The Florida Geographer is the official publication of the Florida Society of Geographers and is distributed without cost to members of the Society. One number per year will be published, pending receipt of an adequate number of acceptable manuscripts.

The Florida Geographer is a state-wide journal, with broad coverage of geographical topics relating to the state and its several regions. No restrictions are placed on the content of articles, providing that they deal with some aspect of the geography of Florida, i.e., local studies within the state, matters of the state generally, or studies of the U.S. South, of which Florida is a part.

Manuscripts are solicited from all who feel they have research worthy of dissemination. No specific format requirements are presently in force, although the editor would prefer manuscripts to be typed double-spaced following the general format of the articles in the present number. However, authors should not be dissuaded from submitting manuscripts because of format considerations; the editor is willing to undertake extensive revisions. As this number demonstrates, we are able to reproduce maps, charts, and tables.

We would like to publish an original map on the cover of each number, so a special request is made to all who have maps of the state or regions of the state which would be of interest to the Society's membership.

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About the Cover...

The cover of this Florida Geographer comes from the November 1763 issue of The Gentleman's Magazine. The text describing this map suggests that "the whole country may be supposed to be exceeding hot, especially the southernmost parts of it.... The soil in many parts of Florida is remarkably fertile, and may be cultivated to great advantage" (p. 522). The article describes Florida in glowing terms and, as if to stimulate settlement, promises that "there is no doubt but the new inhabitants will endeavour to avail themselves of the fruits of it" (p. 554). Some 224 years later new inhabitants still enjoy Florida's riches. Thanks to Alan Craig for providing the FG with this material.
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FLORIDA'S POPULATION IN THE MID 1980s: LOOKING BACK AND AHEAD

Edward Fernald

Florida has always been a growth state. Since the first census of the territory in 1830, population increases of less than 30 percent have occurred in only two decades, 1910-20 and 1930-40. The 1950s showed the largest percentage increase, 78 percent, although the largest numerical increase occurred in the 1970s. Following the 1970 census, demographers nationally were surprised that a state which started with a base of 5 million people in 1960 had grown at the rate of 34.7 percent. They were more surprised when the 1980 census showed that, with a base population of 6.8 million, Florida grew over 42 percent. Compared with other states during the last decade, only Nevada, Arizona, and Wyoming had larger percentage increases than Florida, and only California and Texas had larger numerical growth. Florida is the only state to rank in the top five in both percentage and absolute increase during the 1970-80 period.

The 1980 population was 9.7 million. Population in April 1986, was 11.5 million, which makes Florida the sixth largest state. The percentage increase between 1980 and 1985 was 15 percent, which is 3 percent per year compared with 3.6 percent per year during the 1970s. The State Data Center in the Governor's Office estimates that in 1988 Florida will rank fourth in the nation in population.

Growth Igniters

Several growth igniters can be identified for Florida. In general, military actions have had a positive impact on Florida's population growth. The Spanish American War, World Wars I and II, and, to some extent, even the Seminole Wars and the Civil War, had strong impacts on population growth. Many of the military men who served in Florida during these wars later returned as tourists and finally as residents. More recently the Cuban Revolution of 1959 and, to a minor extent, other social uprisings in the Caribbean have brought immigrants to the nearest friendly soil, which happens to be Florida.

Two other early growth igniters were Henry Flagler and Henry Plants. These gentlemen built railroads in Florida, and in order to have people and products to utilize their railroads, they developed agriculture, forestry, tourism, and other economic activities. They were our earliest comprehensive planners.

During the 1950s growth came from economic stability. Social Security, union movements in the north, assured retirement programs, early retirement, and disposable income for vacations all contributed to Florida's growth. In the 1960s, the space program and the associated expansion of electronics industries fueled much of Florida's growth. Interestingly enough, both economic booms and busts in the national economy have motivated people to move to Florida. Over the years, improvements in transportation and in technology, such as air conditioning, as well as publicity campaigns, have had positive impacts on growth. Finally, the low cost of a high quality of life in Florida has attracted people who also wish to benefit economically from homestead exemptions, no income or inheritance taxes, and the relatively low total tax burden.

1
Natural Increase and Net Migration

There are two causes of population growth, natural increase and net migration. Natural increase is the number of births minus the number of deaths, and net migration is the difference between the number of people moving into the state and the number moving out. In Florida, natural increase has been declining steadily over the past twenty years. This is because of (1) the age characteristics of Florida's population, (2) the high cost of raising children, (3) the economic need for a two-person income in a family, and (4) the professional goals of women. Florida's substantial growth is explained by net migration figures rather than natural increase. Five years ago, we felt that the natural increase, which was at that time less than 20,000 a year, would become negative sometime during the mid-1980s. This has not happened.

Population Distribution and Density

Florida's population distribution is well known to observers of the state. Major urban areas and growth corridors contain the bulk of Florida's residents, whereas many areas of the state are virtually or actually uninhabited (Figure 1). Florida's population distribution is explained, in part, by the obvious fact that people tend live where they can make a living. Historically, people have moved to Pensacola, Jacksonville, Tampa, and Miami because of the ports and the coastal amenities. Towns such as Lakeland, Orlando, and Lake City grew as agricultural service centers. Changes in economic trends have meant that the functions of some of these cities have changed or broadened over the years.

Large parts of the state are too wet or are overly-drained sandy pine flatwoods and scrub areas, and the population-supporting potential of much of these empty lands is close to zero. Other factors which lead to empty acres are large land ownerships and distance from urban services.

Linear Population Pattern

Fig. 1
The location of population is more difficult for demographers to explain today because many Floridians make their living by going to the mailbox for a retirement or dividend check. Further, in today's mobile society, light, high value industry can be located wherever people want to live, and high speed roads allow people to commute longer distances to work.

Between 1973-83, the counties with the highest growth rates (those over 51 percent) were located on the Sun Coast, an area which is continuing a rapid growth started in the 1960s, or they were satellites to major urban centers. Satellite growth explains the increase in many of the high-growth counties (over 50 percent). People move to satellite counties to get away from the crowding, to enjoy a lower cost of land and lower taxes, and to take advantage of amenities such as a larger lot for a kitchen garden. Of course, as the population increases in these counties, people begin to lose the benefits they went there to achieve. An interesting case is Broward County, which grew 62 percent between 1970 and 1980, starting with a base of 620,000 and increasing to just over a million. This numerical increase was larger than the individual increase of twenty-four separate states.

Density, a function of area and total population, is for some uses more helpful to consider than just a numerical total. Density shows the population supporting potential of an area, but it also suggests the pressure of people on the natural systems. Population density in Florida, which has a statewide density of 196 people per square mile, ranges from 5.2 in Liberty County to over 2800 in Pinellas County. Such a high density places a tremendous pressure on land and water supplies, social services, utilities, and transportation. Density pressures on land have policy implications for the protection not only of environmentally fragile areas, but of water and agricultural land, which are important resources to Florida's economy. In the last several years, Florida has lost many thousands of acres of agricultural lands to urbanization. At this time, this is not necessarily a critical problem, but one which the Department of Agriculture and the Legislature might want to study.

Figure 1 provides a better understanding of population location and can help us make some more useful observations. Although there are definite population nodes or centers, these centers coalesce into a ribbon of linear development along the high energy coasts and the I-4 corridor. Eighty percent of Florida's population lives in coastal counties. Trends indicate a continuation of this pattern.

Over 80 percent of Florida's citizens live in urban areas. The urban increase has not only been due to immigration from other states and nations, but also from movement during the 1950s, 60s, and 70s of people from farms to cities. This movement has put pressure on welfare systems, low-cost housing, recreation programs, and schools, and has caused competition for unskilled low-paying jobs. This situation is causing some upper income people to begin the reverse move into high-value, planned communities away from the urbanized core. The present lower cost of living and a more rural lifestyle in some northern counties are beginning to attract not only migrants from out of state, but Floridians from southern counties.

Population Structure

Age characteristics of a population are of prime importance to policy makers in many areas of government, including employment and education and other social service departments. Two ways to look at age characteristics are the population pyramid and the dependency load of a particular area.
Population Pyramids

The population pyramid for Florida (Figure 2) very definitely shows the low birthrate in the state, the large number of baby boomers in their twenties, and the large number of individuals over fifty. The pyramid is not wholly an unhealthy one; it just shows some specific problem areas. The Dade profile (Figure 3) again shows the lower birthrate and a more healthy number of people in the productive ages, between fifteen and sixty-five. The very large number of people in the over-sixty group is softened because of the large population base in Dade County. Leon County (Figure 4) appears to have an unusual age distribution until we realize that the large group from fifteen to thirty-five is due to the existence of two universities, a junior college, and the state government which employs a large number of young people. The larger percentage of very young people shows a higher birthrate here than most counties and the lower percentage of people in the elderly age groups indicates that the retirement group has not found Leon County.

The primary characteristic of Charlotte County (Figure 5) is the very heavy predominance of retirees. The group aged sixty-five to sixty-nine is the largest. Such a large percentage of the population beyond the normal income-earning years might place a strain on the younger cohorts to support the elderly. However, many retirement checks from outside the area support many if not most elderly individuals.

Suwanee County (Figure 6) is typical of an agricultural county in which the birthrate is healthy, but the number of people in the productive age group is low because at about twenty years of age many people leave home for educational or economic reasons and do not return. The large number of young males in Union County (Figure 7) is explained by the large state prison located there, whose inmates are counted as part of the county’s population.
Fig. 4. Population Pyramid for Leon County.

Fig. 5. Population Pyramid for Charlotte County.

Fig. 6. Population Pyramid for Suwannee County.

Fig. 7. Population Pyramid for Union County.
Dependency Load

A second way to look at population is a dependency ratio or dependency load (Figure 6). Those counties such as Dade, Brevard, and Escambia -- with over 60 percent in the productive age group -- are very healthy, whereas the counties of Manatee, Charlotte, and Suwannee are less healthy. Union County is an exception to this rule as the prison inmates account for a large portion of the 71 percent of the county population in the "productive age."

During the 1970s, the sixty-five and older group in Florida grew 71 percent, nearly twice the rate of the rest of the population. In the 1980s, this rate of growth is predicted to increase to 85 percent. Florida is now, with 34.7 percent of its population sixty-five and older, the "oldest state" in the nation.

Florida counties with the highest percentage of older people are on the Gold coast, whereas the counties with the largest number of older people are Dade and Brevard on the Atlantic. Florida has ten counties in which more than a quarter of the population is age sixty-five and above.

In 1980, Charlotte County had a median age of 57.4. Older people tend to be less progressive, more resistant to change, and more apt to oppose bond issues for education or other public projects. A number of population questions are raised when we look at this age characteristic of our population.

