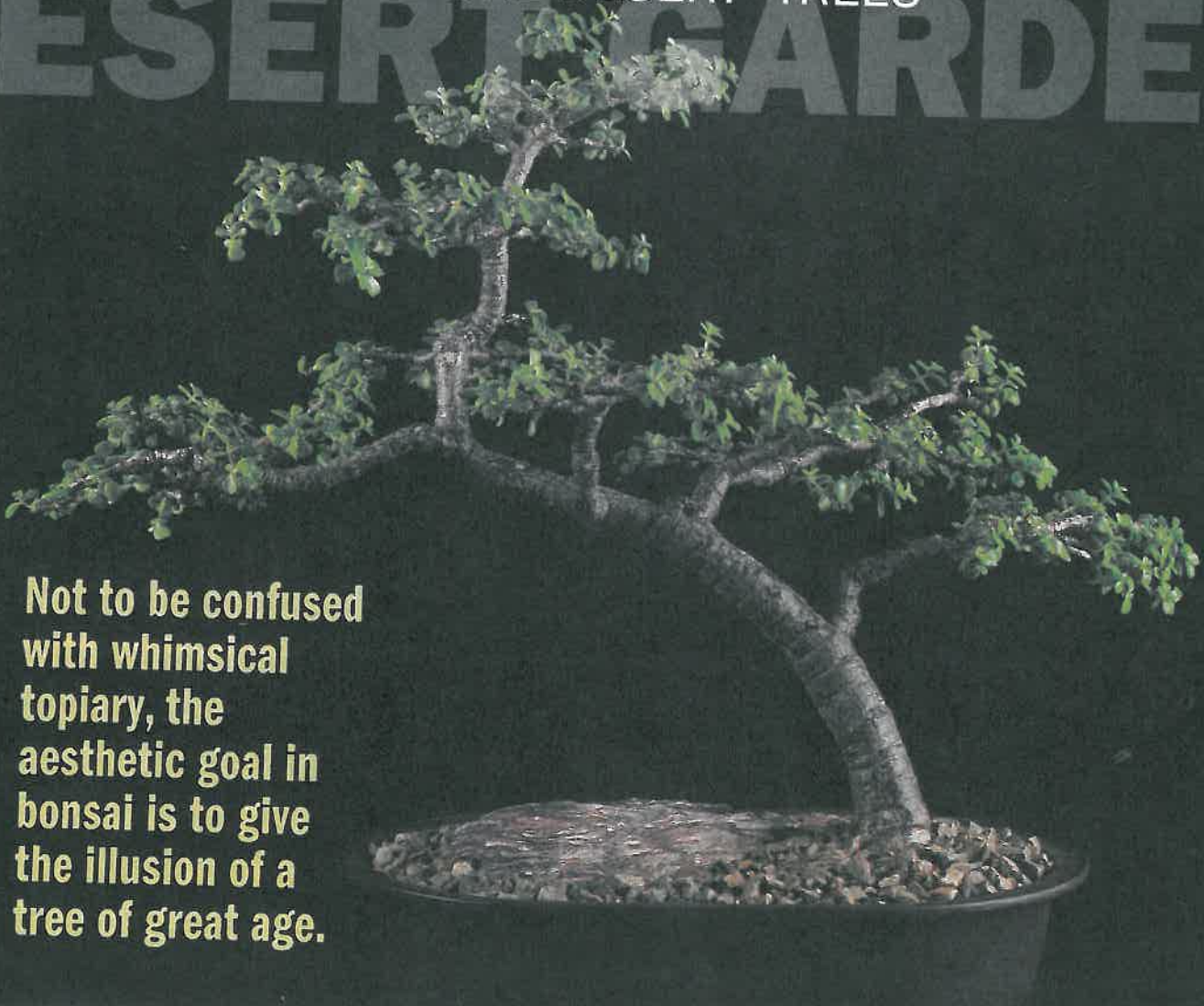


AT HOME IN YOUR DESERT GARDEN

MINIATURE DESERT "TREES"



Not to be confused with whimsical topiary, the aesthetic goal in bonsai is to give the illusion of a tree of great age.

Elephant food (*Portulacaria afra*) in the "slant" style. This is a great species for beginners. It can take full sun and lends itself to many bonsai styles, but needs protection from frost.

