

Arboretum: Garden, Classroom, Lab

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When you visit the Boyce Thompson Southwestern Arboretum, stay long enough to let your amazement at the diversity of plants cool off a bit.

Then you notice more of the other things, like the trail along the creek at the foot of the cliff, like the birds from hawks to hummingbirds, like the lake with rare species of small fish, like the lizards among the geological displays and the squirrels around the abandoned rock house, like the refreshing smells and sounds of a desert canyon.

Seventy species of animals and 144 of birds have been seen at the arboretum.

There's more to the arboretum, too, that you might not see: educational and research activities for advancing the understanding of desert plants and the desert environment.

But the plants themselves, more than 1,500 varieties of them, are the stars of the show. Mainly for them, about 80,000 people a year come to the arboretum 60 miles east of Phoenix, near Superior.

Specimens from dry regions throughout the world grow in 35 acres of botanical gardens. Many visitors say their favorite is the big boojum tree from Baja California. Grouped plantings of cacti, yuccas and agaves show off the varieties of shapes and sizes of these families. Some of



the many wildflowers grow under a grove of eucalyptus trees from Australia or near the olive trees from southern Europe. Besides the botanical gardens, the arboretum includes more than 1,000 acres of natural Arizona desert. The plant life ranges from huge 200-year-old saguaros to what arboretum curator Dr. Frank S. Crosswhite calls "belly flowers" because they are so small you need to lie on the ground for a good look.

Also, two greenhouses allow the public to see many desert plants that might not survive the cool winters at the arboretum's 2,400-to-4,000-foot elevation. One features cacti; the other, other succulents. The names of some specimens catch the flavor of their curious appearance: creeping devil, Peruvian old man and elephant's ear.

Two miles of marked trails, a shaded picnic area, and a visitors' center with bookstore and gift shop add to the learning and enjoyment possible at the arboretum.

Still, the Boyce Thompson Southwestern Arboretum is not as good as the three groups that manage it want it to be. It is run by a unique



Far left: One of the arboretum's walking paths offers this view of Ayer Lake.
Near left: In research plots at the arboretum for testing low-lying plants as ground covers, Tim Clark adds some new plantings. (Photos by Ted Bundy.)

partnership of the University of Arizona, the Arizona State Parks Board and Boyce Thompson Southwestern Arboretum, Inc., a non-profit corporation. The U.S. Forest Service also owns part of the land used by the arboretum. The three managing groups have adopted a master plan for improvements to the arboretum.

Some parts of the plan are already under way. A new parking lot has been completed. The trail network, plant collection and irrigation system are being expanded. Demonstration gardens being planted and grown will show how water-saving plants can be used in home landscaping.

Future plans call for a discovery area for hands-on learning experiences with plants, an auditorium and a classroom. Increased space is planned for the library, seed storage, research facilities and greenhouses. These improvements will allow expansion of the arboretum's educational and research programs.

Many such programs already take advantage of the arboretum's setting and facilities. Guided walks, lectures and interpretive programs are provided regularly to school classes, garden clubs and other groups. The

New 'Friends' Group Helps Arboretum Grow

Membership in a new group, Friends of the Arboretum, helps people take full advantage of the offerings of the Boyce Thompson Southwestern Arboretum while helping the arboretum improve itself.

The group began this winter as part of the University of Arizona Foundation. Members' benefits include:

- a free subscription to *Desert Plants*, the arboretum's colorful quarterly magazine. *Desert Plants* is described on page 19 of this *Arizona Land and People*.

- free admission to the arboretum, which is open from 8 a.m. to 5 p.m. every day except Christmas. Admission for non-members costs one dollar.

- two free guest tickets of admission.

- an invitation to Friend's Day, a yearly fall program about desert plants.

- a special preview of the Annual Spring Plant Sale the day before non-members see the sale.

Dues for regular membership are \$25 annually. Special types of membership are available for higher levels of support. The dues will help fund improvements under the arboretum's master plan for enhancing its plant collections and facilities for educational and research programs.

For further information or a membership application, write to Friends of the Arboretum, P.O. Box 3607, College Station, Tucson, Arizona 85722, or call Leverett T. Clark at 626-0261.

school groups range from elementary pupils on a one-day field trip from Phoenix to university classes that may spend several days or weeks at the site. The arboretum's educational coordinator, Dr. Carol D. Crosswhite, also visits many schools in the state.

Research projects began at the arboretum more than 50 years ago. Some early studies of how roots hold soil in place led to a cooperative project with the U.S. Forest Service for growing thousands of erosion-controlling plants.

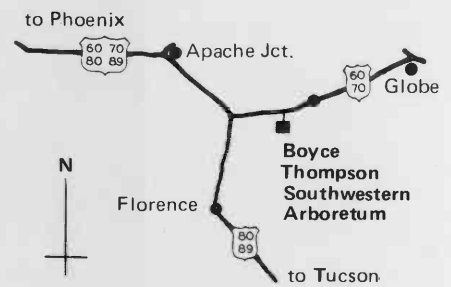
University of Arizona researchers in a current project at the arboretum are growing several low-lying, spreading plants in test plots. They want to identify desert plants that would work well as ground covers for landscaping.

Another research program at the arboretum focuses on desert legume plants. Legumes are plants related to peas and beans whose roots harbor nitrogen-fixing bacteria. Researchers are collecting and screening many of the thousands of little-known legumes from arid lands to check for species that have potential as water-saving crops or landscape plants.

The arboretum also advances the international understanding of desert plants by providing seeds from hundreds of species to research institutes, public agencies and botanical gardens around the world.

The public has a chance to buy water-saving plants at the arboretum's most popular event, the annual Spring Plant Sale. The specimens and seeds sold include trees, shrubs, cacti and other plants for landscaping and houseplants. About 10,000 people came to the two-day sale this April and bought hundreds of varieties of plants.

The timing of the sale gives customers a chance to enjoy the spring-time wildflowers and blossoming shrubs in the arboretum and the sur-



Ocotillos in bloom at the arboretum. (B.T.S.A. photo.)





Cacti and succulents with an assortment of shapes attract attention from a visitor to the 1982 Spring Plant Sale. (Photo by Ted Bundy.)

rounding desert. However, visitors to the arboretum can see flowers abloom almost any time of year. Various cacti and agaves blossom throughout the summer and early autumn, and some shrubs such as jojoba carry flowers through the winter.

The Boyce Thompson Southwestern Arboretum is already close to what philanthropist William Boyce Thompson envisaged when he founded it in 1927. The improvements now planned will make it even better. He predicted it would become "the most beautiful and most useful desert garden of its kind in the world."