### Post 6

Three species of Harvester ants have been identified at this Interpretive Center: **Black Harvester Ants ,Brown Harvester Ants, and American Harvester Ants** (which have a red thorax and black abdomen). Approximately 20 feet behind you is an inactive ant nest. During times of drought, plants are less likely to germinate, and make harvester ants much less common. A good sign of an active nest is finding discarded seed cases and husks around the outer edge of the mound.

Start of the .5-mile Animal Habitat Loop Trail (Trail guides in box at trailhead)

### Post 7

The lone mountain to the South is called **Soledad Mountain**. It is the location of the Silver Queen Mine which opened in the late 1800's. **Gold and silver are still mined to this day,** creating a multi-million dollar business.

Start of the 1.75-mile Discovery Loop Trail (No guides available; see map)

#### Desert Tortoise Preserve Committee, Inc.



www.tortoise-tracks.org

### Post 8

The trees and buildings about 5 miles to the South mark **California City**, which is located along the historic Twenty Mule Team route from Death Valley to Mojave. The largest butte 5 miles due South is **Castle Butte**. During the Spring, the area before you turns into a vast **carpet of small yellow flowers called alkali** goldfields.

### Post 9

The **Burrobush** (*Ambrosia dumosa*) is the second most widespread xeric (adapted to low moisture) shrub. Its grayish foliage is very different from that of the creosote.

### Post 10

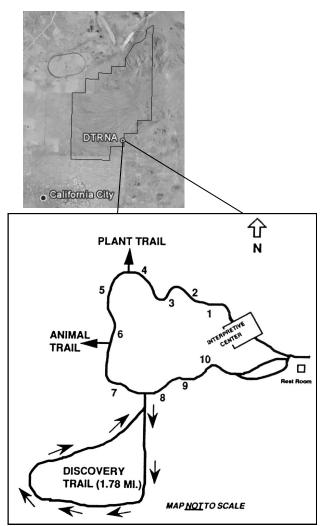
- Can you guess **how many miles it is** from where you are to the top of the farthest mountains straight to the North? (see last bullet for the answer)
- The range is the El Paso Mountains and contains the **Garlock fault**, located on the South side. The fault runs East-West and is about forty miles long.
- The smooth mountain range just in front of the El Paso's are the **Rand Mountains.** The North end of the Natural Area extends into the Rand Mountains.
- ANSWER: 13 miles to the peaks of the El Paso Mountains.

# WELCOME

### to the

### DESERT TORTOISE RESEARCH NATURAL AREA

This pamphlet will guide you through the **Main Loop Trail** surrounding the Interpretive Center.



## Main Loop trail guide

The natural area is home to a variety of species of flora and fauna, representing the intricate Mojave desert biome. In addition to the **desert tortoise** (*Gopherus agassizii*), the DTRNA is home to 27 other species of reptiles, 29 species of breeding birds, 23 species of mammals and many species of arthropods.

### This is a Natural Area for the wildlife and you to enjoy. Please help keep it this way by:

- Staying on the marked trials
- Not handling animals or picking plants
- Leaving rocks, bones, and tortoise shells in place
- Returning trail guides to the boxes at the end of the trail

To make the most of your visit:

- **MOVE QUIETLY**: Noise frightens many of the animals.
- WATCH CAREFULLY: Movement is often a key to the presence of an otherwise hidden animal.
- **LISTEN:** Some animals make sounds. Birds may sing. Rattlesnakes buzz or "rattle."
- **REMEMBER**: When it is cool, many animals can be found warming in the sun. As the air and ground become hot, many animals will

### BEWARE OF RATTLESNAKES!

The **Mojave rattlesnake**, *Crotalus scutulatus scutulatus*, is reputed to possess the most toxic venom of any U.S. rattlesnake. These snakes are an important and vital component of this ecosystem. You may find them **out in the open, under bushes, or occasionally in tortoise burrows.** Treat them with respect by keeping your distance from them and they will stay away from you.

### Post 1

The vegetation in this area is a Creosote bush scrub community. The **Creosote bush** (*Larrea tridentata*), is the dominant perennial plant over a large part of California's deserts below 3,500 feet, and is the most conspicuous plant in the Natural Area. The Creosote bush **provides shelter and shade** for desert animals and plants. Grasses and wildflowers **grow thickly at the base** of the Creosote bushes because of the protection from soil water loss relative to inter-shrub areas.

### Post 2

A **desert tortoise burrow** at the base of a Creosote bush is a typical desert tortoise home. Burrow width is the approximate length of the resident tortoise (so that it can turn around). The burrow **provides the tortoise with protection** from hot and cold temperatures and from predators.



### Post 3

Areas such as this are good locations **to find the invasive species** that have been replacing native plants. Invasive mustards, filaree, arab grasses, etc. **are typically hardier** than the natives species and **compete with them for water and soil nutrients.** Some of these invasive species are eaten by tortoises and other wildlife but **do not provide the proper nutrition** provided by the native species.

### Post 4

In front of this post **is a rodent complex**. These are often found in and around abandoned burrows of kit fox and other predators. **Is there evidence of recent activity? (dirt mounds, tracks?)** Rodents are usually active at night. Lizards, burrowing owls, and snakes also make use of abandoned burrows.

Start of the .4-mile Plant Loop Trail (Trail guides in box at trailhead)

### Post 5

The Sierra Nevada mountain range is directly West. The range extends 400 miles, from Mt. Lassen in the North to Highway 58 in the South. Slightly to the right, the two water pipelines that run along the East side of the Sierra may be visible. The older, black pipeline was built from 1908-1913. Nearly 1,000 men used one billion barrels of cement to complete this 337-mile pipeline that supplies Los Angeles.