Council activities are administered by a fifteen-member Executive Committee that was initially appointed by State Forester Harold K. Mikell. Vacancies will subsequently be filled by election from the general membership. The Executive Committee is composed of the following representation:

One member from the Florida Division of Forestry One member from the Cooperative Extension Service One member from the Florida Forestry Association One member who is employed as a city arborist One member who is employed as a private arborist One member who is employed as a utility arborist One member from the Florida League of Cities

- One member from a tree advocacy group, conservation organization or garden club
- One member from the Florida Nurserymen and Growers Association
- One member from the Florida Recreation and Park Association
- One member from the American Society of Landscape Architects, Florida Chapter
- One member from the staff of the Florida Department of Transportation, representing the Florida Highway Beautification Council

Three Members-at-Large

The Florida Urban Forestry Council is, at present, in its formative stages. The opportunities in its future, however, are as unlimited as the talents and energies of those who believe in the need to make trees an integral part of our towns and cities and want to be involved. In 1990, the Council began publication of the *Florida Urban Forestry Newsletter* as a means of communication between those of us in Florida interested in city trees. The Council was a co-sponsor of the second annual Florida Urban and Community Forestry Conference at Saddlebrook (Wesley Chapel, Florida) on September 12th and 13th and will co-sponsor a third conference at Marco Island near Naples in September of 1991. Shortly, an awards program will be announced by the Council requesting nominations (in seven categories) to recognize Urban and Community Forestry efforts that have resulted in real improvements for communities within Florida. Awards recipients will be recognized at an awards luncheon at the 1991 Urban and Community Forestry Conference.

The Florida Urban Forestry Council also hopes to be actively involved in promoting effective municipal tree protection ordinances and a certification/continuing education program for arborists.

In addition, the Council will serve to screen and prioritize applications from communities and non-profit organizations for cost-share funding under the America the Beautiful Program, and make funding recommendations to the State Forester's office.

The Florida Urban Forestry Council has the potential to be the brilliant sunrise for environmentally sound, greener Florida towns and cities. The Council would welcome the active participation of members of the Florida State Horticultural Society. This is a way for all of us who believe in the values of city trees to pull together for more effective tree management in Florida's urban areas.

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KANAPAHA BOTANICAL GARDENS

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Abstract. Since 1977, the North Florida Botanical Society has orchestrated the development of 62-acre Kanapaha Botanical Gardens near Gainesville, Florida. It has been invested with a twofold educational goal: to develop major collections to demonstrate principles of ecology and evolution and to develop interpretive systems that will impart this information to visitors. Ten major gardens have been completed and a 29-acre arboretum is now under development.

On September 16, 1977 the North Florida Botanical Society was organized as a private non-profit corporation committed to the establishment of a botanical garden for the north Florida community. Later that month, the Society's board of directors asked the Alachua County Commission to make available a 33-acre tract of land for this venture. The request was unanimously approved by the Commission and the Society entered into negotiations with the county attorney to set terms for a long-term lease agreement giving the Society access to this tract. The final product of these deliberations was a complimentary 90year renewable lease for which the Society agreed to pay \$1 per year. Work at the site began on March 7, 1978.

In March 1981, the Society requested addition to this lease of a continguous 29 acres for development as an arboretum. Taking account of the Society's progress in developing the initial site, the Alachua County Commission approved this request bringing the size of the developing garden to 62 acres. Because of its proximity to Lake Kanapaha, the facility was named Kanapaha Botanical Gardens. 'Kanapaha' is a contraction of two Timucua Indian words meaning 'palmetto leaves' and 'house.' Collectively, they refer to the thatched dwellings of the lake margin's original human inhabitants.

The site is environmentally diverse, offering mature hardwood forests interlocking with rolling meadows, several sinkholes, and magnificent vistas from the escarpment overlooking 250-acre Lake Kanapaha. The acreage was formerly utilized for pasture and was devoid of other improvements. In fact a substantial accumulation of refuse had to be removed from the largest sinkhole before development could begin.

The Development Process

Between March 7, 1978 and October 16, 1986-the day Kanapaha Botanical Gardens was formally opened to the public-ten major gardens were developed. Most were integrated into forest-meadow interfaces where lighting was adequate and forested areas were little modified. These gardens are connected by a mile-long loop of paved walkway making virtually the entire facility wheelchair accessible. Approximately 80% of the walkway traverses shaded woodlands, a feature that makes the jaunt comfortable during the oppressively hot days of late summer when floral color is at its peak. An extensive irrigation system was installed and two boardwalks were constructed to provide visual access to two features that did not otherwise lend themselves to foot traffic: our largest sinkhole, which was developed as a 'sunken garden,' and a natural cove of Lake Kanapaha which has been developed into the water lily pond that is central to our bog garden. Six ornamental gazebos were constructed to serve as rain shelters.

