THE FUTURE OF FORESTRY IN THE URBANIZING SOUTH: THE FLORIDA EXAMPLE

Arnett C. Mace, Jr. 1

Abstract.—Rapid urbanization of the South will have significant implications for the management of forests. Growth in population, commerce and tourism, coupled with changing public attitudes, complex ecosystems, and water resource systems, have led to increased regulation of forest management activities. Florida's rapid growth has led to increased sensitivities to the growing pressures on the forest resource base that other southern states will surely experience during the next two decades. This paper describes the Florida example and some implications for the future of forestry in the urbanizing South.

The topic "The Future of Forestry in the Urbanizing South: The Florida Example" is most appropriate for we all recognize the growth in the South. Population and commerce continue to grow in the South despite recent consultant reports on the resurgence of the Northeast and upper Midwest. This growth has major impacts on the "Wood Basket" of the nation and Florida is at the leading edge of sensitivity to growing pressures on the forest resource base.

I will discuss some of the reasons for the increasing pressures on the forest resources of Florida in terms of:

A) population, tourism & commerce,
B) complex ecosystems and water,
C) public attitudes and demands,
D) rules and regulations,

and then conclude with implications for forestry.

Population, Tourism and Commerce

Florida has experienced dramatic population growth since the 1950's; particularly in the 1970's. Figure 1 shows the following growth rates:

1950-1960 3.8M to 4.9M - 29%
1960-1970 4.9M to 6.8M - 39%
1970-1980 6.8M to 9.7M - 43%
1980-1984 9.7M to 10.9M - 12%
1984-1987 10.9M to 12.2M - 12%

By 1980, Florida had become the 7th most populated state; by 1984 it was 6th; and now only California, New York, and Texas exceed Florida in population (Figure 2).

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Florida's Population 1900-1990

Florida becomes America's 6th largest state: 1984

Governor's Office of Planning and Budgeting

Figure 1
Florida's Rank by Population
(in thousands)
Governor's Office of Planning and Budgeting

1980
1. California .... 23,771
2. New York .... 17,875
3. Texas .... 14,321
4. Pennsylvania .... 11,880
5. Illinois .... 11,433
6. Ohio .... 10,800
7. Florida .... 9,874
8. Michigan .... 9,225
9. New Jersey .... 7,377
10. N. Carolina .... 5,888

1984
1. California .... 25,415
2. New York .... 17,857
3. Texas .... 15,997
4. Pennsylvania .... 11,870
5. Illinois .... 11,536
6. Florida .... 10,925
7. Ohio .... 10,797
8. Michigan .... 9,240
9. New Jersey .... 7,458
10. N. Carolina .... 6,136

1987
1. California .... 26,813
2. New York .... 17,894
3. Texas .... 16,738
4. Pennsylvania .... 11,796
5. Florida .... 11,730
6. Illinois .... 11,626
7. Ohio .... 10,889
8. Michigan .... 9,505
9. New Jersey .... 7,496
10. N. Carolina .... 6,322

1988
1. California .... 27,212
2. New York .... 17,717
3. Texas .... 16,991
4. Florida .... 12,028
5. Pennsylvania .... 11,770
6. Illinois .... 11,647
7. Ohio .... 10,909
8. Michigan .... 9,551
9. New Jersey .... 7,523
10. N. Carolina .... 6,384

Figure 2
In addition, Florida has some 40 million tourists visiting the state each year, with a projected increase to 60 million annual visitors by the year 2000. The resident population by the end of the century is projected to be approximately 15 million.

Although recent Census Bureau estimates indicate a reduction in our growth rate beginning in 1980, these do not agree with state-generated figures. During the 70's Florida's population increased on the average by 300,000 new residents per year with a maximum of 500,000 in 1979. This, according to the Census Bureau, had decreased to 199,000 in 1984. The rationale relates to the economic recession similar to 1976-77 and a resurgence in the northeast. Today, Florida has approximately 800 new residents per day.

Figure 3 depicts the demographic and economic trends. These trends indicate the following will occur:

1) 76% of Florida's growth will occur in coastal counties,
2) 78% of all Floridians will reside in coastal counties,
3) 57% of all citizens will reside in eight counties by 1990; these include:
   
<table>
<thead>
<tr>
<th>Duval</th>
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<th>Broward</th>
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<td>Palm Beach</td>
<td>Dade</td>
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<td>Hillsbourough</td>
<td>Orange</td>
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   --Only one county is located in the forested region of Florida; and
   --We have become a highly urbanized state versus a formerly rural state.

4) In addition, we will be experiencing an aging trend from 1980-1990. There is expected to be a:
   
   --65% increase in persons age 75 or older; and
   --35% increase of persons age 65-74.