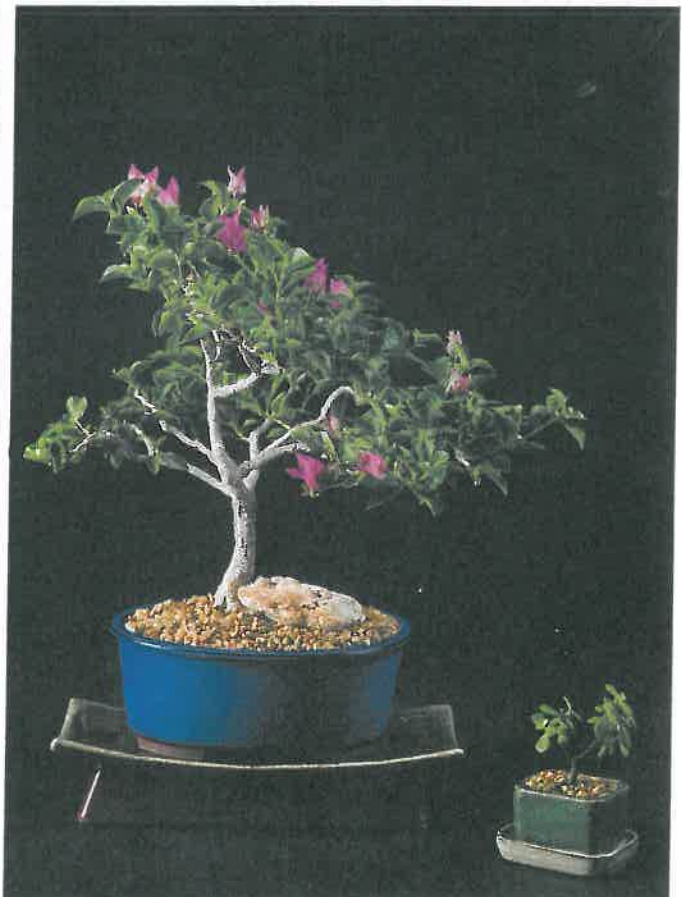
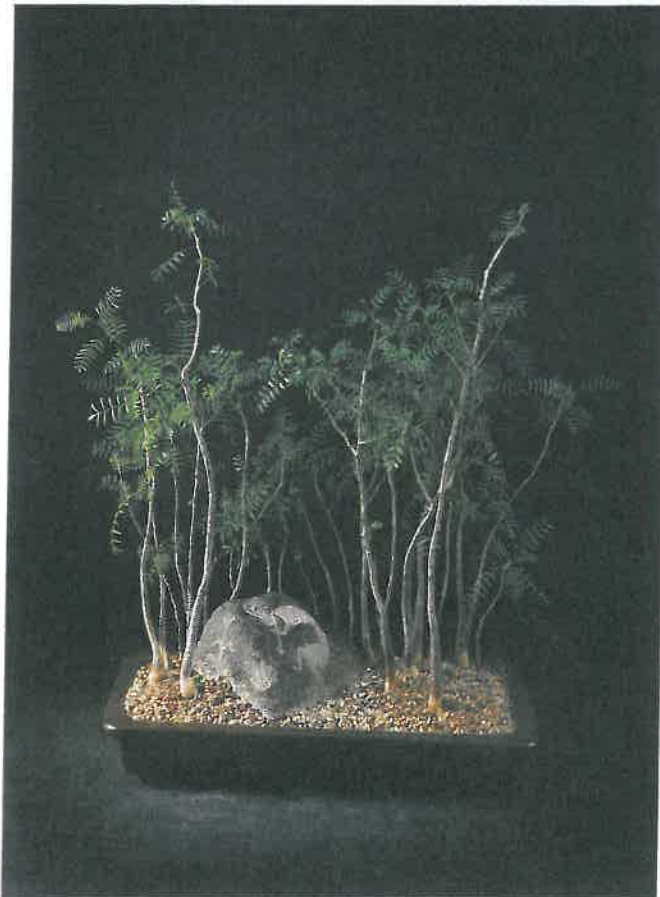
In my work at the Garden as a volunteer docent and horticulture aide, I had long admired with envy the dozens of different species of desert trees from throughout the world. I say "with envy" because of the small backyard at our Moon Valley patio home in north Phoenix. With the 45-foot-wide canopy of a 15-year-old Argentine mesquite

shading two-thirds of the yard, there was little space for other trees. How could I possibly grow some of these desert species in our yard?

When I stumbled upon a bonsai demonstration at Baker's Nursery in Phoenix one morning in 2005, I knew I had found the solution and soon joined the two bonsai societies in town. After promptly killing my

first two non-native juniper trees in the hot sun, I then switched to desert-adapted species. I now enjoy growing about two dozen species of trees, including elephant tree, palo brea, ironwood, velvet mesquite, Texas ebony, and Sonoran rock figs with their exposed roots flowing over miniature boulders. Several shrubs are also beginning to take

by Tom Gatz, Garden Docent and Horticulture Aide



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on interesting miniature tree forms in some of my pots, such as elephant food, *Euphorbia misera*, cascalote, Barbados cherry, bougainvillea, creosote, emu bush, and Texas Ranger.

