Chapter Eleven


Agriculture

I. AGRICULTURE AND THE REGIONAL VISION

Agriculture is critical to the region's overall economy and health and is a key component of the Central Florida 2050 Regional Vision. Agriculture and agriculture-related business generate jobs for thousands of workers and are a major employment sector in the region. Central Florida's existing agricultural lands enhance the character of much of the open space surrounding our region's cities and towns and ensure a way of life for many of our residents. These lands provide open buffers to urban areas, vital sanctuaries for birds, plants, and animals, and permeable surfaces for the natural recharge of underwater aquifers. Nearly one-third of the region is covered in agricultural land, most of which is open pasture. As the region's agricultural economy advances, agricultural lands will serve an important function - to provide a greater variety and supply of locally produced fresh food to meet a growing demand[i].

Central Florida's 2050 Regional Vision

A cornerstone of the Regional Vision is maintaining Central Florida's heritage of agriculture as a viable option for a large portion of the region's undeveloped land. Policy makers, land owners, and farmers should work together to ensure that farming remains economically and environmentally sustainable.

http://myregion.org/RegionalVision/FourThemes4Cs/tabid/198/Default.aspx

Historically the region is known for its citrus, cattle, and floriculture industries. Farmers and ranchers have been devastated by a number of droughts, freezes, floods, and blights over the years, leading to a swift decline in agricultural lands and production since the 1970s. The general escalation of land values and a speculative real estate market have caused many agricultural properties to convert to urban uses. In the last decade both the number of farms and the size of farms in Central Florida have declined significantly, even while the average value of farm products has grown. However, the region's agriculture community has responded to challenges in the past, often by selecting new crops or by developing new techniques. Today there are over 5,000 farms in the region, the majority of which are fewer than 50 acres in size. It is clear that remaining agricultural lands are integral to the region's future health and economic wellbeing.

In 2007 Florida ranked:

- **1st** in the value of production of oranges, grapefruit, tangerines, and sugarcane in the United States
- **1st** in the value of production of snap beans, fresh market tomatoes, fresh market cucumbers, squash, bell peppers, watermelon, and sweet corn in the United States
- **2nd** in the value of production of greenhouse and nursery products, strawberries, and cucumbers for pickles in the United States
- **4th** in the value of the production of honey in the United States

Florida Agriculture also has a significant impact on the overall economy in the state. In 2007 over 140 countries imported Florida agricultural commodities
The Highest value-added and employment impacts across the state were:

- Fruit Farming
- Greenhouse, nursery, and floriculture production
- Support Activities for agriculture and forestry
- Vegetable and melon farming

Agribusiness in Central Florida ensures that the livelihoods of nearly 340,000 workers employed in the industry continue and that 1.2 million acres of farmland are available to future generations. **The 2050 Vision is for a future that supports a sustainable agriculture and food system as vital to the region's overall health and economy.**

In terms of employment, this data shows that Florida agriculture provides for a large number of direct employment jobs. According to a study led by the Institute of Food and Agricultural Sciences at the University of Florida, the number of jobs related to agriculture has grown steadily from 338,253 jobs in 2000 to 418,003 jobs in 2007. The overall fiscal impact of agriculture has also continued to grow over the same period, from 62 billion in 2000 to 103.63 billion in 2007[ii].

II. CHALLENGES IN AGRICULTURE

Agriculture is more vulnerable to the whims of nature than any other major economic pursuit. The physical environment in East Central Florida is relatively hostile to agriculture. Infertile soils, floods alternating with long dry periods, hot summers, hurricanes, occasional freezes, weeds, parasites, and numerous plant and animal diseases all create problems for agriculture. In peninsular Florida, these conditions discouraged the kind of family farms that developed in other parts of the country. Instead, plantation agriculture and later specialty agriculture, intended to produce crops for sale rather than subsistence in the region. In a 1965 report by the ECFRPC specialty agriculture was said to "offer great opportunities for economic development[iii]" in the region. Although the same is true today, the selection of crops may differ, and the need for subsistence-related production has increased.

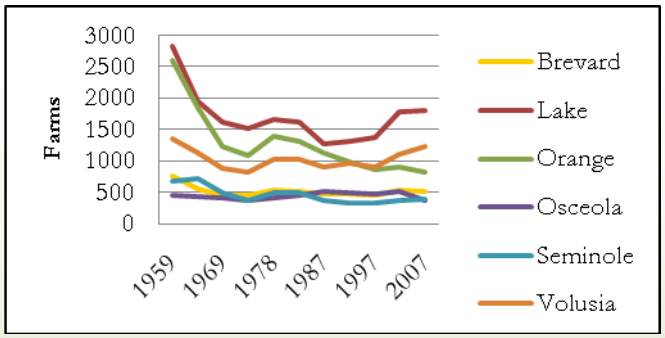
Historically, agriculture has changed and adapted not only to weather conditions, but also to the emergence of new markets in other states and overseas that force competitive change. The region was known for pineapple crops in the late 1800s, before large-scale pineapple production began in the Caribbean and Central and South America. Similarly, Sanford was hailed as the "Celery Capital of the World" before the establishment of new markets made celery farming less viable.