These policies need to be addressed, in part, because as the number of older people increases, their political power increases. They are conservative, but on the other hand, they often require a great deal of governmental services. They, like members of other age groups, require education, health, protection, and recreation, but their requirements take a different character than those of other groups. A problem in some Gulf counties is that the elderly compete with the unskilled and with teenagers for minimum wage jobs. The Governor's Committee on Aging will help us better understand this age group. The Legislature might also consider strengthening the Local Government Planning Act by requiring a demographic or social planning element in local plans.

Futurist John Naisbett indicates that Florida is a bellwether state in several areas, one of which is the age-youth ratio. He indicates that by 1995, the entire U.S. population will have the same age-youth ratio that Florida has.

<table>
<thead>
<tr>
<th>Age</th>
<th>Seminole</th>
<th>Manatee</th>
<th>Dade</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 17</td>
<td>30</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>over 64</td>
<td>16</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>18-64</td>
<td>54</td>
<td>48</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Age</th>
<th>Charlotte</th>
<th>Brevard</th>
<th>Union</th>
</tr>
</thead>
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<tr>
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<td>15</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td>over 64</td>
<td>39</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>18-64</td>
<td>46</td>
<td>66</td>
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<table>
<thead>
<tr>
<th>Age</th>
<th>Okaloosa</th>
<th>Escambia</th>
<th>Holmes</th>
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<td>30</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>over 64</td>
<td>5</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>18-64</td>
<td>65</td>
<td>61</td>
<td>57</td>
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</tbody>
</table>

Fig. 6. Estimated Dependency Loads for Selected Counties, 1979. The number in the black square is the percentage of the population of productive ages (18-64).
now, and by carefully watching what is happening now in Florida, the country will learn a great deal about the problems and opportunities the whole nation will face in the future.

Social Characteristics of the Population

Several other characteristics of Florida's population warrant discussion. Causes of death in Florida have historically been heart disease, stroke, cancer, and respiratory disease, as well as accidents. These data do not indicate that Florida is an unhealthy state. The rates of all but the last are heavily influenced by our large older population. Most of these people have not contracted these diseases in Florida, but have brought their cancers and respiratory ailments to Florida from other states. In general, Florida has an advanced health care delivery system. In terms of education, Florida is ahead of other states on the basis of per capita years of schooling. However, much of the expense of this favorable statistic has been born by other states. Largely the result of a dynamic population, Florida's crime rate is significantly higher than other states, but I believe part of this is due to the fact that our reporting system is also better. In terms of poverty, state statistics show that approximately 13.5 percent of our population is living in poverty.

Florida's marriage rate is a bit higher than the nation as a whole, and nearly half of all Florida marriages are remarriages. Florida's divorce rate is nearly 50 percent higher than that of the U.S. as a whole. Data on ethnic groups show that the percentage of blacks in Florida has fallen from 40 percent in 1900 to 14 percent in 1980, while the percentage of Hispanics has increased from 5 percent in 1950 to 13 percent in 1980. Of more importance is the localized character of this trend. For example, Dade County is over 38 percent Hispanic. (For more on Florida's and Dade County's Hispanics, see Boswell et al. 1986, Stafford 1986, and Webster and Webster 1986).

In the future, Florida's population will continue to increase at a rapid rate, although not as rapidly as it did during the 1970s. Demographers have projected a population of over 15 million by the year 2000. Expectations are that the only differences in the age, sex, or ethnic mix will be slight increases in the over-sixty age cohort and in the Hispanic groups.

Generalizations, Conclusions, Recommendations

Several generalizations from geography should be considered when we evaluate Florida's population growth. First, the physical environment suggests and limits human activities but does not dictate them. Second, the impact of the physical environment is a function of people's attitudes, objectives, and technical skills. In Florida our wetlands, our fragile coasts -- including estuaries, barrier islands, and dunes -- might suggest to us that few people if any would live in these difficult environments. Nevertheless, people have chosen to live in the coastal region where wetland modification, dune destruction and erosion, and potable water problems are simply viewed as challenges we accept, dealing with them through growth management, including selective preservation and appropriations at the local or state level.

Third, when humans modify the physical environment, they must pay an economic price to replace its natural functions or suffer the loss or decrease in the quality of the environmental service. An important need is to be able to identify the threshold beyond which human occupancy is too costly.
There is a new breed of environmental economist who specialize in developing formulas to use to calculate these thresholds.

Fourth, are the implications of growth to the problem of regulation and freedom, which might be summarized by a principle such as "as more people are added to a given area, even assuming a steady level of technology, more rules are needed to maintain social order."

Florida's leaders have shown that they know the importance of population planning, but due to the inevitability of unforeseen events we must be skeptical of trend lines and build into our plans an ability to cope with crises we cannot control. We must be aware of the fact that national economic health, immigration laws, weather patterns, and even the nation's foreign policy produce impacts on Florida's population over which the state has little control. For example, a social or political uprising in the Caribbean can upset another unplanned influx of people. A change in our federal policy toward Cuba could also have an impact on south Florida's population, as could migration policies associated with an energetic federal Caribbean initiative. In very few, if any, other places in the world do we find a sharper division between wealth and poverty in such a short distance as we find between Florida and our Caribbean neighbors.

In several places in this paper the dynamic character of Florida's population has been mentioned. We benefit from the skills, new ideas, and energy from Hispanics, from tourists, and new citizens from other states, but we also need to realize that most of Florida's citizens lack a common history and unifying background. This diversity tends to work against state pride and unity and can foster regionalism, which makes it more difficult for the Legislature to make rational decisions for the good of the whole state.

A final policy problem concerning population trends and characteristics is the accounting of the "de facto" population in contrast to the formal census population. In Florida it is important to note the number of tourists that occupy an area at a given time to understand what their ages, economic status, means of travel, and other characteristics imply for the state. This tourist population provides Florida with the highest per capita retail sales in the country. Each year 40 million people visit, spend over $16 billion, and leave. However, while they are here, they make a heavy impact on recreation, transportation, utilities, and housing resources. This demand is seasonal and the situation presents policy problems that cannot be addressed by yearly data or by data that are not site specific. It is estimated that Broward County has an additional 350,000 people during the peak tourist weeks. It is also reasonable to assume that winter-long visitors have different needs than two-week tourists. State and local agencies need to know more about these two tourist groups.

In conclusion, it is recommended that an advisory group be formed to discuss the data needed by governmental agencies to handle the many demographic problems in the state. As important as population growth and migration are to Florida, little is known about these topics. In the State University System are several universities which have excellent demographic centers that could aid in the collection and analysis of this data.

The difficult legislative decision is how much or how little government is needed to protect individual and collective rights and quality of life in an efficient manner. To balance proactive planning against the often costly reaction to growth problems, and to decide which level of government can best do the job is difficult, certainly, but necessary nonetheless.
References


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WHAT'S IN A NICKNAME?

DAVE AGRESTI, 1986

PROVIDE THE CORRECT ASSOCIATION WHICH LINKS CITIES TO NICKNAMES.

1. RINGLING CITY
2. THE UNIVERSITY CITY
3. THE RETIREMENT CITY
4. HOME OF THE SEMINOLES
5. THE CROSSROADS OF FLORIDA
6. THE GREAT SUBTROPICAL METROPOLIS
7. THE FOREST CAPITAL OF THE WORLD
8. THE WINTER HOME OF THOMAS EDISON
9. THE WORLD'S LARGEST FAMILY RESORT
10. THE BIRTHPLACE OF AIR CONDITIONING

... Answers on page 14.
THE IMPACT OF A TROPICAL STORM ON FLORIDA'S CULTURAL ORIGIN

Dewey M. Stowers, Jr. and Harry J. Schaleman, Jr.

The struggle between France and Spain, April 1562 to October 1565, determined Florida's early colonization. In the opinion of the writers, the outcome was strongly influenced by tropical storms assailing Florida's eastern coast in August and September 1565. These storms severely hampered Pedro Menendez de Aviles' land campaign. However, the cost to the French was greater. Storms destroyed most of Jean Ribault's Florida fleet.

The Events

From the late 1500s until the middle 1500s, Spain explored and colonized the Gulf of Mexico coastline and the Caribbean islands. Ponce de Leon had arrived and named Florida in 1513 (Fother Jerome 1964, 10). On 16 February 1562, Huguenot Gaspard de Coligny, Admiral of France, sent an expedition to Florida under Ribault's command. His 150 men and five ships landed on 30 April on the eastern shores of Florida, near present-day St. Augustine (Lowery 1959, 30). Continuing northward to the mouth of what is now the St. John's River, they planted a French marker and named it The River of May.

Ribault sailed farther northward to South Carolina and established a small colony on 11 June. He left a contingent of men, supplies, and ammunition there and returned to France, arriving on 29 July 1562. However, the colony suffered from Indian attacks and hunger. After a revolt in which their leader was killed, the colonists left. The second French expedition, three ships and a crew of 300, organized by Coligny, left France on 22 April 1564, under the command of Rene de Laudonniere, a self-proclaimed geographer-historian (Bennett 1954, 17-18). In addition, an artist named Le Moyne served as official cartographer. Florida landfall occurred on 22 June. Two days later Laudonniere landed at the mouth of The River of May and was warmly received by Timuquana chief Saturiba. Laudonniere selected an elevated meadowland site a few miles upstream and named it Fort Caroline (Figures 1 and 2). Laudonniere's failure to support Saturiba in an intertribal conflict, however, resulted in the chief's retaliation by withholding

10
food. As conditions at Fort Caroline worsened, many deserted only to be captured by the Spanish.

The morale of the remaining colonists was temporarily bolstered when three English ships arrived under the command of John Hawkins who offered to transport them to England. Laudonniere declined, but a revolt forced reconsideration. He purchased a ship from Hawkins, outfitted it, and permitted colonists to depart. As they were leaving, the sails of Coligny's third French expedition, once more under Ribault's command, appeared with approximately 600 soldiers, sailors, and colonists, most of whom were Huguenots (Bennett 1964, 33).

When Spain's King Philip heard of Ribault's impending expedition, he prepared a counterattack to drive the French from Florida. Menendez, aboard the flagship San Pablo, commanded a fleet of ten ships and sailed from Cadiz on 29 June 1565 (Lyon 1876, 90). A three-day storm almost destroyed the vessels and separated the ships, but Menendez arrived in Puerto Rico on 8 August. Anxious to reach Florida before Ribault and without waiting for the remainder of his fleet, Menendez sailed for Fort Caroline on 15 August with five ships and 800 men. He arrived in the harbor of The River of Dolphins, today called Matanzas River, and named the site St. Augustine (Lowery 1859, 152).

