

## THE LOCAL POLITICS OF LANDSCAPE CONSERVATION

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***Abstract: Every city has landscape conservation needs and opportunities. Land trust planners refer to the 90's as the "Decade of Land Acquisition," because after the turn of the century, many areas of Florida are expected to be at their fully developed state. After 2000, opportunities for preserving natural areas will be severely limited. Since contact with nature is extremely important to human mental health, action must be taken now to assure that urban areas in the future are pleasantly entwined with the natural world rather than existing as endlessly sprawling subdivisions, highways, and shopping centers. To preserve the opportunity for adequate contact with nature, municipalities need to do the following: preserve and replant the urban forest, plan for a greenbelt around the city, allocate lands for nature preserves and botanical gardens within the urban area, and develop "pocket" parks where citizens can find respite from the pressures of city life. The planning strategies, municipal ordinances, and cooperative citizen/government programs that are employed in Gainesville, Florida to accomplish the above objectives can be adapted for use by other communities.***

One of the greatest challenges facing local governments is growth management. The rapid development of south Florida has resulted in small cities growing to fill their borders. Distinctions between communities have been blurred, and a large urban/suburban swath has been created along the east coast from Palm Beach to Miami. In response to the urbanization of the state, the Florida Legislature in 1985 passed the Growth Management Act. This was followed in 1986 with "9J5" of the Florida Administrative Code, which established rules which local governments must follow in their preparation of Comprehensive Plans. The goal of these plans is to foresee the consequences of growth and assure that appropriate steps are taken to support the quality of life—or at least to make certain that it does not decline. One important element of each Comprehensive Plan is the Conservation and Open Space Element, which seeks to address the very important issue of landscape conservation.

The City of Gainesville has interpreted the concept of landscape conservation very broadly and has addressed this need in a variety of ways. In some respects, the vision is similar to the plan that guided the development of Vienna, Austria centuries ago. This large metropolis is entirely surrounded by a mile-wide swath of woods. In America, this concept of defining the limits of urbanization is best recognized in Frederick Law Olmstead's "Emerald Necklace" concept, whereby urban development was excluded from large natural areas adjacent to cities.

At the local level in twentieth century Florida, the government of the City of Gainesville worked with interested citizens to develop a private organization, the Alachua Conservation Trust (ACT), whose mandate is to articulate and carry out a plan to provide a greenbelt for our commu-

nity. The City provided initial funding to ACT, which now (two years later) functions successfully and financially independently as an intermediary between state government funding agencies (i.e. Department of Natural Resources and the Water Management Districts) and landowners to arrange for the conservation of natural areas.

The nucleus of the greenbelt plan is defined by the existence of two large state preserves—Paynes Prairie (18,000 acres) and San Felasco Hammock (2,000 acres). Located on the south and north sides of our community, they function with Newnans Lake on the east to provide large natural areas that confine the limits of growth. Through conservation easements, zoning and acquisition of undeveloped lands between these three large areas, a rural greenbelt will be developed as a permanent barrier to endless suburbanization.

The Gainesville landscape conservation plan also includes a greenways system which will connect these larger natural areas via linear parks which will follow the creek drainage system and occur on flood-prone or swamp land. Cities like Boulder, Colorado and Washington, D.C. have already established extensive greenway bike trails. In the heart of the city, the psychological pressures of urban life can be left behind as one travels along trails that border creeks, traverse swamps on elevated boardwalks, and wind through wooded areas. An amplification of this system is seen in the Rails-to-Trails Program, which in Gainesville has taken the form of an 18-mile trail that will follow an abandoned railroad right-of-way from the east side of the city through Paynes Prairie to the town of Hawthorne. The City has also received a \$301,000 grant from the Highway Beautification Council to transform the former railroad right-of-way along State Road 24 into a tree-lined jogging/bike path with wildflower gardens marking quarter-mile and half-kilometer intervals.

In addition to functioning as important recreation areas for citizens, greenways also can serve as wildlife corridors. Research in wildlife ecology has shown that the creation of preserves, even very large ones, is not enough to sustain viable populations of many important animal species. Thus the greenways system functions to augment the effectiveness of large preserve areas by enabling animals to travel from one area to another. Thus, the large-scale landscape conservation plan for the Gainesville area considers not only how to provide our community with a greenbelt but also how to connect our greenbelt with larger wilderness areas associated with river systems like the Santa Fe and Ocklawaha and with the Ocala National Forest.

