



Let's enjoy those Cacti

When some people complain about desert plants, they may say, “All of those cacti are so spiky and ugly!” They **are** including agaves and yuccas, which are not the same thing, although they **can have** serious thorns. At any rate, cacti deserve more respect.

A small number of species live in Africa and Asia, probably delivered by birds, but all cacti are native to the western hemisphere. So many of them are at home here in the great American Southwest, can one picture the desert without them?

People unfamiliar with this region might only know about **saguaro** cactus. Those tall stately specimens are emblematic of the Sonora desert to our south. Saguaros generally suffer in this area, where winters are too cold. They can be protected with a blanket.

Cacti are succulent, and almost drought proof. Some survive in places as northerly as

Western Canada, or the Andes Mountains, or as far south as Patagonia. These plants are probably the epitome of survival.



Cactus Demonstration Garden at the Lifelong Learning Center

One feature they all share – they do the hard work of photosynthesis in their equivalent of stems and trunks, not leaves.

The next time you look at a stocky barrel cactus, or a tall columnar one, try thinking of it as a tree trunk. Of course, this tree trunk has no limbs, just a lot of spiny armament.

If you were to look at a prickly pear, you might think it has nothing in common with other, more

normal trees or shrubs. Surprisingly enough, most cacti, perhaps all of them, are very much like normal trees or shrubs.

Every prickly pear pad (technically called a *cladode*) is a flattened branch, attached to a stem. It has a center, rooted area, like other shrubs.

The spines we dread are the remains of leaves. They evolved to conserve water. They do not photosynthesize, or do much of anything except offer protection. Many prickly pears and chollas have two lines of defense. The first is the obvious set of spines, which can puncture skin. They are not necessarily the worst weapons, though. Anyone who lightly grazed their hand on a cactus pad has probably discovered the terrible **glochids**. These are their numerous, colorless, tiny, spines. Their hooks, make them awful to remove, but you **must** get them out.

Mojave cacti are perfectly suited for this environment. We receive four inches of rain in an average year, which has not occurred in some time. According to the National Weather Service, our total rainfall in all of 2014 was 1.8". Drought tolerance is critical for survival.

To survive dry periods, those plump stems and barrels are full of fluid. When they need to use that fluid, the stems and trunks become progressively thinner. Barrel cacti develop an accordion shape, another survival tactic. The folds reduce the amount of direct sunlight hitting the plant surface and cuts down on water loss.

Cacti may be intimidating, but deserve admiration and a place in our gardens - In the back, away from paths, pets, *and people*.

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