On 4 September, encountering four of Ribault's ships, Menendez decided to attack (Lyon 1976, 112-14). The French escaped and quickly outdistanced the Spanish ships. Menendez returned to The River of Dolphins on 6 September, where the rest of his ships, delayed by thunderstorms, joined him two days
later. On 8 September 1565 he put his colonists ashore and established St. Augustine. Menendez decided to attack Fort Caroline by land. On 10 September he prepared for the attack and ordered all ships but one to sail for Hispaniola for reinforcements.

The same day, Ribault sailed aboard the flagship *Trinity* from Fort Caroline with seven ships and 800 men to attack St. Augustine (Figure 3) (Bennett 1968, 117). He had ignored Laudonnière’s warning concerning seasonal storms. His plan was to surprise Menendez by confining the Spanish ships to the harbor at St. Augustine. Laudonnière remained at Fort Caroline with seventeen trained soldiers and 223 colonists. He planned to reinforce his defenses but severe storms hampered this.

Ribault’s fleet arrived at St. Augustine just as the Spanish fleet was preparing to depart for Hispaniola. Ribault enjoyed a superiority in ships and men and most likely would have destroyed or heavily damaged the trapped Spanish ships. However, as Ribault attempted to attack, high winds and rough seas separated his fleet. The storm increased to such a level that the original plan was abandoned and the ships became beached south of St. Augustine near Ormond Beach. Menendez and his crew were also caught in the storm, which Indians later claimed was the most severe they had ever experienced (Laudonnière 1975, 161). Their march to Fort Caroline took them through waist-deep swamps. However they reached the French settlement and took it on 20 September, renaming it San Mateo. Laudonnière, Le Moyne, and a few colonists managed to escape. The next day, Menendez left for St. Augustine.

A few days later, Menendez learned from Indians that Ribault’s fleet had been separated and his men cast upon the beaches. Menendez organized a force, marched south, and intercepted the French survivors. All were killed except ten artisans. Ribault had escaped and organized a second group which marched northward. This group also was intercepted. By 12 October, Menendez had killed Ribault and most of his men, and by late November stragglers had been captured (Manucy 1985, 46-7). French influence and design on the Florida peninsula were thus effectively eliminated.
The Storms

Frequent summer storms battered the east Florida coastline during the French and Spanish expeditions. Most of these storms were probably well-developed thunderstorms that normally occur this time of year. They result from divergent air flows from the Bermuda High over relatively cool Atlantic waters to the super-heated Florida peninsula. While capable of generating winds in excess of thirty-five knots and precipitation of over one inch per hour, these storms are usually brief in duration. Most storms usually occur in late morning or early afternoon, only occasionally extending into late evening. However, the storm the Indians called "the worst storm they had ever seen" (a "norther") is estimated to have continued from 13 September until 20 September 1565 with the strongest winds estimated to have occurred on either 18 or 19 September. From evidence on record, this disturbance was of a tropical nature, covering a large area. Anemometers, rain gauges, and accurate barometers were not in existence; therefore, no absolute determination can be made considering the type of tropical disturbance.

As the Indians had observed, the intensity of the storm was exceptionally severe. Contemporary information suggests that the storm probably was a slow-moving, well-developed hurricane which followed a track roughly paralleling the east coast of Florida. Since the storm lasted approximately a week, it most likely stalled somewhere near Cape Canaveral as the result of a probable area of high pressure over the southeastern part of the country. This position would help explain the strong northeast winds, which eventually divided and wrecked Ribault's fleet near Ormond Beach.

Hurricanes which form during the month of September may have two areas of origin. This time of the year is normally a transition period. Tropical storms

![Diagram of hurricane tracks](https://example.com/diagram.png)

Fig 4.
which form during the early part of the season usually originate in the Caribbean Sea. From approximately the first of August until the middle of September, tropical storms normally form in the southeast Atlantic area, moving back to the Caribbean during the later part of the season. Since the storm occurred during the middle of September, both of these areas of formation must be considered, as shown in Figure 1.

Regardless of the area of origin, the effects of the winds generated by the storm were sufficient to divide and wreck all but one of Ribault’s fleet. This event, in conjunction with the capture of Fort Caroline during the same storm, rendered the French survivors an easy target for the forces of Menendez.

The French seemed on the verge of destroying Menendez at St. Augustine. Had this storm not occurred when Ribault’s fleet was preparing to attack, Spanish influence in Florida might have suffered severely. Because of the strategic location of Florida relative to Spanish shipping and the overall importance of Florida to Spanish designs in the New World, it is safe to assume that the Spanish would have continued the struggle to remain the dominant power. However, a French victory in September 1565 could have given them a decided advantage. It is intriguing to suggest that perhaps Florida today would have had a pronounced French cultural imprint rather than a Spanish heritage.

References


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Answers to nickname associations on page 9.

1. Sarasota 6. Miami
2. Gainesville 7. Perry
4. Tallahassee 9. Daytona Beach
5. Yeeshaw Junction 10. Apalachicola
FIRE CONTROL AND ECOLOGICAL SUCCESSION IN McCARTY WOODS, HERNANDO COUNTY, FLORIDA

Thomas D. Feldman

Forest fires have been traditionally viewed negatively, as an evil to be conquered. We speak of so many acres of forest being "destroyed" by wildfire, of "battles" won or lost by fire crews hired to prevent the loss of so many board-feet of timber, of lives lost fighting forest fires. This negative image of fire is often held by those attempting to preserve areas in their natural state, as well as by those with an economic interest in on-site resources.

Until recently, the preservation of environmentally sensitive areas, when attempted, has entailed the suppression or elimination of fire. Fires, whether caused by natural factors such as lightning, or by human factors such as carelessness, vandalism, or design, play an important role in the ecology of these areas. Fire is just one element in the intricate ecological equation. Human modification of one side of this equation, however slight, has effects on the other. The effects can result in changes in the species composition of an area.

Ecological succession is a directional, cumulative change in the species composition of an area. One of the best ways to document succession is by making repeated observations of the same plot over a number of years (Barbour et al. 1980, 211).

In the middle 1960s, Stephen L. Beckwith measured the species composition of the plant communities in an area called McCartry Woods, in Hernando County. This area has been protected from fires since before 1932 (Beckwith 1967, 250). Part of his research involved the permanent staking out of defined plots, thereby establishing a base for comparison with future data. In April, 1985, the communities measured by Beckwith were re-measured, using similar techniques, by Dr. David C. Hartnett and his plant ecology class at the University of South Florida (Hartnett 1985). Dr. Hartnett had previously located Beckwith's original stakes. This enabled the researchers to take measurements from Beckwith's own reference points.

The purpose of this paper is to analyze and compare these recent data with those obtained by Beckwith, in order to

Fig. 1. McCartry Woods, Hernando County, Florida.
document changes, if any, in the species composition of the plant communities. Changes in species composition can be used to ascertain the position of a community in an ecological model of succession. This can indicate the direction of succession, either progressive (towards a climax community), or regressive (back to a seral stage) (Barbour et al. 1980, 206). The objective will be to compare the species compositions obtained in both studies to determine if the McCarty Woods area has shifted from a sub-climax seral stage due to the exclusion of fire (as predicted by Beckwith), and if so, in what direction.

The study region is some six miles north of Brooksville in Hernando County in an area known as Chinsegut Hill-McCarty Woods (Fig. 1). An unusual feature of Chinsegut Hill is a 400 acre tract of virgin longleaf pine forest (Pinus palustris), one of the last remaining large pieces of such a community in Florida. The property was transferred to the Federal Government in 1932 "for maintenance of a wildlife refuge, forest preserve, and experiment station" (Beckwith 1967, 251). In order to perpetuate in its natural state a portion of the longleaf pine forest in the area, the Nature Conservancy bought a five acre tract bordering the west side of Chinsegut Hill. This piece is McCarty Woods (Fig. 2) (Beckwith 1967, 251).

Longleaf pine is a species ideally suited to frequent fires, which are required to maintain the community (Barbour et al. 1980, 377). The regular recurrence of fire can maintain a community at the sub-climax seral stage. Therefore, elimination of fire should allow progressive succession towards a climax stage.

The nature of the communities on the site range from longleaf pine to mesic hardwood hammock. The hammock vegetation occurs on the acres that are less well drained, due to a clay subsoil. The only major tree species which are characteristic of the true climax in this region were not found by Beckwith are Magnolia grandiflora and Ilex opaca (Southern magnolia and American holly) (Beckwith 1967, 258-66). Table 1 lists the major tree species found in both studies, and those expected in a typical climax hammock.

An examination of Table 1 would seem to indicate that the species composition is progressing towards a climax hammock. This conclusion is based on the addition of several species, such as magnolia, dogwood, and laurel oak.
TABLE 1

Tree Species Found in McCarty Woods Studies and in Typical Climax Hammock

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Species Present in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beckwith 1966</td>
</tr>
<tr>
<td>Dogwood............</td>
<td>x</td>
</tr>
<tr>
<td>Sweetgum...........</td>
<td>x</td>
</tr>
<tr>
<td>Magnolia............</td>
<td>x</td>
</tr>
<tr>
<td>Laurel Oak..........</td>
<td>x</td>
</tr>
<tr>
<td>Live Oak............</td>
<td>x</td>
</tr>
<tr>
<td>Pignut Hickory......</td>
<td>x</td>
</tr>
<tr>
<td>Slash pine..........</td>
<td>x</td>
</tr>
<tr>
<td>Longleaf Pine.......</td>
<td>x</td>
</tr>
<tr>
<td>American Holly......</td>
<td>x</td>
</tr>
<tr>
<td>Cabbage Palm........</td>
<td>x</td>
</tr>
<tr>
<td>Hornbeam.............</td>
<td>x</td>
</tr>
<tr>
<td>Persimmon...........</td>
<td>x</td>
</tr>
<tr>
<td>False Buckthorn......</td>
<td>x</td>
</tr>
<tr>
<td>Winged Sumac........</td>
<td>x</td>
</tr>
<tr>
<td>Mockernut Hickory...</td>
<td>x</td>
</tr>
<tr>
<td>Ironwood............</td>
<td>x</td>
</tr>
<tr>
<td>Water Oak.............</td>
<td>x</td>
</tr>
<tr>
<td>White Ash.............</td>
<td>x</td>
</tr>
<tr>
<td>Swamp Chestnut Oak...</td>
<td>x</td>
</tr>
</tbody>
</table>


The direction of succession can also be inferred by examining the understory vegetation as well as the overstory. The dominant trees of the future may be today’s saplings. In the longleaf pine area, the absence of fire has allowed hardwood saplings to increase in number and size. Pine seedlings are shade intolerant, and require mineral soils as a seedbed (Barbour et al. 1980, 377). A brief examination of the McCarty Woods area reveals the near absence of pine seedlings, a fact also noted by Beckwith (1967, 266).