   However, the influx of business, particularly high technology industry, has decreased the average age in some locations such as St. Petersburg, which dropped from 55 in 1970 to 44 in 1980.

   The most important points related to commerce, other than economic swings, may be the increase in diversification of industry and the increase in international finance. Increase in high technology industry has been particularly dramatic.

   High technology industries include aviation, electronics and communications, defense, pharmaceuticals, surgical and medical, and food processing. Florida leads the Southeast in high technology industrial growth, with some 27% of total manufacturing employment (22%-national)—a 47% increase since 1977. Figure 3 depicts the four fastest-growing commerce areas for 1980-1990 and their primary locations. These include:
THE FLORIDA STORY

Coastal Counties

Fastest Growing Small Counties

8 Counties with 57% State Population by 1990

Counties with Fastest Growth Ages 65–74

Fastest Growing Areas for:

S ervices Sector (Medical, Attractions, Hotels, etc.)
T rad e Sector (Retail & Wholesale)
F inance & Real Estate Sector
M anufacturing Sector

Governor's Office of Planning and Budgeting

Figure 3
| Service    | +74% |
| Trade     | +58% |
| Finance   | +76% |
| Manufacturing | +52% |

A 1983 Fortune survey of the nation's top 1,000 companies ranked Florida as their second choice for location of corporate headquarters.

The future growth of private industry and Florida will be influenced by factors which range from international to local levels and impacts. Another significant factor is taxes—including corporate, unitary, income, property and service—to support the infrastructure for this growth. Infrastructure and revenue for roads, penal, medical, education, and wastes, including water treatment, are sorely lacking.

Public Attitudes and Demands—Social Climate

The dramatic increase in growth in a state with finite natural resources and fragile ecosystems has raised the level of sensitivity of the public and public officials. Many new residents come to Florida with what I call the "Last-In Philosophy" which implies that "no change should occur after I arrive."

Table 1 displays a recent survey of public opinion about growth management. This survey indicates the following:

1) similarity of responses throughout the state,
2) interpreted by public officials for:
   a) greater land-use regulation
   b) greater regulation pertaining to water resources—a major concern, and
3) open-ended questionnaire with no consideration of tradeoffs.

The important point is that elected and appointed officials often interpret these types of responses as a mandate.

Additionally, I sense an increase in the popular attitude that the public has a right to use privately owned lands for a variety of leisure activities and certain desired amenities. This results in the issue of private property rights to do with one's property as one desires versus the right to use as determined by the public.

Ownership is a right to use as determined by society in a democracy. Today, a group of Floridians are organizing to sue local, regional and state agencies to enforce all rules and regulations.

Also, a general feeling is that the private sector should provide more revenue for services the public desires. There is also tremendous public pressure for increasing state ownership of "unique" sensitive lands for preservation. For example, over 80% of three southern counties is in public ownership. Yet funds and resources are not available to effectively manage these lands.
## ATTITUDES ON GROWTH MANAGEMENT ISSUES

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<th>WE NEED ECONOMIC GROWTH EVEN IF IT HURTS THE ENVIRONMENT:</th>
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<tr>
<td>AGREE</td>
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<td>DISAGREE</td>
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All figures are percentages. Columns may not add to 100% because undecided, don't know, and similar responses are not shown.

Source: Florida Environmental and Urban Issues, April 1985

Table 1
Rules and Regulations

Commensurate with dramatic growth and social change and/or public attitudes, government at state, regional and local levels has increased both the number and scope of activities and responsibilities, and background and/or attitudes of employees. Each government level is trying to "out-environment the other."

Today, the forest land manager must deal with a vast array of agencies sometimes with overlapping or conflicting rules and procedures for approval of projects.

Prudent regulation is essential! The question is one of balance in efficiency, reasonable economic benefit/cost ratios, and effectiveness of regulation; particularly assessment of effectiveness vis-a-vis the cost and enforcement.

With reapportionment and single-member districts, our state Legislature has changed dramatically since the 1960's.

In the Florida House of Representatives, there are 29 members from Broward and Dade County alone, compared to 25 from North Florida—Marion County and north (Figure 4).

In the Florida Senate, there are nine Senators from North Florida compared to eleven from Broward and Dade Counties alone (Figure 5).

Also, there are five Congressmen north of Marion County compared to five from Broward and Dade Counties alone (Figure 6). This does not consider the Orlando and Tampa area.

Implications for Forestry

The implications of this dramatic past and projected growth are rather obvious and include the following:

1) Continued population growth will further reduce acreage of commercial forest lands which can be economically held and managed. The same applies to agricultural lands.

