

---

# Desert Appreciation

by: Thom Hulen (as summarized by Fran Wylie); Sep 2003

## PERSONALLY ENJOYING THE BEAUTIFUL SONORAN DESERT

---

map courtesy Julia Patterson



photos: Dave Mills



Thom Hulen, Conservation Director of the DFLT (Desert Foothills Land Trust), spoke in one of a series of talks at Terravita March 13, 2003, on the DFLT and on hiking in our desert area.

He defined a desert as a place where evaporation exceeds precipitation. Phoenix gets about 7.5 inches of rain per year providing about 4.2 gallons per square foot. In Terravita, we get about 8.5 gallons of water per square foot which amounts to a 14 inch precipitation rate.

The Sonoran desert is unique. It is the only place where the saguaro grows. It has two rainy periods per year: the winter rains are characteristically gentle whereas the summer rains tend to be dramatic and sporadic. Plants here have adapted to the environment. They may have small leaves or no leaves. Waxy leaves reduce evaporation. Gray-green leaves reflect light away from the plant. Some plants are adapted to produce food at night; stomata close in the day and open at night. The indigenous palo verde has chlorophyll on its bark to permit photosynthesis.



Desert Awareness Committee  
PO Box 4602, Cave Creek, AZ 85327  
480 488-5477 or 480 488-1543  
©2011 Desert Awareness Committee

The saguaro serves as an example of cooperation in nature. Ovules are fertilized by pollen. Bats and white-winged doves pollinate the saguaro flowers. When bats feed upon nectar and white-winged doves feed upon insects in saguaro cactus flowers they transfer pollen from one plant to another. The fruit then becomes available for other animals to ingest and to distribute seeds by various means. When feeding on the fruit they inadvertently knock off fruit that will be consumed by ground dwelling animals.

Although mad dogs and Englishmen may go out in the midday sun, animals do not. There are more deer in Carefree and Cave Creek than elsewhere in the state. The same is true of javelinas. Some animals are nocturnal. Most mammals such as dogs and rabbits have no sweat glands so they stay in the shade and pant to keep cool. The big ears of jack rabbits help them keep cool.

When we go hiking, we should plan on providing 1.5 gallons of water per hour. We should carry a “letterman,” comb or something similar to remove spines accidentally acquired.

Good advice regarding threats from snakes, bees, or other predators is to “never put hands or feet where eyes have not first seen.” As for scorpions and tarantulas, shake articles out before using; Thom has never been bitten in 47 years of exposure.

The DFLT property is open to the public as are other preserves. Hikes are led to the cave six times a year because the DFLT has a conservation easement on the property.

Thom described caliche as calcium carbonate which is the same mineral that makes limestone.

He also spoke of toads: the Red Spotted Toad and the Sonoran Desert Toad (Colorado River Toad). All have poisonous skin glands. When dogs and cats bite or mouth the toad, they foam at the mouth. Thom recommends rinsing the animal’s mouth with water from a hose. American Indians and others have used skins of toads to produce hallucinogenic effects.



# DEFEAT THE HEAT

## A LIST OF MINIMAL ITEMS FOR SAFELY HIKING IN THE DESERT

### The Top Three things to have with you:

1. Water
2. H<sub>2</sub>O
3. Agua



### What you should wear:

1. Loose fitting cotton clothes that cover the body
2. Sun hat
3. Comfortable, sturdy hiking shoes or boots.



### Equipment:

1. Sunglasses
2. Cellphone (may not receive a signal)
3. Walking stick
4. Pocket comb
5. Pocket knife/multi-tool
6. Hard candy/Energy bar
7. Map of area



## MORE GOOD ADVICE

*When hiking always remember the following:*

### H—HYDRATE

which means take water no matter how short the hike. Always be prepared for the unexpected and that means having water at all times!

### I—INFORM

always tell someone where you are going even if it is just in the wash by your home. Leave a note if necessary, but be sure someone will know where to look for you.

### K—KNOWLEDGE

know your limitations...consider your footwear, clothing, and your stamina. Don't venture on unknown trails without a map or guide.

### E—EXPERIENCE

if you are not an experienced hiker, we don't recommend you begin by hiking in the desert alone. As beautiful as the desert is, there are many dangers if you are not properly prepared. Find a guide or seek guidance.

For information on safe desert hiking, contact a member of the Desert Awareness Committee at [http://azfcf.org/desert\\_awareness\\_index.html](http://azfcf.org/desert_awareness_index.html)

**HIKE RESPONSIBLY...BE SAFE**