In addition to the lack of pine reproduction, the pines that do remain are old, now averaging 136 years, the youngest being about 125 (Beckwith 1967, 250). They are also few in number. This means that the loss of a few trees has a major impact on the population. Longleaf pines are generally taller than the surrounding trees (80-100 feet), and are thus susceptible to lightning strikes, not an uncommon occurrence in this part of Florida (Beckwith 1967, 250, 264, 277). The increase in hardwoods also puts the pines at a disadvantage in the event of a prolonged drought. Hardwood species are better able to withstand such conditions (Beckwith 1967, 268).

McCarty Woods was set aside for several purposes. One was to preserve a near climax community. This has been successful, as the study indicates continued progression towards the typical climax vegetation. Another was to preserve a portion of the longleaf pine community. The data obtained by Beckwith, and the data from the recent study, indicate that this goal has not been achieved. The decline and near absence of pine seedlings, due to the exclusion of fire, will result in the progressive succession and replacement of pines by hardwood species, and as Beckwith predicted. Beckwith recommended girdling or poisoning some of the larger hardwoods, and beginning a program of controlled burning to kill the hardwood saplings, as a means of re-establishing the longleaf pine community on the site (Beckwith 1967, 266).

It is probably too late to return the northern portion of the site to its former predominantly pine community. Perhaps it would be more useful simply to allow succession to proceed so that more may be learned from periodic re-examination of McCarty Woods.
Methodology

Both studies involved the use of quadrat and point-centered quarter sampling techniques. Beckwith used twenty point-centered quarters for his overstory examination, and ninety one-meter square quadrats for the understory analysis. The recent study used ten point-centered quarters for the overstory, and ten ten-meter square quadrats for the understory. The aluminum stakes used by Beckwith were placed every 100 feet along two lines 100 feet apart (Fig. 2). The 1985 survey used each stake along the eastern line (stakes 1-10) as a corner of a ten meter square quadrat. The relative cover of each species in a quadrat was estimated visually and recorded.

In the point-centered quarter method used in the recent study, stakes 1-10 served as points. The line 1-10 was used as one axis through all points. Perpendiculars were drawn from each point, and in each quadrant the distance to the nearest tree, its basal area, and species were recorded. "Trees" were defined as any woody plant greater than three inches DBH (diameter at breast height). Understory saplings were measured up to 4.5 feet tall.

The data obtained in this way were used to calculate the relative density, relative dominance, and relative frequency of each species. From these, an importance value (IV) was determined, according to the following general formulas:

Density = number of individuals/area sampled

Relative Density = (Density for a species/total densities for all species) X 100

Dominance = Total basal area or coverage values/area sampled

Relative Dominance = (Dominance for a species/total dominance for all species) X 100

Frequency = Number of plots or points of occurrence/total number of plots or points

Relative Frequency = (Frequency for a species/total frequencies for all species) X 100

Importance Value (IV) = Relative Density + Relative Dominance + Relative Frequency

In order to compare the understory importance values obtained in 1985 with Beckwith's data, an Importance Value had to be calculated from the 1986 data. These are shown in Table 2. The data indicate a general increase in the importance values of various hardwood saplings. The data for Pinus palustris was insufficient to calculate an IV for 1986. However, as previously mentioned, there is a near absence of pine seedlings on the site, and the trend of succession is readily apparent visually. This tends to support Beckwith's conclusion that longleaf pine is being replaced by hardwoods due to the exclusion of fire from the site.

Overstory data were compared by frequency, and no importance value was calculated for Beckwith's data. These data are shown in Table 3.

Discrepancies in the interpretation of the data could be the result of an insufficient number of sample points, one-half of Beckwith's. For example, Table 1 indicates that live oak was present in 1986 but not in 1985. Live oak is in fact well represented on the site, but none were picked up in the
TABLE 2
Importance Value Data, Understory, 1966 and 1985

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Importance Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beckwith</td>
</tr>
<tr>
<td>Sweetgum</td>
<td>3.6</td>
</tr>
<tr>
<td>Pignut Hickory</td>
<td>5.1</td>
</tr>
<tr>
<td>Longleaf Pine</td>
<td>N/A</td>
</tr>
<tr>
<td>American Hornbeam</td>
<td>18.5</td>
</tr>
<tr>
<td>Eastern Hophornbeam</td>
<td>7.4</td>
</tr>
<tr>
<td>Water Oak</td>
<td>22.3</td>
</tr>
<tr>
<td>Swamp Chestnut Oak</td>
<td>3.8</td>
</tr>
<tr>
<td>Sour Orange</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Source: Beckwith (1967) and field notes

TABLE 3
Overstory Vegetation, Frequency of Occurrence

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beckwith 1966</td>
</tr>
<tr>
<td>Sweetgum</td>
<td>36.3</td>
</tr>
<tr>
<td>Pignut Hickory</td>
<td>8.8</td>
</tr>
<tr>
<td>Longleaf Pine</td>
<td>7.5</td>
</tr>
<tr>
<td>American Hornbeam</td>
<td>8.8</td>
</tr>
<tr>
<td>Eastern Hophornbeam</td>
<td>8.8</td>
</tr>
<tr>
<td>Water Oak</td>
<td>15.0</td>
</tr>
<tr>
<td>Swamp Chestnut Oak</td>
<td>5.0</td>
</tr>
<tr>
<td>Winged Elm</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: Beckwith (1967) and field notes

sample. Also, Beckwith used ninety quadrats, located in a more random fashion than were the ten quadrats used in the recent study. Furthermore, the stakes themselves were not randomly located. This may affect the statistical validity of the samples in some unforeseen way. Since the recent study was a field exercise with limited time available, visual estimates of relative cover in the quadrats were averaged out among the members of the groups, a procedure considerably less rigorous, and therefore probably less accurate, than that employed by Beckwith.

Nonetheless, it is hoped that future phytogeography investigations will be conducted using the reference points placed in McCarty Woods by Beckwith as a mean of documenting succession in the area.

References


TERRITORIAL CONCEPTS AMONG TAMPA'S DEAF COMMUNITY

Harold F. Gitman

The deaf population of the United States has historically been viewed as a collection of handicapped individuals isolated from society and unable to cope because of an inability to hear. Deafness itself has traditionally been defined in pathological terms relating to degree of hearing loss. While hearing is indeed important in defining who is and who is not deaf, mere decibels of hearing loss do not provide an adequate measure of the impact of deafness on an individual. The present study suggests that deafness may be better understood when defined in cultural and social terms rather than pathological. The deaf are viewed as a native, but alien, minority culture, living within the matrix of the hearing society. The deaf community of Tampa has been studied as representative of this native but alien cultural group.

Unlike other minorities, there are no reliable figures regarding the size of the adult deaf population. The U.S. Bureau of the Census has not attempted to enumerate the deaf population since 1930. Even if the deaf were included in the census, there remains the problem of differentiating between pathological and cultural deafness. It is the culturally deaf, those who identify with deaf society and accept and live by the rules of that society, who are of interest here. These individuals rely upon American Sign Language (ASL) as their primary means of communication. They tend to avoid contact with hearing society, and they use English only as a second language and only when compelled by economic pressures such as employment or making major purchases.

The Deaf Community of Tampa

Estimates provided by the Tampa Deaf Service Center suggest that the deaf cultural group in its service area, the city of Tampa and Hillsborough County, includes some 6000 individuals. The total number of hearing impaired residing in the area may be as high as 40,000 (Turner 1985). It was a sample from this community which comprised the population for the present study.

Some 300 individuals were contacted during the course of this study, all identified with the deaf community. This is not a study in medical geography, and the subject is approached from a cultural rather than audiological perspective, so no data were generated regarding the actual degree of hearing loss among those contacted. Identification with the deaf community was the only criterion employed to define deafness.

Not all deaf residents of Tampa identify with the deaf community, nor are those with normal hearing necessarily excluded. Individuals whose hearing is lost later in life, especially after becoming an adult, tend to remain part of the hearing world. Those individuals comprise the majority of hearing impaired nationally (Schein and Delk 1974). It is assumed that Tampa follows the national trend. In general, the earlier deafness is acquired, the more likely one is to identify with the deaf community. This suggests that in order for one to gain membership in the community, a process of acculturation must take place. Among hearing individuals, acculturation takes place primarily in the home. Children tend to learn by following the example of adults in the family. For the majority of deaf children this is impossible. Only about 7 percent of deaf children are born to deaf parents (Schein and Delk 1974). The vast majority of the deaf learn deaf social behavior and cultural traditions from sources.
outside the home. The residential school, not the family, is the institution through which most of deaf had been acculturated.

The Residential School

As shown in Figure 1, the residential school for the deaf, with its dormitory setting, brought together deaf children from both hearing and deaf households. Because children from deaf households tend to be better adjusted, and linguistically more competent, they quickly become leaders, both academically and socially (Furth 1966). Deaf children go through the school as a unit. Deaf children of deaf parents become leaders of the cohort group. When the group graduates, all become adult members of the deaf community. The shared experience of the residential school is one facet of deaf life which separates the deaf from the hearing world. Relationships and social hierarchies developed at the school tend to be carried into adult life. Student leaders become adult leaders. Deaf cultural traditions continue through the activities and environment of the residential school. For the deaf, the residential school is not only an educational institution, but among the deaf adults contacted during the course of this study, it is regarded as the primary socializing force in deaf culture. At the deaf residential school deaf children learn how to become deaf adults, how to behave in deaf society, and to distrust the hearing. These lessons are taught not by the faculty of the school but by the children of deaf parents, the native deaf. It must be remembered that the majority of deaf children had never seen another deaf person prior to entering the residential school. Deaf households, by definition, contain deaf adults. Children from these households learn naturally the lessons of deaf culture by observing the behavior of deaf adults. Deaf lore is brought into the residential school by those children.

American Sign Language (ASL)

Perhaps the most important skill taught at the residential school is communication. It is at the school that children from hearing households learn the language of the deaf, ASL. ASL was not formally taught at most schools. Its use was banned at some institutions. Yet the language flourished. Again, children from deaf households, where the language is used as the primary means
of communication, bring ASL into the school setting along with other elements of deaf culture and rules of social behavior. Children of deaf parents acquire ASL naturally, they learn from their parents just as hearing children learn a spoken language (Klima and Bellugi 1979). ASL becomes the linguistic bond which unites the deaf community. So important is ASL in the school setting that at least one expert in deaf education has stated that there never has been a totally oral education for the deaf (Fent 1977). A common language then becomes the second element of deaf culture. The institutional experience being the first.
ASL is the most important element of the deaf cultural landscape. Just as language unifies other cultures, ASL unifies the deaf. The deaf community is a community of signers. In the case of ASL, the role of language in the culture may be even more profound than it is for many hearing societies.