Inside the urban area of Gainesville, opportunities for landscape conservation have been realized through the creation of nature parks like Bivens Arm (60 acres) and Morningside Nature Center (278 acres). These areas provide environmental education to local school systems and provide citizens with important passive recreational opportunities. Likewise, the creation of small gardens and "pocket parks" within the city limits has enhanced the quality of life in our community. On the grounds of the Thomas Center, an old hotel renovated to provide office space for many City departments, extensive plantings of flowering

trees, shrubs and perennials comprise the Thomas Center Gardens. Along the Sweetwater Branch, a creek that drains an area on the east side of the city, a botanical garden is planned in conjunction with the Matheson Historical Center.

One of Gainesville's greatest natural assets in the cause of landscape conservation is its urban forest. Colonial maps define the location where Gainesville now exists as "the great hammock"—a huge forest that extended from the Georgia border to south of Wildwood. Most of this forest has been replaced by cattle ranches, agriculture, and commercial forestry operations. Remnants, however, exist in various locations like San Felasco Hammock State Preserve and the Ocala National Forest. Despite the degradation of most of the understory as the urban area has been developed, evidence of this ancient great woodland remains today within the city of Gainesville. As one approaches the town from the air, the appearance of the community is so heavily wooded that it is regularly referred to as "a city in a forest."

To protect the urban forest, Gainesville has developed laws to protect and require the replanting of trees. The Tree Protection Ordinance regulates hardwoods on public and commercial properties that are larger than 8" in diameter at chest height (dch), with the measurement increasing to 12" dch for slash, longleaf and loblolly pines. A permit is required to remove trees above these size limitations. As a condition of granting the permit, the planting of two replacement trees can be required. If the trees are cut without a permit, replacement is required on an inch-for-inch basis based on diameter measurements.

For the homeowner, the rules governing removal are different. Privately owned homes are exempt from the Tree Protection Ordinance with respect to any tree smaller than 30" in diameter. However, special rules apply to larger "Champion" and "Heritage" trees. Special attention is given to very large trees because their size and age qualify them for consideration that transcends the immediate concerns of everyday life or the whims of individual homeowners. "Champion" trees are those that have been identified by the Florida Division of Forestry as being the largest of their species within the State of Florida or by the American Forestry Association as being the largest of their species in the U.S. "Heritage" trees are those larger than 30" dch.

Individual homeowners are free to remove Heritage trees within the legal setback limits of the property. In other words, within the buildable envelop (the space the home can legally be expanded to fill), the fate of large trees remains with the homeowner. However, outside the legal setbacks, Heritage trees are protected by ordinance. Champion trees receive legal protection regardless of their location and can only be removed after a hearing by the City Commission's appointed Board of Adjustment.

Besides controlling the removal of individual trees, the Tree Protection Ordinance also requires the protection of trees during construction. Prior to issuing building permits for any proposed construction project, the impact on the urban forest is assessed during Site Plan Review, and an effort is made to preserve as many trees as possible. During construction, durable tree barricades must be built to protect at least 2/3 of the area under the canopy dripline. This

is minimal protection, since the rootzones of most trees extend outward in an area three times as large as that covered by the crown. However, if the required area to be preserved was large enough to protect all the roots, almost no trees would remain on construction sites. It is also written into the Ordinance that roots larger than 3" in diameter must be cut cleanly when they are encountered during the construction process. If the barricade is well constructed and respected, if roots are cut rather than mangled by equipment, and if adequate water is made available to tree roots after construction, the majority of trees will survive.

Rules for planting new trees after construction is completed are included in the Landscape Ordinance. At the minimum, one tree must be planted every ten parking spaces so that the paved surfaces of parking areas will be at least 50% shaded within ten years. Since urban heat islands are considered one of the most important factors contributing to global warming, this requirement—one of the strictest in the United States—is considered extremely important in establishing ours as an environmentally conscious and conscientious community.

A variety of global environmental problems are causing great changes in the way that humans view many matters. Five years ago, Robert Costanza, a graduate of the University of Florida's doctoral program in Environmental Engineering, founded the International Society of Ecological Economists in an effort to recast the traditional economic method of measuring development which underestimates the intangible costs of pollution and environmental destruction and ignores society's responsibility to future generations.

The local application of this perspective is evident in Gainesville through efforts to assure that sufficient action is taken with respect to landscape conservation. The five elected City Commissioners and the City Manager provide general leadership for these efforts. However, they are frequently both motivated and assisted by citizens, many of whom are horticulturists active in the Florida Native Plant Society, the Florida Nursery Growers Association, or in a variety of other garden or nature associations. It is not unusual for these organizations to make their opinions known to our elected officials, either individually as citizens or through proclamations adopted on behalf of the organization by a consensus of the membership. In addition, the City Commission is guided by a variety of groups such as the Tree Advisory Board, the Plan Board, and the City Beautification Board. Horticulturists serve on all three of these important committees as well as on the Board of Directors for the Alachua Conservation Trust.

