FLORIDA AND FLORIDA FORESTS: A SENSE OF PLACE

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Abstract

This introduction is to give the forest nursery conference attendees a sense of place—within the state, university, school and the forests to which they relate. Florida is a large diverse state, with climates ranging from temperate to sub-tropical, reflecting diverse vegetation, including forests. The state has lost nearly half of its original forests to development, with about 15 million acres still in forests. Florida is the fourth most populous state in the US and growing at a rate of about 47 per hour, or 414,000 per year.

The University of Florida has 46,000 students, the fourth largest university in the US, and is one of 64 North American universities selected for membership in the American Association of Universities. The School of Forest Resources and Conservation is small but very productive, with its faculty attracting the second most extramural funding among 34 related units. The School began one of the first tree improvement programs to provide genetically improved seeds for high quality planting stock. Florida has been a leader in tree planting nationwide and still ranks fourth, planting about 150,000 acres annually. Notably, sustaining forest cover in Florida, the southeast, and the nation begins with the work of nursery managers like you.

Key Words

Florida climate, forestland, timber investment management companies

FLORIDA AND FLORIDA FORESTS

My task here today is not to address technical nursery topics or operational technology for running a nursery. You have many excellent presenters in an outstanding program that will ably address those topics. But first, let me acknowledge that one of my great opportunities is cooperating with your opening speaker, Earl Petersen, and the very fine Division of Forestry that he administers in Florida. I should also note that because of having our moderator, Steve Gilly, as a student in a class I once taught, I am not surprised that he put together such a fine program and that he runs one of the best nursery operations in the country.

You are in Florida at Gainesville, meeting in the University of Florida Hotel and Conference Center. You will take field trips to see North Central Florida landscape features, including a visit to the Austin Cary Memorial Forest, a property of the School of Forest Resources and Conservation. During this stay, talking and thinking about nurseries and sustaining forests, I want to make some remarks that give you a sense of place while you are here. Florida was the 27th state, entering the union in 1845. The state tree is the sabal palm. (You will dull your chain saw on this tree. As with many tropic species, it accumulates silica, that is sand, in its matrix.) The state bird is the mockingbird (a bird you do not kill after Parker Lee's novel). The state animal is the panther (which gives us intimate awareness of T&E species). The state flower is the orange blossom (obviously designated before the infatuation with native species). The state soil is Myaka fine sand (the most wide-spread soil series in Florida and the soil most abundant for planting forest seedlings in Florida).

The area of Florida includes 35 million acres, of which 2.5 million acres of the surface are water— 11,000 rivers, streams and waterways, and 7000 lakes greater than 10 acres, all bounded by 1200 miles of coastline, and twice that if tidal shoreline is measured. The highest point is 345 feet, in the panhandle in Walton County. One cannot be further than 60 miles from the coast; yet to travel from Key West to Pensacola, Florida, you would travel the same distance as going from Pensacola to Chicago, Illinois. This distance traverses an array of climates—temperate to sub-tropical, reflecting diverse forests and habitats. Moving along this course you see pines and hardwoods typical of the Lower Coastal Plain. In the south, you encounter Gumbo-Jumbo trees, an occasional native mahogany, the abundant and invasive melaleuca, Brazilian pepper trees, and the majestic Big Cypress Swamp just before the Everglades (once called the "sea of grass") appear. Slash and sand pine change their variety or race; slash from var. *elliottii* to *densa*, and sand pine from the Choctawhatchee to the Ocala race as you move from north to south.

When Florida was settled, about 27 million acres were forested. After clearing for agriculture, communities, and population support facilities, only about 15 million acres remain today classified as forestlands. Of these acres, 2.8 million are in public ownership, with 1.25 million in 3 national forests, and 1.55 million in other public ownerships, mostly in 30 state forests managed by your host, the Florida Division of Forestry. The remainder is in private ownership; 4.6 million acres owned by forest industry and 7.2 million owned by non-industrial private owners.

Recent trends reveal drastic changes taking place in the structure of forest ownership. Several of the forest products firms have divested themselves of land ownership or are in the process of doing so. Thus, fewer acres are in the industry-owned category. A new class of ownership has emerged that is referred to as "TIMCOs" or Timber Investment Management Companies. The large contiguous industrial tracks of several hundred thousands of acres are being sold in smaller blocks, with some being diverted to other uses. Being fragmented lessens their suitability as habitat for faunal species that have large ranges. Similarly, the lands near urban centers are being fragmented into "forest-etts" with the average size of such ownerships now about 17 acres. Such fragmentation occurring in the urban interface is increasing the challenge to forest managers. These patterns of change reflect 2 levels of forest fragmentation. The numbers of private nonindustrial owners are increasing with both those owning the larger tracks and those owning the smaller tracts.

Florida is now the fourth most populous state in the US with 16,400,000 residents, and is visited by about 60 million tourists each year. Between 1980 and 2000, the state's population grew on average by 39

persons per hour. Last year (2001) the state grew at a rate of 47 persons per hour, which translates to 1135 per day or 414,000 per year, about twice the population of Alachua County where you are now located. At this rate, the population of Florida will reach 25 million by 2025. Depending upon the flow of abandoned agricultural land back to forests, we lose between 40 and 70 thousand acres of forests each year. Needless to say we have a lot of people watching us practice forestry in this state.