During the last decade (1970-1980), commercial forest acreage declined by 597,000 acres—4%. This would have been greater had not some 310,000 acres been added due to changes in the classification system.

Some 1.3m acres have been diverted to other uses (42% urban; 35% agriculture; and 22% to noncommercial forest). This occurred despite the fact that Florida planted more trees last year than any other state.

In addition, we are seeing more and more large industrial tracts on the market or sold.
Figure 4
DISTRICTS OF THE FLORIDA SENATE

Figure 5
DISTRICTS OF THE
FLORIDA
CONGRESSIONAL
DELEGATION

Figure 6
We are rapidly developing large acreages of urban-forest interfaces. How do we manage these interfaces for fire protection, prescribed burning, harvesting, etc.?

2) The move to a more urbanized society will undoubtedly result in an increased demand for use and products (commodity and noncommodity) from private forest lands.

This will present problems as well as opportunities. Problems may be in the form of trespass and liability and demand for use. Opportunities will exist to market non-fiber products formerly considered non-commodity, such as hunting, grazing and recreational leases.

3) There is pressure to increase property taxation of private lands to generate revenue for social services, such as transportation, penal, education, medical, etc.

The Florida Constitution prohibits a state income tax. Thus, we have to find other sources of revenue or reduce expenditures.

4) Increased pressure on fragile ecosystems and resulting public concern will undoubtedly lead to more rules and regulations. For example, during the early part of the environmental movement in Florida, there were 41 environmental bills introduced in the 1970 legislative session, compared to over 100 in 1987. But none of the 41 had the impact of The Wetlands Bill of 1984, The Growth Management or State Comprehensive Plan Legislation of 1986 or Surface Water Management Act of 1987. New rules and regulations will be promulgated by the Legislature and particularly by local, regional, and state agencies as they increase their scope of activities and responsibilities. Most of these regulations will relate to water, wildlife and "unique" ecosystems.

5) An increasing number of state legislators will have a poor understanding of the role and importance of forestry and/or have other agenda items due to their interests and those of their constituents. Contributions of forests to wildlife, water, recreation, and aesthetics are poorly understood.

6) Impact of exports and imports must be considered. Southern pine exports from 1975 to 1979 rose from 100 MBF to 200 MBF. However, from 1980 to 1984 it declined from 261 MBF to 169 MBF.

At the same time, Canadian imports increased dramatically in the south. While demand for wood products is commensurate with growth, imports are assuming this increase. Also, the prospect of Central and South American imported forest products loom on the horizon.

7) Forests occupy 45% of the land area of Florida and contribute significantly to the maintenance of a quality environment—quality
water and air, wildlife habitat, recreational opportunities, and aesthetics.

As I tell my wildlife associates and friends, forestlands provide the last significant remaining wildlife habitat. Most wildlife, including man, is adaptable. While the managed commercial forest may not provide the "ideal" habitat, it is far better than no habitat. Also, management of forests for fiber with wildlife considerations is far better than no fiber.

This same philosophy applies to other products and amenities of forest land.

8) Forest industry, like all others, will be affected positively at times, and at other times, negatively. Knowing the trends, actors, and possible types of action that will impact us will help us continue to participate in Florida's growth and to change the environment in an active and influential way.

Foresters, as a profession, have believed that the public recognized the benefits of our labors and that public officials would provide for us. We forgot about or seldom recognized the need for education of the public, lobbying for programs, public relations, and direct involvement in the political process.

By nature, most of us would rather manage the forest which we are trained to do rather than educate a legislator or be involved in conflict resolution; but this has led to our current decreased role in natural resource policy formulation. Also, this has led to a lack of public confidence.

We are all to blame for the lack of involvement. Our education, research, private and public organizations have not responded to the growing need for involvement.

Rules and regulations, judicious and effective, are absolutely essential in a state with sensitive ecosystems and a large and growing population. We have the responsibility to be directly involved in providing information and education to legislative bodies and regulatory agencies to effectively and efficiently manage our vital renewable natural resources—our forests.

Rules and regulations are a reality! The question continues to be what rules and regulations are necessary to manage this resource for our economic, social and environmental benefit.

As mentioned earlier, Florida is the leading edge of the South's urbanizing states. Other states can learn from Florida's correct and incorrect decisions. Also, Florida provides other states some lag time to develop appropriate policies and management systems.

The future of forestry in the South must change in response to this urbanization. The question is whether such modification will permit the
practice of commercial forestry that is economically viable, or whether our forests will be developed for the use by people solely for other benefits and amenities. Each of us has a role to play in these important decisions through our involvement in education, research, extension, and the political process.