'The Fragile Desert'—still fragile

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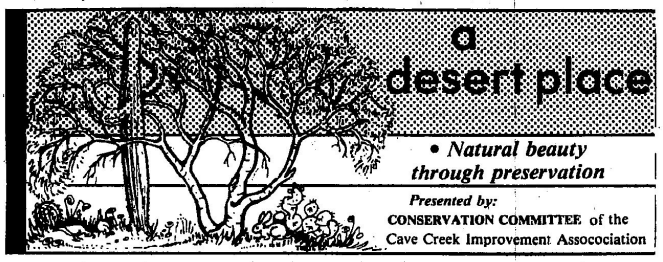
by Christina Quick



A visiting friend from the Midwest told me, "The desert has funny trees!"

I questioned that remark. Her idea of funny trees was that desert leaves were tiny and didn't change color in the fall. She was used to large leafed trees.

I asked her if she knew that large leaves were "drip tips." This was a surprise to her.

There are nearly 1,200 forest trees found on the North American Continent, almost all the genera are represented by 55 leaf types.

My friend had mentioned the ginkgo tree leaf. It is a fan-shaped leaf found in no other flowering plant, from a unique tree that is the only survivor of a family that flourished in the age of dinosaurs. I told her that all trees had a tale to tell; that if she lived here and became a friend of the trees and understood why our trees are as they are, she would love them as she did the trees of her native state.

As we have stated many times in Desert Place, the leaflets of our desert trees are in most cases from drought decidous, or drought tolerant trees. They lose their leaves during dry periods and leaf out during wet or rainy periods.

The green trunk of the palo verde provides photosynthesis. This is the activity that ultimately makes all life possible, permits plants to trap energy from the sun and store it in the form of glucose, or sugar for their growth.

As to the lack of the fall foliage color, this is caused by the stopping of photosynthesis. In preparation for sealing off a tree's supply of water for the winter, a process starts in the autumn.

Since chlorophyll must be renewed in order to survive, it disappears from the leaves when the flow of moisture ceases; and once the dominant green color is removed, the leaf reveals other hues that were there all the time, obscured by the green. In our desert, there is no need to seal off a tree's supply of water — in fact the winter rains are life-saving to our trees.

Most of my life, I have heard the statement that you feed and water trees to the drip point. That is true here. Water may not drip from the leaves, but the roots of the tree reach out to that point — underground of course — where the leaves reach to above the earth.

If a tree has a small water well under it and has a broad crown, the water from the well doesn't nourish the roots. It is one more reason to plant desert-type trees here.

Unlike an animal, which can move about freely in search of food and water, the tree, once its seed has germinated, is locked in place and is at the mercy of certain external forces. The most critical of these is water, for water and life are inseparable. All the tissues of a tree, those that are dead as well as the living ones, contain water.

Some of the water that hits the ground in rains runs almost immediately into washes and is carried away. Water that runs off in this fashion is of almost no value to the land community. To be of maximum use, moisture must be delayed on its path to washes, and on to rivers. This is one of the principal benefits of plant life. Vegetation slows down the runoff, absorbing much of the moisture and making a slower progression to the wash or river.

For most of human history, man's involvement with nature has been both intimate and complete. The primitive man had a wisdom that was accumulated about his environment; his skills were learned by adapting to the natural surroundings.

In recent times, man has removed himself from the partnership that nature requires. Many people ignore the great blessings and forget the terrors that nature can hold. As a consequence, man has lost the sacred relationship, what Dr. Rene Dubos called a "theology of the earth" that link humankind to all physical attributes of the planet.

Each passing year brings new evidence that all living things on earth are bound together in a complex and yet fragile interrelationship. Our committee published a booklet, "The Fragile Desert."

It is a fragile desert, and the committee hopes to bring a growing realization of the perils mankind faces if it does not cease the practices that have despoiled so much of the desert environment.

It is a heartening development of recent times to see an effort by some people and groups to renew a working partnership with nature, to restore what has been taken away and to replenish and protect the resources on which we are dependent.

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Remember to visit the Conservation Committee's "A Desert Place" booth at the Arts and Crafts Fair in Cave Creek Saturday, Nov. 26 and Sunday, Nov. 27.

Plant and cacti cuttings, wildflower seed, dried flowers and pods, mineral bookends and desert plant, animal and bird information will be available.

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On Dec. 6, the Conservation Committee will meet at 7:30 p.m. in the Cave Creek School library.

The December date is an exception.

The regular monthly meeting date is the third Tuesday of each month at the above time and location.

The committee invites and welcomes new members.

For further information, phone 488-3849.