DTPC recognizes that these early educational experiences can have far reaching positive impacts on the children and in the creation of future conservationists.

By Melissa Nicholson



Brentwood School 1st grade students busy learning about the desert tortoise

A Reason For Hope: Youth Involvement in Conservation

This fall, Jane McEwan, the 2nd Vice President of the DTPC Board of Trustees, was privileged to hear Jane Goodall speak on "A Reason for Hope" at the California Bar Association's annual meeting. "It was gratifying to see Jane Goodall receive a standing ovation upon her introduction, before even saying a word, from the crowd of eight hundred attorneys and guests," said McEwan. The President of the Bar Association remarked on the unusually large attendence at the Bar luncheon and added that the turnout exceeded the largest attendance of six hundred at previous luncheons. The turnout and the ovation reflect both the high regard for Jane Goodall's work and the need all of us have to hear "A Reason for Hope."

Although Jane Goodall has watched the decline in the Chimpanzee's population and habitat since beginning her work in Gombe almost fifty years ago; she continues to travel and speak year round inspiring and encouraging others in their efforts to preserve species and habitat. The people she meets as she travels the world speaking on behalf of the Jane Goodall Institute provide her main reason for hope. Everywhere she goes, she meets people who are working to make a difference. Jane Goodall's essay on her four reasons for hope can be found on her website: <www.janegoodall.org/ jane/essay.asp>.

Jane Goodall's greatest reasons for hope has been the



determination of young people and the indomitable human spirit, both of which are exemplified by the children and youth working through local Roots & Shoots clubs worldwide. Goodall created the Roots & Shoots program, an international environmental and humanitarian program for youth to foster respect for all living creatures and to help young people learn how to improve their communities. With tens of thousands of young people in almost 100 countries, the Roots & Shoots network branches out across the globe, connecting youth of all ages who share a common desire to help make our world a better place.

A quick check of the Roots & Shoots website <www.rootsandshoots.org> revealed that there are 94 Roots & Shoots groups operating within a 100 mile radius of the Desert Tortoise Natural Area (DTNA). As the Roots & Shoots program is about making positive change happen for communities, animals, and the environment, we at the DTPC recognize our shared commitment to conservation and education and would like to see the DTPC work with the Roots & Shoots organization toward our common goal. The DTPC is planning a large scale seed collection and planting project that we feel fits perfectly with the Roots & Shoots mission statement. The DTPC is currently working to contact all age appropriate Roots & Shoots groups in the vicinity of the DTNA to organize this project. Once dates and times are finalized all members who are interested in participating in the project are encouraged to come to the DTNA and participate.

RECENT VANDALISM AT THE DTNA



The Summer 2007 issue of Tortoise Tracks included a photo of a sign at the main entrance of the Desert Tortoise Natural Area (DTNA) that had been spray painted with graffiti. Although that sign has since been repaired, vandalism is not only still occurring, but is on the rise. Two signs marking the entrance to the DTNA were intentionally run over by an unidentified vehicle on Sunday, January 13th. The DTPC, in collaboration with the Bureau of Land Management, has plans to repair and reinforce these signs to prevent incidents this this from recurring.

A new BLM Ranger, Brian Martin, is now permanently stationed at the California City Police Station. Ranger Martin will be conducting patrols specifically targeting the DTNA and was the first individual to discover the recent vandalism.

The increase in vandalism has been linked to an increase of OHV use in the area of the DTNA. A record number, 45% of visitors to the DTNA in the Spring of 2007, arrived on OHV (Please refer to the 2007 Naturalist Report on the DTPC website for more details on this trend). The DTPC is currently working on an outreach program specifically designed for OHV recreationalist in an attempt to appeal to the these individuals to ride responsibly and respect the DTNA.

Calendar of Events

March 29-30: DTPC Spring Work Party Contact dtpc@pacbell.net or (951) 683-3872.

April 9-11: California Desert Nature Festival, held at the Living Desesrt in Palm Desert Contact dtpc@pacbell.net or (951) 683-3872.

April 9-11: Climate Change and Deserts Workshop: Adaptive Management of Desert Ecosystmes in a Changing Climate, held in Laughlin, Nevada. Contact www.dmg.gov/climate for more details.

May 2-4: Desert Tortoise Days in California City. Visit www. californiacity.com for more details.

May 16th: CTTC Valley Chapter Turtle & Tortoise Show from 4-7 PM. Contact valleycttc@yahoo.com for more information.

May 17th: CTTC Chino Valley Chapter Turtle & Tortoise Show from 11 AM-3 PM. E-mail calif4@aol.com for more information.

Special thanks to the following individuals for their invaluable contributions to the DTPC:

Deníse LaBertaux & Bruce Garlinger Mary & Lee Parsons The Arizona Herpetological Association Aurora Larson

Brett & Nancy Stearns
Bill & Carol Greene
Ed Bradley
Nicholas Cates
Thomas Egan
Phil & Barbara Leitner
Joanne Nissen
Ellen Werback
Ernest Messner
David & Sybille Sandoval
Genny Smith

DESERT TORTOISE PRESERVE COMMITTEE			
MEMBERSHIP/DONOR FORM			
NAME ADDRESS CITY STATE	ZIP		DATE RENEWAL NEW
Individual membership Family membership Sponsor membership Benefactor membership Patron membership Life Membership Dues Additional Donation Total Enclosed	\$ 15 annually [] \$ 20 annually [] \$ 30 annually [] \$ 75 annually [] \$ 100 annually [] \$ 500	The DTPC is an IRS recogn nonprofit corporation. All co \$15 annual membership due full extent allowed by law. All contributors receive the q <i>Tracks</i> . Membership and donor informand will not be disclosed to	ontributions above the basic es are tax-deductible to the uarterly newsletter <i>Tortoise</i>
DONATION ONLY Enclosed is my donation of \$ Please make checks payable to DTPC and mail to: DTPC 4067 Mission Inn Avenue Riverside, CA 92501		I WANT TO VOLUNTEER My area of interest/expertise is: My E-mail address is:	



Vehicle for Stewardship

Jun Lee, a contract DTPC employee and Board member, donated his 1995 Isuzu Trooper in January. The vehicle is in excellent running condition with a new transmission and comes equipped with four new tires. The Trooper will be stationed at the DTPC office in Riverside with the Preserve Manager and Office Administrator, Melissa Nicholson, who regularly monitors and waters

the restoration project that has begun at Camp "C". In addition, the vehicle provides support for educational programs, surveys of potential lands for acquisition, and visits to current DTPC properties. Jun Lee is happy that the vehicle will be helpful in accomplishing the goals of the DTPC.

CONGRATULATIONS Mark Massar, M. S.!!

The DTPC Recording Secretary, Mark Massar, completed his Master's of Science Degree at California State Polytechnic University, Pomona. Mark defended his thesis, entitled "Female Choice in the Desert Tortoise," in December of 2007. Both Dr. Glenn Stewart, Professor Emeritus of the Biological Sciences Department of Cal Poly Pomona and Dr. Kristin Berry of the USGS served as Mark's thesis advisors. "This is a very important milestone for Mark," said Dr. Berry. The DTPC wishes to extend our congratulations to Mark on this major accomplishment.



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





JOIN US!! Spring Work Party March 29-30, 2008

If you are interested in attending on one or both days please register by calling (951) 683-3872 or e-mail dtpc@pacbell.net