



A Santa Cruz island ironwood in the Mary Wattis Brown Garden of the UC Davis Arboretum is identified by a laminated label.

Labeling the Collections at the UC Davis Arboretum

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In July, 1996, the Elvinia J. Slosson Endowment Fund awarded \$10,000 for an 18 month period to continue the production and placement of plant labels in the research and teaching collection of the Davis Arboretum. This award funded approximately half of the originally proposed project; the original project goals were scaled back accordingly to approximately 350 metal labels and 2000 laminated labels. Although the term of the project was originally proposed as eighteen months, personnel changes and scheduling conflicts with student workers have shifted some project work into 1998. We anticipate now that the project will end on June 30, 1998.

The production of all plant labels begins with an update of our digitized collection maps: mapped plant names and accession numbers are checked for accuracy, corrected as needed, and the number of labels needed is recorded. Using a variety of horticultural and botanical reference materials, the geographic range or, in the case of cultivars, comments on the garden selection

history, are researched for each plant and added to the label inventory, along with the total numbers of labels needed. A list of plants requiring labels is exported from the mapping system to an application with sophisticated page layout tools and, for this, a paper copy of the plant label is produced. For the laminated labels, the heavy stock paper labels are trimmed, laminated, and then affixed with a UV-resistant plastic tie to either a branch of the plant or, for low herbaceous plants, to a wire label stake that is placed next to the plant. For metal labels, a camera-ready final copy of the labels is printed and then sent to a service bureau where a film negative and, finally, uncut sheets of photometal labels, are produced. These are returned to the Arboretum to be trimmed into separate labels, have their sharp edges rounded for safety, and then mounted, with a backing plate, to the tree or label stand.

Due mostly to high material and photometal printing costs, the metal labels are very expensive to produce and install. Therefore, we have targeted most of these labels for a collection that is both permanent (that is, features large, long-lived trees) and nationally important. With approximately 125 species, varieties and hybrids, the Davis Arboretum has one of the largest and most varied collections of oaks (*Quercus*) in all of the United States and, indeed, the world. Most of these oaks can be found at the far west end of the Arboretum in the Peter J. Shields Oak Grove, an 11-acre site with more than 80 deciduous and evergreen species of both native and exotic oaks and a documented collection of F-1 and segregated F-2 hybrids. Among its many specimens, the collection includes a fine collection of oaks native to the western U.S., including the rarest of any of the oaks in California, the island oak (*Q. tomentella*), a handsome group of Persian oaks (*Q. castaneaeifolia*) received from Kew Gardens, and a number of oaks from the Old World, rarely seen in cultivation in the U.S. Originally planted in 1964, many of the trees have matured to striking and distinctive specimen trees. This collection is actively used by researchers and as a teaching collection, as well as a site to test selections of these fine trees for tomorrow's landscapes. With its open vistas and wide sweeping lawns, the grove has also become a popular and pleasant retreat for students and visitors, with especially heavy visitation on the weekends.

Approximately 300 plant labels have been prepared for the oak grove and are ready for printing. Dr. John M. Tucker, a world-renowned oak expert, volunteered his time and worked closely with the student



The botanical name of the plant appears on the front of each laminated label (left) and information about the plant's native range appears on the back (right), along with credit to the Slosson Endowment Fund for funding the labeling project.

responsible for this area to research taxonomic name changes and ranges for all the species and varieties in the collection. This task was both painstaking and time-consuming, but the new labels represent current scientific understanding of taxonomic and phyto-geographic relationships. The final metal copy for these labels has a black background and silver letters. They will be attached to the tree with tree expansion screws.

Laminated labels are inexpensive and quick to produce and we have focused much of our project activity on the preparation and installation of these labels. To date, 964 labels have been prepared and installed in several of the major Davis Arboretum collections, particularly our large California native plant collection, the Mary Wattis Brown Garden, and in our Mediterranean Collection. As the label dangles from a tie, the geographic range or information on the horticultural selection of the plant was included on the back of these labels and added to the database of plant information and linked to our digital maps. The back of each label also credits the Slosson Endowment Fund as the source of funding for the labeling project. We anticipate adding approximately 1000 more labels before this year's spring bloom, labeling plants in the South African,

Argentine, Chilean, North Coast, and Ericaceae Collections.

Other than planting new collections, producing and installing labels is probably the single most satisfying project for a botanical garden staff. One of the most common frustrations for interested students and gardeners is to visit a botanical garden and not be able to find the name of a particular plant that catches their interest. Thus our garden visitors have been delighted as each new area is labeled and we get many comments from "satisfied customers". The former director of the California State Parks Interpretive Program commented: "I have travelled up and down California and seen plant labels in many parks and gardens and I have never seen such clearly designed and elegant labels as you have in your collection." We value the support the Slosson Endowment Fund has given our research and teaching collection to provide this much appreciated interpretive aid to our visitors.

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