 Territory of the Deaf

Absence of Deaf Neighborhoods

The deaf, unlike many minorities, have no territory over which they have jurisdiction or even limited control. Deaf culture exists within the matrix of the much larger and powerful hearing society. Attempts to discover some geographical area which could be defined as a deaf ghetto or neighborhood in Tampa were fruitless. As illustrated by Figure 2, deaf institutions are distributed throughout the region in much the same manner as is typical for hearing institutions. Access to major transport routes, availability, and property costs appear to be the criteria considered in locating deaf social and cultural institutions. Among other data culled from the Tampa Deaf Service Center, a sample of 600 postal zip Codes revealed that the deaf do not tend to live near each other. The only salient fact the zip Code analysis revealed is that the deaf tend to live in lower and middle income areas, which could have been anticipated since generally the deaf earn significantly less than their hearing counterparts.

ASL as Territory

Lacking any definable space over which they exert a modicum of control, the deaf tend to regard their language in much the same manner that other societies regard territory. The deaf protect ASL from outside (hearing) influences and, through a variety of subtle measures, limit the degree to which hearing individuals can enter the deaf world through ASL. As indicated in Figure 3, ASL forms the core of deaf culture and society. The deaf community itself surrounds ASL and acts as a barrier to all who attempt to enter this realm (Nash and Nash 1981). A buffer zone has also been established between the deaf and hearing, Pidgin Signed English (PSE). Like all pidgin languages, PSE contains elements of several linguistic traditions. In this case, PSE contains elements of English and ASL. While PSE may be used to facilitate communication between peoples of different linguistic traditions (hearing and deaf), it also serves to protect the minority language, ASL. PSE also removes the necessity of communicating in English, a language which most deaf know, but with which few are comfortable, especially when gestures are used to represent English words and signs are placed in English syntax. PSE represents the periphery of the deaf cultural realm.

It must be remembered in all discussions of ASL that the language is neither derived from, nor closely related to English. Lacking a phonetic base, ASL is highly ideographic. Switching from ASL to a signed form of English is similar to attempting to write using a phonetic alphabet and ideographs interchangeably. It can be done, but it is difficult. The deaf do it constantly.

Another aspect of ASL as a form of territory has to do with the manner in which the deaf increase volume in conversation. When a deaf person wants to dominate a conversation the amount of space used in signing becomes larger. One's ability to control signing space is related to the ability to control a conversation. In situations where a hearing person might shout, a deaf person
merely co-opts the space that another might use to converse, effectively limiting the second individual's ability to communicate. When signs are small, the deaf are whispering. This also occurs when two or more deaf turn their backs to a larger group in order to insure privacy. Territory which cannot be spatially defined is not common, but the concept is important in explaining the persistence of many minority cultures. European Jews substituted Torah for physical territory during the Middle Ages (Maier 1975). This enabled Jewish culture and tradition to survive during the centuries following the diaspora. It also means that when the Jews did return to their homeland, Jewish culture could trace an unbroken history to Biblical times. That culture was preserved in Israel, which was found wherever Jews congregated to read Torah. Torah represented the idea of a Jewish state or territory which provided for the continuity of Jewish culture.

In much the same manner, ASL provides for the continuity of deaf culture. Wherever deaf congregate and communicate in ASL, this place becomes the deaf culture realm.

The use of two languages, ASL and some form of English illustrates another attribute of deaf culture, diglossism. Diglossism is common among the deaf (Stokoe 1976). It has also been noted among other minority cultures. Among the Christian minority in Baghdad two languages are commonly used. The Christian's own language is used when interacting within the group, while the majority language is used when dealing with outsiders. This holds true even if the outsider is fluent in the minority language (Jackson 1985). The deaf community of Tampa behaves in much the same manner. With few exceptions, noted later, even if a hearing person is well known to the deaf individual, and the hearing person is fluent in ASL, the deaf tend to respond in either formal signed English or PSE. This should not be interpreted as an act of ill will or an insult to the hearing person. Rather it is perhaps a simple protective reflex.

Deaf perceptions of the environment also differ profoundly from those of the hearing. The most obvious perceptual difference is the perception of sound. Sound in the deaf world represents physical force, not a means of communication or of pleasure as when one listens to music or the sounds of nature. Noise, which most hearing people perceive as unwanted sound, is viewed as a series of jumbled, incoherent movements or a garish clash of color (Wright 1976). In the deaf world, sound is movement. That which does not move is silent. As indicated earlier, volume is a function of space. The more of one's visual field a movement occupies, the louder it is.
Deaf Society and Hearing Society

Deaf material culture differs only slightly from that of the dominant society. Obviously expensive stereo equipment has a low priority, but apart from a few electronic devices, the deaf and hearing buy similar things. Important devices for the deaf include a closed caption translator for television, and a printing device for the telephone called a telephone device for the deaf (TDD, or among older deaf, TTY for teletypewriter). Bells and buzzers commonly associated with telephones, doors, and alarm clocks are replaced by flashing lights.

Deaf social behavior also differs from that of the hearing. The majority of social activities are well organized, placed under the auspices of a particular group. This may be a legacy of the residential school experience, or it may be that the deaf want assurance that a large number of people are in attendance at any function. The result is that the deaf usually gather in large groups several times a week under various pretexts. During the winter of 1985-86, the Tampa Deaf Service Center sponsored a bowling league. The league did not attract enough bowlers to support an eight-team format, and several of the teams that did play were short at least one bowler. However, on league bowling nights, approximately fifty deaf non-bowlers attended, not as spectators but to socialize among themselves. Bowling night became a regular event and provided a place where all knew that a number of deaf would be gathered.

Deaf society is not closed to those with normal hearing. Many prominent individuals in the community have no hearing loss. Many can function in the hearing world through the use of hearing aids. In both cases, the individuals involved have undergone a long period of acculturation and socialization. Of those individuals with normal hearing, children of deaf parents tend to be most readily accepted by the deaf community. This is not unexpected. Those hearing children are acculturated from birth. They learned to behave as deaf, and they learned the language and the lore of the community from their parents and other deaf adults.

Hearing siblings of deaf may also be accepted by the community. In this case, the hearing person has lived with a deaf sibling or siblings and may have acquired the language and lore through years of close association. Patterns of social behavior may have been acquired along with the other attributes of non-material culture from siblings.

Other individuals often accepted into the community include especially highly regarded interpreters and religious leaders. The former because of their close association with the deaf, and the latter because they tend to be trusted and are believed to be altruistic. A somewhat smaller but still significant group includes hearing spouses of deaf individuals. Such spouses would have some facility in ASL or other form of manual communication or, one might assume, the marriage would not have taken place.

Regrettably, very few hearing parents of deaf children gain acceptance to the deaf community (Nash and Nash 1991). Having little or no understanding of deafness, hearing parents tend to view the phenomenon as a handicap to be overcome (Spradley and Spradley 1978). Deaf children can seldom follow in the footsteps of hearing parents. Training, education, and acculturation of the deaf child generally occur outside the home. Because hearing society is decidedly monoglot, many hearing parents never attempt to learn ASL. Rather, they likely may expect the child to learn lip-reading ("Corey" 1984). Yet the deaf are no better and perhaps worse than hearing people at lip-reading (Siple 1978). For all these reasons, the hearing parent often feels pushed aside -- barred, as it were, from the territory of the deaf.
In Tampa, and probably American society generally, the deaf constitute a definable linguistic minority, sharing many aspects of culture and behavior with the dominant hearing society but differing in other areas. Unlike many of America’s hearing linguistic minorities, the deaf form no spatially defined residential communities, no neighborhoods, no ghettos. Rather, their language, ASL, is their territory. This territory is exclusive since hearing persons are reluctantly admitted, and it is transportable, receiving definition whenever the deaf community gather and communicate among themselves.

References

"Corey," 1985. Interview with a twenty-two year old individual, deaf from birth, 12 November.


Turner, William. 1985. Interview with William Turner, Executive Director, Deaf Service Center of Tampa, 5 November.

The analysis of place names continues to intrigue those whose task it is to explain human use of space, and toponymic investigations are evident in the geographic literature. A sample of recent articles illustrates this. David Sopher (1978) claims "an old tradition" in his analysis of the "cosmic structuring of space" from a toponymic point of view. Guest and Lee (1983) examine the acceptance factor of locality names which had no political or municipal recognition. The influence of politics on recent place-names changes is evident in analyses of nations as far apart as Iran and Vanuatu (Rodman and Rodman 1985; Lewis 1982). Less recently, customary usage of both generic and specific names has been investigated by Zelinsky (1976) with regard to cemeteries, and also by Zelinsky (1982) with regard to landforms, towns, stores, and streets. Further, each issue of Canadian Geographic magazine includes a column on Canadian place names and their origins.

Toponymic dependence may be considered as the degree to which the names of satellite towns are derived from and therefore dependent upon the name of a dominant town. For example, Miami Beach derives its name from the more prominent settlement Miami, so can be said to be a toponymic dependency of Miami. The present analysis examines the influence of Florida SMSA central city names on the names of their surrounding metropolitan municipalities. Specifically, the investigation seeks to determine whether or not there is a relationship between the population of the central cities and the number of smaller municipalities which include the name of the central city in their specific names. These subsidiary municipalities are termed toponymic dependencies.

Fig. 1.

Population and toponymic data are given in Table 1 and mapped in Figure 1. In this investigation, the toponymic dependencies for each central city SMSA.
were counted, using the 1986 edition of the Florida Statistical Abstract. Four correlations were designed for analysis. First, the number of toponymic dependencies was correlated with the populations of the central cities. The correlation coefficients were then tested for significance, using a standard t-test. A major difficulty arose from the fact that Jacksonville and Duval County have a unified government. Jacksonville's population, over one-half million, is significantly larger than second-ranked Miami (380,416). It was felt that this might significantly skew the investigation. As a second step, therefore, the correlation was carried out eliminating Jacksonville and its one toponymic dependency from the analysis. A third line of investigation eliminated cities with no toponymic dependencies -- that is, only those cities which in fact evidence toponymic dependencies were considered. For these ten cities, central city size was analyzed to determine if it correlate significantly with the number of dependencies. Fourth, a similar analysis was done also eliminating Jacksonville from consideration.