UNIVERSITY OF FLORIDA

I would be remiss if I did not tell you something about the University of Florida (UF) where you are now situated. Our Provost describes the UF as a large, major, comprehensive, research land-grant university.

Large

When the Buckner Act combined several institutions in Florida to create the Florida State College for Women in Tallahassee and the University of Florida in Gainesville in 1906, the University of Florida enrolled 102 students. In fall 2001, the enrollment was 46,000, making the University of Florida the fourth largest in the US, with students from 100 countries and all states. Ninety percent of the entering freshmen score above the national average on the SAT. These freshmen have an average GPA of 3.99 on a 4.0 scale and an average SAT of 1285. The number of merit scholars in the class ranks UF fourth among public universities. The growth plan is to reach 50,000 with the last 7000 at the graduate level.

Major

The UF is one of 64 institutions in North America selected for membership in the prestigious American Association of Universities (AAU). Membership comes by quality measures that are quantifiable, such as volume of research, numbers of PhDs, and so on.

Comprehensive

UF includes 21 colleges and schools offering over 100 academic majors. As a former president once said: "The University of Florida is exceeded by none and equaled by only two other universities in diversity of program." This means we have all the arts and basic sciences, agriculture and engineering, and the other professional schools of medicine and law all on one campus.

Research

Last year the UF expended \$379 million on research while 10 state universities expended a total \$500 million.

Land Grant

By merging the Florida Agricultural College to form the UF in 1906, the university became a support institution for the agricultural and mechanical arts, which grew through a series of congressional acts to include the College of Agriculture, the Agricultural Experiment Station, and the Cooperative Extension Service. These give the UF a presence in every county of the State.

Athletics

I would not properly have described this place if I did not acknowledge that the UF has a very successful athletic program. Only UCLA and UF have been in the top ten among I-A institutions for 18 years based on competitive performance. In the SEC, the UF programs have been selected as "the conference best" for 10 consecutive years. The last national championship UF won was men's golf in 2001. The ladies golf team competed for the national championship in 2002, but unfortunately lost to Stanford. One hundred thirty three athletes earned places on the all-academic team. In basketball in the last 7 years, 27 players made the all-academic team. The closest competitor SEC school had 14 and some with as few as one. Thus the UF can excel in academics and athletics.

School of Forest Resources and Conservation

The School of Forest Resources and Conservation is a unit within the Institute of Food and Agricultural Sciences that comprises the Experiment Station, Extension Service, and the College of Agricultural and Life Sciences. IFAS, as it is called, is one of the top 5 agricultural research entities associated with land grant universities. While all else is large at the UF, the School is small. We have about 150 students, about equally divided between undergraduates and graduates. The School already exceeds the graduate to undergraduate ratio that is typical of AAU universities. Our students find the job market very favorable. I tell everyone every chance I get that I have the best job in the university – a faculty of overachievers and they like each other. One important indicator of the quality of the School's faculty is that

among 21 academic departments and 13 research and education centers to which we relate in IFAS, our faculty ranked second in terms of the extramural funds attracted to support programs in 2001.

In our programs, we share your challenge to maintain green and growing forests. By the 1930s, the forests in this region were depleted. In 1928 the Florida Forest Service, now DOF, started providing tree seedlings to help reforest the cut over, burned down, rooted up, and over-grazed landscape. In re-greening Florida, the state became the consistent national leader in seedling production and tree planting. Even to this day, the state ranks second in nursery seedling production and fourth in replanted acres with about 150,000 acres annually. This School developed one of the first tree improvement programs to genetically improve the planting stock for re-greening Florida. This program is now in the third generation of improvement. In addition, we pioneered forest fertilization to give the re-planted acres a growth boost during stand establishment and development.

The state has been losing forest acres to other uses, but by increasing the growth rate of re-forested acres, we have been able to increase productivity of forests such that there has not been a shortfall of raw material for sustaining the \$8 billion the forest products industry provides to the Florida economy. At the same time forests provide many other goods and ecological services that citizens expect from forests.

Because of the renewable and recyclable nature of wood products, we expect demand for both wood and non-timber products to grow. With the growth in population and citizen interest in what we do, the future is for forestry to be practiced in a fish bowl. We will have to become as astute in dealing with people as with the technical problems of growing, harvesting, and using trees. No doubt we must produce more wood from fewer acres managed more intensively. Yet, we must do this with a public that has an anti-burn, no pesticide, in fact no chemicals of any kind including fertilizer being applied in forests, attitude. Today we have a growing number of citizens who see timber as a secondary objective, if an objective at all, from public forests.

For those acres where we can grow forests intensively, we look to nursery managers like you to produce genetically superior seedlings that have the health characteristics to survive and grow rapidly once out-planted. If you do this successfully, we can maintain our industries that provide economic diversity while our forests provide biological diversity to our landscapes. The program suggests that you are properly going about your tasks and that you are prepared to lead. I wish you well in your few days here discussing the science and technology of nursery production and management, and I invite you to enjoy this place. For more information visit the following websites: http://www.stateofflorida.com/index.html http://www.ir.ufl.edu/facts.htm http://www.sfrc.ufl.edu/