During the development of Kanapaha Botanical Gardens, the Society was generously assisted by individuals, organizations, businesses, and agencies of city and county government. Private donors provided a truck, a tractor, lumber for the boardwalks, irrigation pipe, chain-link fencing, and even a wood-frame house that was relocated to Kanapaha Botanical Gardens as a contributed service. The Society received a grant from a private Scottish horticultural trust that facilitated the house's renovation for service as an entrance building and gift shop. The vast bulk of the Society's work force was initially comprised of individuals hired through public work grants, mostly affiliated with the now-defunct Comprehensive Employment Training Agency (C.E.T.A.). After 1983, when C.E.T.A. monies were no longer available, development relied to a very large extent on court-appointed community service workers, still an important component of the gardens' labor force.

The Gardens

Because Kanapaha Botanical Gardens arose as a citizens' initiative, its development was not encumbered by the constraints that often limit the mission or expression of a private facility that is bequeathed to the public domanin. The founders of Kanapaha Botanical Gardens established as its basic mission "to celebrate the immense beauty and diversity of the earth's flora." In the realization of this intent, they envisioned a twofold educational design:

(1) Most major collections would be organized to demonstrate principles of ecology and/or evolution.

(2) Interpretive mechanisms would provide visitors with a concise statement of the principles involved and, for all exhibited plants a common name, Latin name, botanic family, and native distribution.

In pursuit of these goals, the Society has emplaced photoengraved aluminum signs throughout the facility and established the following gardens:

Butterfly garden. The most recent major garden was sponsored by the Mimosa Circle of the Gainesville Garden Proc. Fla. State Hort. Soc. 103: 1990. Club. The butterfly garden has been fashioned from an array of species whose colorful flowers attract butterflies. This garden straddles the entrance/exit walkway.

Vinery. This garden features a large collection of ornamental plants with a vining habit and is, in effect, two gardens since it includes both a full-exposure setting for sunloving species and a woodland garden for shade-loving forms. An elegant lattice archway system has been completed here and the several vine sculpture frames include a gigantic anchor from an early 19th Century English shipping vessel (on continuing loan from the Florida Museum of Natural History).

Herb garden. The herb garden is Florida's largest and one of the most extensive in the eastern United States. Almost all plants were contributed and the Gainesville Street Department donated the antique bricks used throughout this and the bamboo garden. Several elements, including a gazebo and an ornate central sundial, were sponsored by the Gainesville Woman's Club. This extensive garden consists of an 8100 square-foot medicinal herb garden, a 1600 square-foot Renaissance knot garden, and a 1600 square-foot scented garden (consisting of raised brick beds accessible from a brick maze walkway), and constitutes one of the finest herb gardens in the nation. The Florida Endowment for the Humanities provided financial assistance for conduct of the research necessary to developing the hundreds of photoengraved signs placed here.

Sunken garden. The largest of several sinkholes on the site has been transformed into a sunken garden visually accessible from an elegant boardwalk designed as a contributed service of two architects. A koi pond was recently developed in this garden which is a popular site for weddings and other social events. The signage here provides an overview of the effect of natural selection in defining the flora of a cool, shady, moist site.

Bamboo garden. Florida's largest (and one of the nation's finest) public bamboo collections is traversed by a brick walkway. Subterranean concrete walls separate monopodial species.

Spring flower garden. In a magnificent woodland site overlooking Lake Kanapaha, an extensive spring flower garden has been established to provide a spalsh of spring color. Hundreds of azaleas (both native and exotic), dogwoods, redbuds, fringe trees, mock oranges, apple trees, tung trees, red buckeyes, forsythias, violets and other spring-flowering plants have been massed to provide a visual celebration of the advent of spring.

Hummingbird garden. The Gainesville Woman's Club sponsored an ornate gazebo as the centerpiece of this garden which displays a huge array of plants whose flowers attract hummingbirds during the warm months. This has become an especially popular garden with wildlife photographers and offers all visitors the prospect of enjoying the aerial acrobatics of North America's smallest bird.