Results

Analysis of the data of Table 1 and city size data established the following correlations:

1. For all central cities. ......................... $r = 0.305$
2. For central cities, excluding Jacksonville. .... $r = 0.447$
3. For central cities with toponymic dependencies. $r = 0.029$
4. For central cities with toponymic dependencies, excluding Jacksonville. ............... $r = 0.400$

A number of observations may be made from these data. First, the correlations between city size and number of dependencies increase when Jacksonville is eliminated from the analyses. Especially is this the case when only those cities with dependencies are considered; the correlation increases from .029 to .400. Thus, the elimination from consideration of Jacksonville's great comparative size, coupled with its one toponymic dependency, establishes a much higher correlation coefficient -- and, it should be noted, a higher variance.

The inclusion of the smaller cities, with a high number of zero dependencies, produces higher correlation than is evident without them. This is not unexpected from the working hypothesis. For all cities below West Palm Beach in population, only 22 percent have any dependencies. For West Palm Beach and larger towns, half evidenced dependencies. In fact, were it not for Melbourne and its three dependencies, the correlation would be even greater.

In terms of significance, only one correlation was found to be significant at the .05 level, the correlation using all cities with Jacksonville excluded. Thus, the only significance statement which may be made is that there is a significant correlation between central city size and number of toponymic dependencies for non-unified cities in Florida, that is, all SMSA central cities less Jacksonville.

Discussion

Why do some cities have large numbers of toponymic dependencies while others do not? No easy answers are forthcoming. In the present analyses, only one case (all cities excluding Jacksonville) showed a variance above the .10 level, so forceful pronouncements of causation cannot be made. Indeed, we see
<table>
<thead>
<tr>
<th>Central City</th>
<th>Operant Terms</th>
<th>Population</th>
<th># of Dependencies</th>
<th>Name(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jacksonville</td>
<td>Jacksonville</td>
<td>588,363</td>
<td>1</td>
<td>Jacksonville Beach</td>
</tr>
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<td>Miami</td>
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<td>Hialeah</td>
<td>158,796</td>
<td>1</td>
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<td>Ft. Lauderdale</td>
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<td>151,796</td>
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<td>Population</td>
<td>#</td>
<td>Name(s)</td>
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*In the case of Palm Beach/West Palm Beach, the central city is obviously the toponymic dependency of its older, smaller namesake. The fact of dependency, however, is still present, and it was necessary to treat West Palm Beach as the central city in this case.*
here that the size of central city population offers little to explain the
number of toponymic dependencies.

Inspection of the data does provide some interesting observations, how-
ever. For example, Orlando and Tampa have no formalized toponymic dependen-
cies, although they are certainly major Florida cities with high name recogni-
tion. Melbourne, on the other hand, has three dependencies, ranking only
behind Miami, West Palm Beach, and Ft. Lauderdale (seven, seven, and four
dependencies respectively). Why so many dependencies for Melbourne; why none
for Tampa and Orlando?

Linguistic affinity may relate to causation and merits consideration.
Linguistic affinity examines the actual words of the root toponym with regard
to its "niceness" or "pleasantness." A number of indices have been produced by
linguists to measure the pleasantness of English words. By this analysis it
might be found that "Lauderdale" is, after all, more pleasant-sounding than
"Gainesville," so would therefore have more dependencies. Another possible
factor may be age of cities: perhaps older cities have generated more topony-
mic dependencies than recent cities. An attractive suggestion is a town's
perceived positive association: towns with positive images generate toponymic
dependencies. For example, the large number of dependencies with "Palm Beach" or "Miami" may be the result of the positive image of the central cities.

These are speculations. More work on causation will be necessary to reach
firm conclusions in this area of toponymy. For those with a love of the
geography of words and of the character of urban places, the work will be
worthwhile.

* * *

1. Technical assistance from Drs. David Lee and Ronald Schultz, Florida
   Atlantic University, is appreciated.

References

Guest, Avery M., and Lee, Barrett A. 1983. Consensus on locality names within
   the metropolis. Sociology and Social Research 87:274-91.

Lewis, Peter G. 1982. The politics of Iranian place-names. Geographical Review

Rodman, William L., and Rodman, Margaret C. 1985. Rethinking Kastom: On the
   politics of place naming in Vanuatu. Oceania 55:247-51

Sopher, David E. 1978. The structurings of space in place names and words for
   place. In Humanistic geography: Prospects and problems, ed. D. Ley and M.
   Samuels. Chicago: Maaroufa Press.

Zelinsky, Wilbur. 1976. Unearthly delights: Cemetery names and the map of the
   changing American afterworld. In Geographies of the mind: Essays in
   historical geography, ed. D. Lowenthal and M. J. Bowden, 171-95. New
   York: Oxford Univ. Press.

Zelinsky, Wilbur. 1962. Generic terms in the place names of the Northeastern
   United States. In Readings in cultural geography, ed. P. Wagner and M.
THE SECOND ANNUAL DADE COUNTY GEOGRAPHY BEE

Beth Kirk and Sherry Maer

The Second Annual Dade County Geography Bee was held in February, 1987. Encouraged by the success of the first bee (Kirk and Maer 1986), the organizers worked to make the second even more notable. Participation this year was double that of 1986; thirty-two middle and junior high schools from Dade County competed. Because of the increased number of schools involved, the Bee's founding sponsor, the Optimist Club of West Kendall, recruited the Optimist Club of North Bay Village to co-host the event. The combined resources of the clubs helped make this Geography Bee an even greater success than last year (1).

The competition rules again established double elimination rounds. The first school to reach ten points with a two-point advantage was declared the winner. Moderators came from local universities and colleges and from the business community (2). Pat Kixmiller of Miami-Dade Community College North Campus again donated her time to edit the questions.

The first elimination round was held on February 12th at McMillen Junior High. Seventeen schools sent teams to vie for the two semi-finalist positions. The winners were McMillen Junior High, the defending champion, and Gulliver Academy. The second round, held at Neutius Junior High the next day, saw Neutius Junior High and The Hebrew Academy of Greater Miami advance to the final round. The championship round was held two weeks later. McMillen Junior High defeated the others to retain the championship. The co-captains (John Clarke and Daniel Gray) and the rest of the team (Scott Percival, Pedro Rodriguez, Erin Rooney, and Eric Lanning) accepted the Optimist Club’s traveling trophy and individual plaques.

The organizers of the Dade County Geography Bee encourage other Florida counties to hold similar competitions and they look forward to a state-wide competition in 1988. The Optimist Clubs of Florida will also be encouraged to become involved in this worthwhile educational competition. Anyone interested in further information on the Bee should contact the authors at McMillen Jr. High (13100 S.W. 59th Street, Miami, FL 33183) or Dr. Michael Krop (Vice-Chairman, Dade County School Board, Miami).

* * *

1. Special thanks goes to Joseph Gagliano and Frank Carpenter (Optimist Club of West Kendall), the West Kendall OptimListics, and Richard Daer and "Doc" Schwartz (Optimist Club of North Bay).

2. Thanks also goes to the moderators: Page Cubbison (MDCC-South), Richard Daer (Optimist Club of North Bay Village), Nancy Erwin (Florida International University), Patricia Kixmiller (MDCC-North), Althea McNulty (St. Thomas University), F. Kaye Reinhofer (Reinhofer and Associates), and Denis Shaw (MDCC-South).

Reference

PROPOSAL TO THE NATIONAL GEOGRAPHIC SOCIETY

FOR THE ESTABLISHMENT OF A FLORIDA GEOGRAPHIC ALLIANCE

Edward Fernald, Tom Dunthorn, and the Florida Geographic Education Task Force

[this article concerns the proposed creation of a Florida Geographic Alliance. At present some fifteen states have geographic alliances and receive support from the National Geographic Society. To develop the concept of a similar alliance in Florida, Ed Fernald and Tom Dunthorn worked with Ms. Kim Love of the NGS Geographic Education Program. A Florida Geographic Education Task Force was formed (1) and planning was underway following the FSC meeting in Bradenton. A planning proposal was presented to the NGS and the Florida Department of Education and funding was received from both agencies to create a proposal to be submitted to the NGS for formal alliance status. That proposal, with minor editorial changes, follows. Editor.]

Introduction

This request is for establishment of a Florida Geographic Alliance to increase and improve geographic education in the state. The Alliance will provide a vehicle for coordination and communication among Florida's classroom teachers, academic geographers, public school administrators, and geographic social studies education organizations. Concerns of the Alliance will include courses for credit, workshops, development of curriculum, availability and evaluation of classroom materials, development and evaluation of teaching strategies, and other professional outreach activities.

In Florida, the Department of Education, the public schools, and the post-secondary educational institutions all recognize the need for improving geographic education in both the state and the nation. Although some efforts were being made within the Florida Department of Education and some support was evident in the Florida Legislature, it became obvious that more concerted efforts were needed to improve the quality of achievement by the Florida students in geography.

During the spring of 1987, Florida received a grant from the National Geographic Society for the establishment of a Task Force in Geographic Education. This task force had the support of many people and organizations, such as the Florida Society of Geographers, the Florida Department of Education, local school teachers and supervisors, and professors from community colleges and the State University System as well as from private colleges and universities. A special commitment was given by the State Commissioner of Education Betty Castor to match any support given by the National Geographic Society for the establishment of the task force (2). The task force was established and included geography professors, Florida Department of Education administrators, local school district supervisors, and classroom teachers from throughout the state. Through August, evaluation of the task force meetings has been unanimously positive and its achievements significant. For example, nine of the presentations at the Florida Council for the Social Studies meeting in October were given by members of the Florida Geographic Education Task Force and several reports will be made to both the Florida Association of Social Studies Supervisors' meetings and the Council's meetings. In addition, a suggested content outline for workshops and an introductory credit course for teachers have been developed. Several in-service sessions have been held and classroom
materials have been shared. Each has included the geographic themes supported by the National Geographic Society. The work of the task force, while successful, must be continued and the best way for that to be done is for the Florida Task Force to become part of the National Geographic Society's Alliance Network.

The Alliance Region

Florida consists of sixty-seven counties, and each county represents a school district. The Florida Department of Education has a social studies program specialist who is responsible for coordinating geographic education activities in the state. This program specialist maintains communication with a person responsible for coordinating social studies education, including geographic education, in each district. The Alliance Region will be the state of Florida. The Alliance will use the existing coordinating structure, supplemented by resources of the Florida Society of Geographers and individual professors from the community colleges and the State University System and private colleges and universities.

