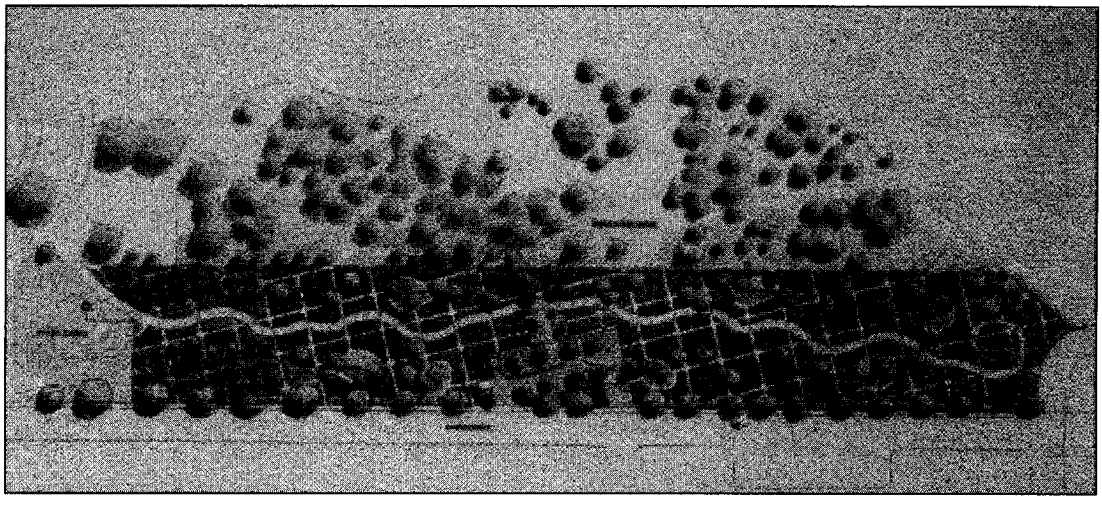
The Hydrozone Garden: A Demonstration of Groundcovers for Reduced Water Use in Landscapes

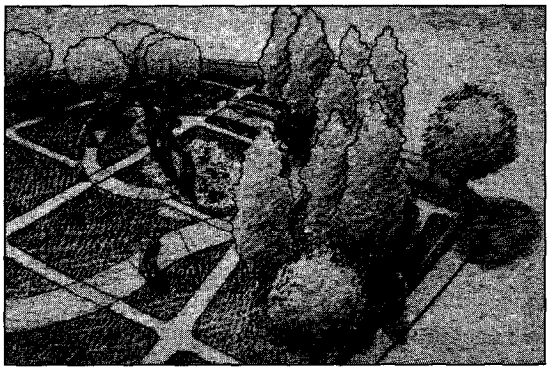
Kerry J. Dawson, Ellen Zagory, Warren Roberts, and Patricia Lindsey

This year's funding has allowed the completion of Design Development for a research, education and demonstration garden for the display and testing of ornamental species under five different irrigation schedules as a function of evapotranspiration (ET). This garden will provide highly controlled conditions necessary for testing various species for performance under selected irrigation conditions, will provide an experimental site for researchers interested in water relations in plants and will provide for landscape and horticultural professionals as well as the general public, a display garden of state of the art irrigation technology.

Design Development was completed by staff and the Landscape Architect consultant. A series of meetings between staff and the Landscape Architect Consultant were held to discuss and make final decisions concerning the details of all aspects of garden design. Work completed includes:

- An accurate site survey and grading plan.
- A complete inventory of all existing trees
- Final layout and design of all hardscape elements including mounds, paths, beds, seating, sculptural elements, access/parking, interpretive signs, storage shed/restroom structure, fountain, historical orchard, and visitor plaza.
- Identification of construction materials.
- Siting of designated experimental plots within the overall plan for research on water use.
- Design of an interpretive plaza and display





- Proposed planting list of species for each zone based not only on their ornamental use but also for testing of Landscape Coefficient values as per the WUCOLS (Water Use Classification of Landscape Species) project.

- Interpretive planning including: the use of hydrozones in landscape design to reduce water use, the Model Water Efficient Landscape Ordinance and its requirements, landscape water demand, sources and costs, and irrigation systems for high efficiency. Use of the CIMIS program for estimating irrigation needs.

- Construction of a full model for use in construction planning and fundraising.

- Development of a fund-raising brochure

A copy of the prototype of the fund-raising brochure is attached. It is presently being circulated to Arboretum staff and cooperating personnel for comment. We anticipate completion of the final brochure by mid-July.

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