Rock garden. There are two separate components of this garden. A central assemblage of plants adapted to arid areas is enveloped by a rock garden in the European tradition i.e., a collection of flowering plants clambering among rocks and boulders to create a contrast of textures. The large boulders featured here were moved into place with heavy equipment provided by both the City of Gainesville and Alachua County.

Bog garden. The centerpiece of the bog garden is a water lily pond developed into a lakeside cove and which

is accessible from a boardwalk. The pond is the late summer sensation of Kanapaha Botanical Garden and its offering climax with the appearance of the giant Brazilian *Victoria cruziana*. Shoreline emergents include papyrus, bamboos, irises, royal ferns, mallows, and more.

Palm hammock. This major collection includes most palm species known to be hardy in our climatic zone including several hybrids.

In addition to these major gardens, Kanapaha Botanical Gardens now hosts a series of smaller 'vestpocket' gardens including:

(1) an insectivorous plant garden that displays both native American species and several from abroad.

(2) an ornamental pepper garden.

(3) a wildlife food plant garden in which are displayed species whose berries attract birds and other wildlife.

(4) a woodland wildflower garden. This garden is being developed on a woodland hillside overlooking Lake Kanapaha. The Gainesville Garden Club sponsored a gazebo for this garden which should be transformed by time into a major attraction.

(5) a mallow garden subdivided into four areas to accommodate members of the four tribes of the family Malvaceae.

Of several horticultural features still to be developed, the most notable is the extensive arboretum which will consume most of the 29 acres that lie west of the developed portion and which were acquired for this purpose in March 1981. An irrigation system has been installed and extensive planting has been completed already. This area will further feature a series of water features (ponds,

streams, and waterfalls) that are planned as a joint venture with the City of Gainesville's Regional Utilities Department. This will provide these features for Kanapaha Botanical Gardens while serving as an exemplary demonstration facility for recycling wastewater effluent from the nearby Kanapaha Wastewater Treatment Plant.

Kanapaha Botanical Gardens has set a goal of fiscal self-sufficiency and presently generates over 80% of its revenues from its operations. Kanapaha Botanical Gardens assesses a modest admission fee and operates both a gift shop and plant sales nursery that is stocked largely from an on-site propagation greenhouse and nursery. Additionally, the staff sponsors several specail fund-raising events including three moonlight walks annually and a winter bamboo sale. The facility's principal operational deficiency at this time is its lack of enclosed space to accommodate meetings, workshops, and to provide refuge for social events in case of inclement weather. Presently, Kanapaha's enclosed space is limited to a small building that serves as an admission building, gift shop, rest rooms, and office space. The Society's board of directors is presently planning an effort to raise the funding necessary for the construction of a more substantial facility.

Overall, the development of Kanapaha Botanical Gardens has proceeded quickly and auspiciously. It is the Society's belief that this has transpired because it has served as a catalyst to focus human energies that were here already. It now stands at the threshold of realizing its singular goal—to celebrate the immense beauty and diversity of the earth's flora.

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TREES THAT KNOW THEIR PLACE

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Abstract. Much of the work for arborists in all areas of the country consists of reducing the size of trees that have been planted in spots for which they grow to be too big. Street tree plantings have a number of constraints ranging from the need to stay clear of overhead wires and lights, to restrictions on root growth by the size of the planting area and the presence of underground utility structures. Smaller properties and town gardens also need trees in scale with the size of the lot.

A selection of trees suitable for these conditions in south Florida is discussed.

Most arborists agree that the best pruning for the health and long life of a tree is no pruning at all—or at

least no pruning whose only purpose is to reduce the size of a tree. "Trees that know their place" are trees that will not outgrow the site in which they are planted, and might better be called "trees that installers knew were right for their place." There are many sites in which a small tree is appropriate: the tiny yards that come with many townhouses, places where there are wires or other obstructions overhead, and spots where some tall, green, living relief is needed for a streetscape or garden, but where there is a very restricted rootrun due to underground conditions. Some situations may also require a columnar shape or a limited spread to the branches. These are not treated in detail in this paper since the main impetus for it has been the need to encourage the planting of trees to shade the ground around our living areas. Columnar trees and palms may shade and cool the sides of buildings if correctly placed, but do not contribute much to an overhead canopy cover.

For small gardens, the specifications for a suitable tree would probably include a single or multiple trunk that carries an open canopy, spreading high enough to allow walking, or at least sitting comfortably, in a light to medium shade. Dense shade may be a disadvantage in a small garden since it limits the smaller plants that can be grown to add color or other interesting features to the area. Not all