Frowned on with concern by some plant-lovers harboring suspicions of plants being tortured in tiny pots, one tree book author even unfavorably compared the occasional root pruning of bonsai trees (which actually makes room for more soil in the pot) to the cruel and archaic practice of foot binding. In fact, few plants get as much care and attention as do these valued specimens pampered by bonsai enthusiasts. With proper care, your bonsai tree may well outlive you. One specimen at the U.S. National Arboretum in Washington, D.C. is reputed to be more than 380 years old!

Not to be confused with whimsical topiary, the aesthetic goal in bonsai is to give the illusion of a tree of great age. The look is slowly achieved by developing a thick, weathered trunk, and encouraging downward slanting branches and branch ramification by means of strategic clipping or temporary wiring. Sensei Leroy Fujii recommended leaving spaces in the tree for imaginary tiny birds to fly between the branches.

Just about any plant with a woody stem can be grown as a bonsai, but the most realistic ones have small leaves or needles and thick, gnarled trunks. Avoid the bonsai plants for sale at the big box stores; they are often not suited for our climate and most bonsai trees need to be grown outdoors. Potential places to find specimens with character are in the

discount area of some nurseries and (with permission of course) from the yards of old, established neighborhoods that are undergoing renovation. When salvaging a large plant from the landscape, save as many roots as you can and quickly transplant it to a very large pot or plastic storage tub with drainage holes added. Then gradually reduce the pot size and root mass each year. Keep it watered and well fed; even desert plants need extra care when confined to pots.

Try to start with the thickest trunk you can find. I have seen some olive trees and bougainvilleas with trunks a foot or more in diameter successfully converted to bonsai masterpieces. Don't be in a hurry to put your plant into a bonsai pot. Smaller, one-gallon specimens often spend four or five years growing in the ground or in deeper three- to five-gallon training pots, where they more quickly develop the desired bonsai style and trunk thickness. Be sure to place a flat rock or tile a few inches under the soil to encourage roots to initially grow laterally. That way it will more readily fit into a smaller bonsai pot when it begins to look more like the miniature tree you envisioned.

Much of the knowledge about well-draining soil mixes and repotting techniques that I have gained at the Desert Botanical Garden has helped me in caring for my bonsai trees. Conversely, the knowledge gained from the bonsai clubs has given me new perspectives on pruning and shaping not only my bonsai trees but also my full-sized trees. The big mesquite in

our backyard is acquiring a windswept style—artistic, but also practical to better deal with the monsoon winds.

Many bonsai enthusiasts struggle (sometimes successfully) to keep pines and maple trees alive here in the desert. I'm not that skilled, so I stick with the desert plants that thrive here. The elephant tree (*Bursera microphylla*), native to Arizona and Mexico, is a great bonsai candidate and one of my favorites. Specimens often take on natural bonsai form as they cling to desert hillsides and get pruned by browsing animals and frost. They are usually available at the Garden plant sales if you get there early.

Some succulent plants can also be displayed as bonsai. Although not considered a true woody tree by bonsai purists, I think a great starter species is the succulent plant called elephant food (*Portulacaria afra*). It's a tough little plant that thrives in full sun with minimal water. Its only Achilles' heel is cold weather. Be sure to bring yours inside if the temperature is predicted to drop below freezing. A new book entitled *Bonsai Succulents* (2007) by Philippe de Vosjoli and Rudy Lime is loaded with intriguing photos and can be found in the Garden library (open weekdays 12-4 p.m.). If you would like to learn more about this ancient living art, contact the local clubs listed below. Your success, like mine, will improve dramatically under the gentle guidance of club mentors.

Phoenix Bonsai Society,
www.phoenixbonsai.com or Scottsdale
Bonsai Society, scottsdalebonsai.weebly.com

Opposite page, top left: The roots of this Sonoran rock fig, *Ficus petiolaris*, (formerly *F. palmeri*) were wrapped around a rock and buried for several years before the plant was elevated to display it in the "root over rock" style. *Top right:* Like a tree growing over a cliff edge, this elephant food, *Portulacaria afra*, is styled in the "semi-cascade" bonsai form, with a haworthia serving as an accent plant. *Bottom left:* Elephant tree, *Bursera microphylla*, seedlings were used to create a miniature "forest" scene. Smaller trees were placed in the back to give the illusion of distance. The petroglyph rock art was created by local artist David Morris. *Bottom right:* So that the pot does not compete with the tree, glazed colored pots are normally used only with bonsai plants that flower, such as this bougainvillea. A tiny elephant food "tree" is used as an accent.