## The University of Arizona Campus Arboretum

Plant collection offers research opportunities

By Susan McGinley

## MISSION OF THE PROPOSED UA CAMPUS ARBORETUM

The mission of the University of Arizona Campus Arboretum is to preserve, manage, enhance, and expand a vital collection of plants in an active urban Sonoran Desert setting; and to showcase the historic, aesthetic, environmental, economical, and educational value of these plants within our community and the American Southwest.

## **HISTORY**

The UA plant collection has historical significance. Landscaping the campus was a priority from the time Old Main was built. Many plants have been installed by faculty and students, or donated by graduating classes. Robert H. Forbes, a 19th-century faculty member, planted the hundred-year-old olive trees that shade the north mall. The Joseph Krutch Desert Garden is a legacy from the original late-1920s cactus garden that once filled the entire mall east of Old Main.

During the mid-20th century arid-tolerant species from all over the world were brought to Tucson and planted on campus. More than 50 campus trees are the only existing specimens in Arizona, and several are unique to the entire Southwest. A few were the first of their kinds to be planted in the Western Hemisphere.

## **CONTACT**

Elizabeth Davison (520) 621-1582 edavison@ag.arizona.edu The University of Arizona campus is the oldest continually-maintained green space in Arizona.

For more than 100 years, UA students, faculty, staff and visitors have enjoyed the beautifully landscaped campus in the heart of the Sonoran Desert. This unique collection of trees and shrubs provides educational and research opportunities for students and faculty, historical examples of plants from arid and semi-arid

climates around the world, and restful shady places for study or retreat. The campus is an outdoor classroom for students and faculty from the College of Agriculture and Life Sciences; College of Science; and College of Architecture, Planning and Landscape Architecture.

"Students learn plant origins, botanical interrelationships, landscape principles, and human/plant history," says Elizabeth Davison, lecturer in the Department of Plant Sciences and director of an effort currently underway to designate arboretum status for the campus landscape.

"Because it's situated in the unique, richly diverse Sonoran Desert ecosystem, the UA campus serves as a resource for desert plants with potential for food, fiber, medicines and landscape uses," Davison says. Examples of such useful plant sources on campus include carob trees (chocolate substitute), cassia shrub and tree species (anti-bacterial properties, cough suppressant, root knot nematode killer), eucalyptus (cosmetic and medicinal oils), jojoba (waxes and oils), willow (aspirin), and salvia (cosmetic and medicinal oils).

Davison is spearheading the effort to obtain arboretum status for the campus. "Step one is to correctly identify every plant on campus with signs," she says. She and her team are conducting a full plant inventory and collecting botanical notes and historic documentation. The official arboretum designation would qualify the



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campus arboretum to seek funding for conservation of existing valuable plants, additions of new and important aridtolerant species, student projects, and enhanced horticultural efforts. The designation would also help protect significant and/or vulnerable trees that have research potential.

"Cataloging trees and shrubs on campus would give faculty and students better information on the potential of plants in the campus collection that may be useful for study, analysis, and extraction of compounds," Davison says. "Most of the plants in the UA collection were installed before 1993 by faculty and students who traveled the world, botanizing in arid countries." (The Convention on Biological Diversity, which went into effect worldwide in 1993, but has not yet been ratified by the United States, mandates that the patent or ownership rights to any plant material taken after 1993 from non-native species must revert to the country of origin.)

Davison hopes to hire staff and students who will assist in managing the campus plant collection. She has already conducted plant walks and lectures around campus, and will be a featured speaker at a homeowner tree clinic on campus in spring 2002. W

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