Goals Statement and Work Plan

General Objectives

The Florida Geographic Alliance will develop a coalition composed of educators, geographers, community and business leaders, and other interested citizens dedicated to developing support for geographic education in the state. That support will include:

1. Assistance to educators in implementing geography-based curriculum.

2. Opportunities for professional development and information exchange for teachers (regionally based Alliance meetings).

3. Implementation of a state center for geographic education to coordinate in-service activities and house research-based activities for geographic education statewide.

4. Awareness projects including an Alliance newsletter as well as local, regional, state and national media recognition.

5. Recognition by and inclusion of local, regional, state and federal elected representatives in Alliance activities.

6. Development of local, state and regional fund-raising to supplement Alliance activities.

The objectives of the Florida Alliance will be to enhance the geographic awareness of Florida's kindergarten through 12th grade (K-12) students by increasing appreciably their fund of geographic knowledge and by increasing their ability to think geographically. We wish to place a higher priority on geography and geographic methodology in the school curriculum and to improve methods of geographic instruction at every level from kindergarten through the 12th grade.
Specific Objectives

Year One. The objectives during the first year of the Alliance are to:

- Continue the work of the Florida Geographic Education Task Force under the title "Florida Geographic Alliance Steering Committee."

- Increase awareness of the members of the Florida Society of Geographers, the Florida Council for the Social Studies, and the Florida Association of Social Science Supervisors of the needs of geographic education in Florida schools.

- Continue to inventory, develop, and evaluate materials and teaching strategies in geographic education.

- Develop teams consisting of a professional geographer and a professional educator to serve the various districts.

- Utilize the services of the Association of American Geographers, the National Council for Geographic Education, and the Florida Society of Geographers in order to identify geographers who might serve as resource people to the Alliance.

- Develop and conduct a series of in-service teacher training courses to meet the needs of the individual districts. These would include a suggested content outline to fit different delivery schedules such as, but not limited to:
  1. Residential workshops/institutes
  2. Commuter workshops/institutes
  3. A series of ten-hour blocks in the district
  4. Courses with a once-a-week format
  5. Summer institutes
Outstanding teachers who have been trained in these five courses of instruction will, where practical, train other teachers to achieve a multiplier effect.

- Work with the institutions of higher education toward the full implementation of course credit for school teachers. This credit should be applicable toward accreditation in geographic education, extension of teaching certificate, or application toward a graduate degree. This would require working with the State University System common course numbering committee as well as with individual departments of geography and social studies education throughout the state.

- Establish and support regional networks of teachers.

- Plan and conduct workshops in geographic education in appropriate and convenient locations.

- Work with the school districts to implement course performance standards.

- Work with the Commissioner of Education to develop an energetic program to solicit funds from the private sector for the encouragement and implementation of a higher quality of geographic education in the state of Florida.

- Gain an understanding, through in-service teacher education, of the geographic character of Florida as a state and its relative position physically and culturally to the other states of the nation and the countries of the Caribbean Basin.
- Gain an understanding, through in-service teacher education, of the interrelationships between Florida and the rest of the world.

- Encourage state and local competitions in the form of geographic education "brain bowls" and related academic competitions.

- Evaluate and encourage legislation beneficial to geographic education.

- Develop a Geographic Alliance newsletter to facilitate the dissemination of news and new ideas for better geographic education, including instructional technology.

**Year Two.** The objectives during the second year of the Alliance are to:

- Continue programs initiated in the first year.

- Continue the goal to establish geography as a separate course wherever possible in the curriculum and improve geographic education in other applicable courses.

- Develop a public/private partnership conference on geographic education.

- Develop in-service geographic education programs to meet the needs of persons from private sector groups such as chief executive officers, marketing personnel, or business people who would be interested in a specific foreign country. These services would be self-supporting and would improve the public's perception of the importance of geographic education.

**Year Two and Beyond.** The goals in the second and subsequent years will be to continue the above activities in order to assess the need for the development of a Center for Geographic Education in Florida.

**Climate for Educational Change**

For many years geography, as a subject within the Florida public school curriculum, was recognized as important but did not receive dedicated resources for implementation and improvement. In 1987 a number of factors have changed that situation. The results of geographic testing, formal and informal, have brought the problem of geographic illiteracy to the attention of school administrators and the members of the Florida Legislature.

During the 1987 session of the Florida Legislature, geography was included in the legislation establishing the minimum performance standards in subject areas designated as areas of critical need. This program requires testing of geographic knowledge in grades 3, 5, 8, and 11. Legislation also provides money for in-service teacher training activities.

Increased commitment to the development of geographic education in the state of Florida has also come from The State Geographer, the Social Studies Program Specialist, and the Florida Society of Geographers. A very important personal commitment was made by the new Commissioner of Education Betty Castor to the Florida Geographic Education Task Force and to individual representatives from the National Geographic Society. In addition, a number of commit-
ments of support and requests for help have come from district social studies supervisors and principals. After years of frustration, it appears that 1987 is the beginning of a long-term commitment to geographic education.

Alliance Membership

Key individuals in the Florida Geographic Alliance will include Dr. Edward A. Fernald, The State Geographer, the Director of the Institute of Science and Public Affairs and professor of geography at Florida State University, and chairman of the present Florida Geographic Education Task Force. Tom Dunhorn, Social Studies Program Specialist, will be the key representative of the state Department of Education to the Alliance. In addition, the present members of the Florida Geographic Education Task Force will serve as the steering committee of the Alliance.

Although the Florida Department of Education will be the submitting administrative institution, the Institute of Science and Public Affairs at Florida State University will support the Alliance along with the Florida Council for the Social Studies, Florida Society of Geographers, Florida Association of Social Studies Supervisors, individual universities and community colleges, and school districts. As fiscal support is developed from the private sector, it is anticipated that organizations such as chambers of commerce and other private sector groups will become associate members. Other key individuals will be professional geographers and educators who make up the consulting teams. The steering committee will be made up of representatives from various parts of the state and will represent public school classroom teachers, district administrators, university and community college geographers, and the state Department of Education. Also serving on the steering committee will be Jan L. Tucker, President of the National Council for the Social Studies.

Outreach Activities

Florida State University is a leading university in the preparation of teachers in the southeastern United States. The university prepares teachers, administrators, human services specialists, and other professional personnel for a full range of educational endeavors in both public and private settings. The university prepares persons to conduct research that contributes to the continual assessment and improvement of educational practices so that significant outreach efforts in geographic education can be identified. Members of the Department of Geography and the social studies education areas of specialization, including the chairman of the Geographic Education Task Force, have throughout their careers been involved in teacher education and preparation.

The leadership of Florida State University within the Florida Alliance should not be construed to de-emphasize the strong contributions of the eight other universities in the State University System, private universities such as Stetson University and the University of Miami, and the various community colleges. The work now being done through the Continuing Education Programs and the Teacher Education Centers of the State University System will be greatly enhanced by the increased activity and participation of the Florida Geographic Alliance Network.
Summary

In the state of Florida, geographic education is being spotlighted in the year 1987. The interest and attention are genuine, built on a solid base, and destined to continue throughout the years. Individuals and institutions at every level of the education process in the state as well as the private sector are involved.

A discretionary grant from the National Geographic Society, matched by support from the Office of the Commissioner of Education, has allowed the Florida Geographic Education Task Force to begin a solid program to improve geographic education in the state. The State Legislature has committed its continuing support through inclusion of geography in the Minimum Performance Standards Program which requires testing and outreach programs. Commitment from a variety of resources in the state ensures the success of this effort. The additional support of the National Geographic Society will allow a quicker and more effective implementation of quality geographic education in a growing state (approximately 12 million people) through the Geographic Alliance Network.

* * *

1. The members of the Florida Geographic Education Task Force are Rodney Allen (Social Studies Education, Florida State University), Tom Beewell (Geography, University of Miami), Bruce Bradford (Geography/Geology, Stetson University), Doyle Casteel (Social Studies Education, University of Florida), Ron Cold (Law Education, Dade County Public Schools), Tom Dunthorn (Social Studies Specialist, Florida Department of Education), James Elliott (Social Studies Supervisor, Seminole County Schools), Edward Fernald (Institute of Science and Public Affairs, Florida State University), John Foster (Novat Middle School, Lynn Haven), Jesse Hanesley (Social Studies Supervisor, Orange County Schools), Mike Hollander (Golden Gate Middle School, Naples), Beth Kirk (McMillan Junior High, Miami), Pat Klimiller (Miami-Dade Community College - North), David Lee (Geography, Florida Atlantic University), Aller Lippert (Geography, Manatee Community College), Kim Love (National Geographic Society), Marsha Miller (Edward H. White Senior High, Jacksonville), Peter Muller (Geography, University of Miami), Linda O'Brien (Lakeview Junior High, Winter Garden), Arthur Olson (Educational Research, University of Central Florida), Louis Paganini (Geography, University of Florida), Clinton Rouse (Social Studies Supervisor, Volusia County Schools), Harry J. Schallen, Jr. (Geography, University of South Florida, St. Petersburg), Ron Schultz (Geography, Florida Atlantic University), Dewey Stowers (Geography, University of South Florida, Tampa), Warren Tracy (Director, Social Studies, Duval County Schools), and Jan Tucker (Social Studies Education, Florida International University).

2. PSG President Jeanna Fillman-Richards thanked Commissioner Castor for her support of geography in Florida. Ms. Castor's reply has been printed on page 41.
WHAT'S IN A NICKNAME?
DAVE AGRESTI, 1985

PROVIDE THE CORRECT ASSOCIATION WHICH LINKS CITIES TO NICKNAMES.

1. JOSE GASPAR CITY
2. THE DOLPHIN CITY
3. THE HYDROPLANE REGATTA CITY
4. THE HEART OF THE GOLD COAST
5. HOME OF THE FIRECRACKER 400
6. FLORIDA'S SHADE TOBACCO CAPITAL
7. THE HOME OF STETSON UNIVERSITY
8. THE HOME OF THE WORLD'S LARGEST BASS
9. FLORIDA'S SECOND LARGEST CITY IN AREA
10. SOUTH FLORIDA'S OLDEST PIONEER VILLAGE

...Answers on page 40.

...This unusual Greek letter psi is the logo for the... (p. 40)

In 1986 and 1987 three atlases were produced which dealt with location patterns of women, Atlas of American Women by Barbara Glima Shortridge (New York: Macmillan, 1987), Women in the World: An International Atlas by Joni Seager and Ann Olson (London: PAN/Pluto Press, 1988), and the volume here reviewed. The Gibson and Fast atlas is similar to that of Barbara Shortridge in that it deals with the United States only and therefore offers more detailed information than available in the Seager and Olson international atlas.