As Florida continues to develop, acquisition of adequate greenspace is absolutely essential. It must happen quickly, because what is not preserved will be used for human purposes. In the Florida Keys, the local land trust believes that by the turn of the century, all the land will be at its fully developed state. Thus in that part of the state, any land that is wanted for nature preserves or parks must be acquired during the next ten years.

At present in Alachua County, where Gainesville is the largest city, the entire county is zoned for one unit per acre. This is certainly a plan for endless suburban sprawl across the landscape as Florida's population continues to grow. The Alachua County zoning issue will be addressed

through the development of the County's Comprehensive Plan and possibly changed to allow for a future with differences between rural and urban environments.

By planning for appropriate landscape conservation, a better quality environment can be attained for the entire state. It is each community's challenge and responsibility during this decade. Those who lead our communities are

elected by citizens; their policies are guided by citizen advisory boards. Horticulturists will play an important role in determining Florida's success in providing for appropriate preservation of greenspace within their communities. In other words, the local politics of landscape conservation begins and ends with *you*.

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## FLORIDA'S URBAN FORESTRY COUNCIL

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During the past two years, the extensive publicity of theories concerning possible impacts of global warming and the greenhouse effect have heightened public awareness of the need for trees in and around our urban centers. The perpetuation and care of city trees, however, is nothing novel and new to the United States. As an example, one would note that tree wardens were to be found in New England communities over a hundred years ago.

Since the early 1970's "Urban Forestry" has described a renewed emphasis on trees in our towns and cities, an emphasis that goes beyond the care of individual trees to management of community trees as a dynamic interrelated continuum . . . an urban forest.

Urban forestry in Florida had its beginning in 1970 when the Florida Division of Forestry initiated its urban forestry program through cooperative agreements with a number of fastly urbanizing cities and counties. Florida's tremendous growth had prompted an environmentally-conscious state legislature that year to amend Florida's County Forestry Law to allow for cooperative urban forestry assistance to counties and municipalities. The objective of the Division of Forestry's 20-year effort in Florida urban areas has been "to provide the services of a professional forester, to assist in the establishment and management of trees and plant associations to enhance the beauty and livability of the urban environment".

After almost twenty years, many Florida cities have now employed their own urban forester or city arborist. Some of the larger cities have entire forestry departments responsible for tree planting and tree care and maintenance. In addition, a number of private urban forestry consultants and consulting arborists are now available to assist communities, large and small, with the development of comprehensive urban forestry programs. Many closely related professionals (landscape architects, nurserymen, private arborists, park supervisors, etc.) are becoming more active and more vocal in emphasizing the need for improved urban tree management programs. This, coupled with a tremendous interest by citizen and volunteer groups in participating in environmental enhancement, and national legislation prompted by an environmentally-minded President and Congress has set the stage for significant strides to be made toward greener, healthier Florida cities.

The newly-passed 1990 Farm Bill (Forestry Title) contains authorizing legislation for a renewed national commitment to urban and community forestry (U&CF) at a substantial funding level through 1995. Credit for this very significant step toward greener U.S. towns and cities should be given the U.S. Forest Service and the National Urban Forestry Council of the American Forestry Association who drafted portions of the initial legislation and the National Association of State Foresters who testified before Congress on the need for a new national U&CF policy.

Technically, the 1990 Farm Bill (Forestry Title) represents an amendment to Section 9 (Urban and Community Forestry Assistance) of the Cooperative Forestry Assistance Act of 1978. The bill does several very important things for urban and community forestry. It provides for:

1. Support funding for increased U&CF technical assistance to towns and cities through the State Foresters or equivalent state officials.
2. Establishment of a U&CF matching cost-share program for communities and 501(c)(3) non-profit organizations.
3. Creation of a National Urban and Community Forestry Advisory Council to develop and implement a national U&CF action plan.
4. A one-time grant of \$20 million to establish an *America the Beautiful Foundation* to solicit corporate funding and award matching grant monies for urban and rural tree planting.

An integral part of each state's implementation plan for accelerated U&CF Programs under the 1990 Farm Bill will be the active involvement and participation of a state urban forestry council. Creation of the Florida Urban Forestry Council was authorized by Florida Commissioner of Agriculture Doyle Conner in the spring of 1990. The organization might more appropriately be described as an association (council is more frequently used to describe a small group with a limited membership). The word "council" was, in fact, adopted to allow for a parallel at the state level to the American Forestry Association's National Urban Forestry Council (NU-FOREST COUNCIL) and the newly created National Urban and Community Forestry Advisory Council.

The Florida Urban Forestry Council is meant to be a forum and catalyst for urban forestry that will ideally involve the entire urban forestry community in Florida. Membership in the Council is open to any individual, citizen, group, organization, society, association, business or public agency with an interest in urban forestry.