Women's Atlas of the United States provides state by state maps of where and how American women live and die. Some 168 full color maps are grouped under seven major headings. Most are choropleth maps, though some are dot maps or graduated circle (or graduated something else, e.g., the map on smoking and drinking shows graduated martini glasses). Detailed chapters on demographics, education, employment, politics, crime, health, and family life offer current (1980 or later) data and fairly extensive explanatory text. Regional trends are noted, and many maps include statistics for women as well as comparable ones for men. Gibson and Fast emphasize patterns which reveal the extent to which the geography of women departs from that of the population as a whole, making this atlas more useful in this regard than Atlas of American Women which as the name implies is only about women.

In some but not all maps, Florida stands apart. Florida women are older and more urbanized than their southern sisters. Females in Florida are also more likely to have completed high school, work outside the home, and own a business. However, despite state enacted equal employment opportunity and equal pay laws, they are not more likely to occupy professional and adminis-trative positions than women in states without such laws. Neither do they earn more pay.

The quality of the cartography is excellent, and map design is often quite innovative. In some maps the northeast is blown up to show detail; in some, perspective views show the US as a flattened block diagram. Data selection is broad and appropriate. The atlas is a good one and serves as a stepping stone to further research, analysis, and informed action.

Victoria Johnson

...Answers to nickname associations on page 39.
1. Tampa
2. Miami
3. St. Petersburg
4. Deerfield Beach
5. Daytona
6. Quincy
7. Deland
8. Dunellen
9. Cape Coral
10. Bradenton

...The logo for the Florida Psychological Association
June 15, 1987

Ms. Jeanne Fillman-Richards
President
Florida Society of Geographers
1804 Maple Avenue
Sanford, Florida 32711

Dear Ms. Fillman-Richards:

Thank you for your support in our endeavors to initiate a Florida Geographic Alliance. With the foundation established by the Florida Society of Geographers and other interested groups and individuals throughout the state, I feel we should be successful in achieving geographic literacy in Florida.

Please accept my enthusiasm and support for expanding geographic education.

Sincerely,

Betty Castor
Commissioner

8C/tcb
CONTRIBUTORS TO THIS ISSUE

Dave Agresti loves map games. He teaches criminal justice at the University of South Florida.

Tom Dunthorn is a member of the Florida Geographic Education Task Force and has helped this organization receive the support of the Florida Department of Education. His title is Social Studies Specialist in the Department of Education.

Thomas D. Feldman received his B.A. and M.A. degrees in geography from the University of South Florida and is currently a Ph.D. student at the University of California, Riverside.

Edward A. Fernald was appointed The State Geographer of Florida in 1983. He is an associate vice president for academic affairs and a professor of geography at Florida State University.

Harold F. Gilman received his Ph.D. from the University of California, Riverside, in 1977. He teaches at Riverside City College. His interests are in human geography and human/environment interactions.

Jerry Holt is a counselor and instructor in mathematics for Palm Beach County Schools. He also serves as adjunct instructor in geography for Florida Atlantic University.

Victoria Johnson, a graduate student in geography at Florida Atlantic University, is concerned with world health, hunger, and ecology problems. She writes for the FAU student newspaper on these and related topics.

Beth Kirk, a social studies teacher in Dade County, received her B.A.E. from the University of Florida. She was chosen as Teacher of the Year from her school in 1985-86. Her interests include physical and cultural geography.

David Lee is a transplanted Californian who teaches cartography and human geography at Florida Atlantic University.

Sherry Maer is an occupational specialist for the Dade County Public Schools. She received her B.A. in psychology, and her M.S. in vocational education from Florida International University.

Harry J. Schaleman, Jr. has interests in cultural, regional and historical geography. His address is Department of Geography, University of South Florida, St. Petersburg.

Deway W. Stowers received his doctorate from Duke University. For many years he has taught meteorology and climatology at the University of South Florida.
Letter from the Editor

Except for occasional short-paragraph interjections, your editor has restrained from publishing his own compositions. However, a personal essay on the ten years I have served as editor of The Florida Geographer is now appropriate. During this period, I have enjoyed putting together thirteen numbers of the FC. With the present number, I step down as editor of The Florida Geographer.

Looking back, I view this labor with greatest pleasure. This has been an exciting time for geography in the state, a time of rich accomplishments for the Florida Society of Geographers, and a time when many elements came together to merit the publication of what I hope readers feel has been a quality professional journal. Florida has grown substantially in recent years, and the profession of geography has also grown — indeed, the field has never been stronger. The geography departments of the universities of the state survived threats to their very existence which were the topics of conversations ten years ago. Close to home and recent was the threat to the department at the University of South Florida. Happily, I am informed, that department is secure and is even adding people. Florida Atlantic University recently received permission (and perhaps more importantly, money) to plan for a Master of Urban and Regional Planning degree. This degree program will be housed in the Geography Department, and new staff will be added to administer and teach in that program. Additionally, the FAU department is recruiting a new geography professor, and recent additions to the university administration further strengthen geography: the new Dean of the College of Social Science, Robert Cattin, is an urban planner, and the new Vice President for Academic Affairs, Len Berry, is a geographer. (I had the privilege of working with Len when he chaired geography at the University of Khartoum in 1965.)

Especially exciting in Florida geography circles is the strengthening of instruction at the K-12 level. The article in this issue by Ed Fernald, Tom Dunthorn, and the Florida Geographic Education Task Force discusses the proposed formation of the Florida Geographic Alliance. Florida is about to join the favored list of states which have formalized Alliance status and receive support from the National Geographic Society. The Florida Department of Education is behind geographic education, as the letter from Commissioner of Education Betty Castor to FSG President Jeanné Fillman-Richards testifies. Classroom geography, we anticipate, is on the verge of a renaissance.

The vigor of geography can also be seen in new programs elsewhere. In this issue, Beth Kirk and Sherry Macer discuss the second Dade County Geography Bee (the first was the subject of an article in FC vol. 20). The concept of a geography bee should spread to other schools leading eventually, we hope, to a state geography competition.

Clearly, geography and geographers are winning victories great and small. I wish we could claim a great increase in the size of the FSG; unfortunately, we cannot. The membership of the society remains about the same, year in, year out. It consists of a core of dedicated individuals who have been members for years. Each year new members are added, of course, but others fail to pay their dues, so after about the third or fourth notice, they are dropped. The loss of members is sad and surprising. With an annual obligation of only seven dollars, membership in the FSG remains one of the true bargains among professional societies.

A part of the bargain of FSG membership, I would like to think, is receiving The Florida Geographer. I take no credit for the quality of the articles in the FG — editors, after all, publish nothing beyond that which authors submit. Let me then categorically thank all the authors who have submitted manuscripts over the years. Many manuscripts were volunteered without any prompting on my part, but many scholars have had to be prodded. Some of the articles, many in fact, could have been published in journals which quite frankly enjoy greater prestige than The Florida Geographer. I would like
to thank those authors who supported this journal by giving me the chance to publish these quality articles.

Published in this issue is an index of the articles published during my tenure as editor. There were seventy-six articles, five book reviews, and four independent cover maps which appeared in the thirteen numbers I edited. Some sixty-seven individuals submitted work which was published. The longest article was the 1936 article on the attitudes and perceptions of the riot in Miami by Tom Boswell, Ira Sheksin, and Carroll Truss. This article was fifteen pages long. In terms of greatest number of articles, Don Randes takes the prize. He was author or coauthor on seven papers. A few of the pieces published were reprints from other publications (always with permission). Only one FC article has been reprinted elsewhere, Mel Walke’s article on shoplifters in Boca Raton. It was reprinted in the The Florida Police Chief.

Of the 158 people and institutions on the mailing list, 125 are Florida addresses and 26 are other US addresses. The FC is sent all over the world, to Europe, to South America, India, even to the USSR. Free copies are distributed to the Association of American Geographers, the American Geographic Society, and a few other national associations. For a while the National Geographic Society received a free copy, but then they started subscribing and paying for it, so the word “gift” was taken off their address label. I hope no one at the NGS is reading this! The US Library of Congress accepts the journal gratefully but makes sure it is understood that they cannot pay for it.

Grateful thanks must be given to numerous individuals other than authors who have supported the production of this journal. I have called upon the expertise of many individuals over the years to help evaluate the merits of manuscripts submitted. Individuals all over the country were contacted, though most came from Florida. Alan Craig, who teaches the Florida course at FAU, probably reviewed the most, but then Bob Tata, Jim Latham and Ron Schultz were called upon as well. Often I asked historians, political scientists, sociologists, criminal justice professors, and other FAU faculty for their expertise. In recent years, Lydia Smiley in Exceptional Student Education has performed invaluable service by evaluating manuscripts and proofing the copy as it came from the printer.

The production of The Florida Geographer of course was underwritten by the FSG, and the treasurers of that organization consistently honored my claims for production costs, specifically, Betty Abbott, Mary Leffler, Linda Summackson, Jim Henry, and Cliff Holmes. Support was also forthcoming from individuals at my institution. Thanks therefore goes to Bob Hucksorn, formerly Dean of the College of Social Science. Throughout the years, whoever walked into Bob’s office would see the Florida Geographer prominently displayed. Recognition of this sort helped when I sometimes thought of chucking the whole bit. Thank to Ron Schultz, chair of my department, for his support as well. Over the years I must have xeroxed hundreds of pages of FC material which Ron let me charge to the department budget. Thanks to Alan Craig, not only for reviewing manuscripts, but also for writing book reviews. Publishers periodically send me some rather strange books for review. No matter the book, Alan would review it, make it pertinent to a Florida audience, and produce pithy statements always filled with insight and wit.

Thanks to Ira Sheksin who has agreed to become the new editor. Ira has a strong record of supporting the FSG and The Florida Geographer, and I urge potential scholars to give him the same support that I was given. Finally, thanks to The Florida Society of Geographers. The encouraging remarks I have received from the members have made editing this journal all worthwhile.

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*The first author of a jointly authored article is identified with an asterisk.
For conciseness, titles have been shortened and initials have been used in
place of first names.
The Florida Society of Geographers was chartered in 1964 as a non-profit organization for the purpose of furthering professionalism in geography through the application of geographic techniques in all areas of education, government, and business in Florida.

The society supports these objectives by promoting acquaintance and discussion among its members and with scholars and practitioners in related fields by stimulating research and field investigation, by encouraging publication of scholarly studies, and by performing services to aid the advancement of its members and the field of geography in Florida.

The society holds a meeting once a year, usually in February. At this meeting papers are presented and matters of mutual concern are discussed.

Persons interested in membership in the Florida Society of Geographers should contact: 

Regular membership is $7.00 for a calendar year; student membership is $3.00.