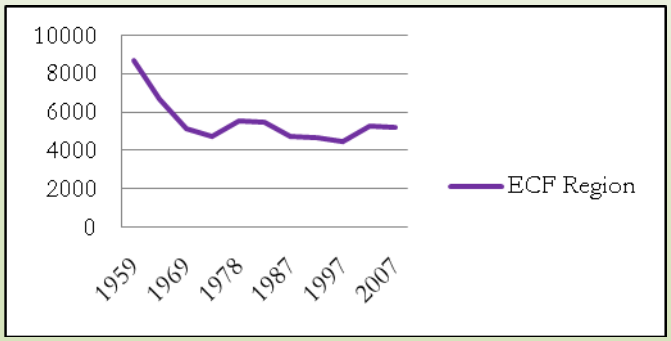
III. LOSS OF AGRICULTURAL LAND IN REGION

The following charts illustrate the extent of agricultural land that has been lost in the region from 1959 to 2007. **Figure 1** shows that while the number of farms is still decreasing on a county by county basis, after a steep decline in the number of farms that occurred from 1959 to 1977, the loss of farms has slowed. In two counties, Volusia and Lake, the number of farms has increased slightly in recent years. Overall, the total percentage loss of farms for the East Central Florida Region from 1959 to 2007 was 40.42%.

Figure 2 shows the regional loss of land in terms of acres lost. The steepest decline in lost acreage occurred in Osceola from 1987-1997, but the county has regained some of the acreage lost in recent years. Seminole County shows the greatest loss of acreage in the region with a loss of 83.15% Overall, the total percentage of loss of farm acres for the East Central Florida Region from 1959-2007 was 46.69%

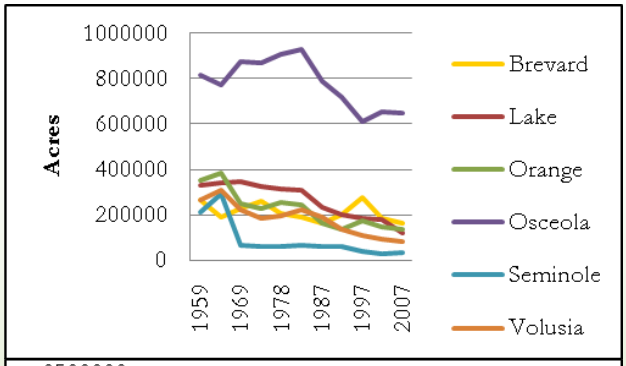
Number of Farms **(Figure 1)**

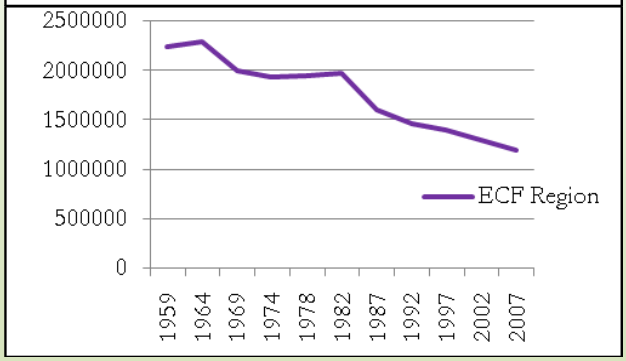




Loss of Total Farms	
Brevard	-31.22%
Lake	-35.83%
Orange	-68.27%
Osceola	-17.17%
Seminole	-41.91%
Volusia	-9.34%
ECF Region	-40.42%

Land in Farms **(Figure 2)**





Loss of Farm Acres	
Brevard	-36.83%
Lake	-63.11%
Orange	-61.01%
Osceola	-20.70%
Seminole	-83.15%
Volusia	-68.32%
ECF Region	-46.69%

IV. REGIONAL COLLABORATION

There is a great need for regional collaboration and cooperation among the agricultural community. Agriculture is continually adapting and responding to issues ranging from weather and climate change to developments in technology to regulatory reforms. Sharing information and developing strategies to promote the region's products collectively enhances the viability of a strong and sustainable agricultural economy. The Joint Policy Framework Committee of *myregion.org* found that the greatest potential for improving the economic and environmental health of agriculture in the region is through the increased cooperation of public entities and individuals with the many available resources of the federal, state, and regional institutions. In this spirit ECFRPC will begin hosting a Regional Agriculture and Food Systems Roundtable of farmers, ranchers, land owners, retailers, restaurateurs, policy makers, non-profit and agency representatives, university extension services, and other interested parties, scheduled to meet quarterly beginning in 2010.

V. FLORIDA'S CITRUS INDUSTRY

The citrus industry had a transformative and lasting effect on the region's overall economy, landscape, and heritage. Although citrus trees are not native to Florida, they have been growing in the state for over four hundred years. It is known that by 1579 citrus was already plentiful at St. Augustine.[iv] Agriculture declined under English colonization and did not regain importance until the United States acquired the territory in 1817.

Numerous groves were established in the northern part of the state after the Second Seminole War subsided in 1842, as well as in St. Augustine and Tampa, due to their seaport accessibility. As the citrus industry grew, so did Florida's population and economy. For a number of years ranching and citrus growing were subsistence rather than commercial ventures, since the products could only move hazardously to market via sailing schooner. When the railroads expanded into the state in the late 19th century, trains brought Florida citrus to northern markets. The Great Freeze of 1894-95 devastated north Florida's thriving citrus industry; almost every orange tree north of Sanford was killed. Many growers relocated further south and established groves in the central Florida region.

Photos Courtesy of: Florida Fruit and Vegetable Association

The citrus industry grew throughout the beginning of the 20th century, despite battling winter freezes and various diseases. Some farmers switched to planting truck crops like celery instead of citrus, trying their hand at vegetables to take advantage of the rich muck lands. In the 1940s the demand for frozen orange concentrate and processing pushed the region to produce more citrus, and other cluster industries emerged including seedling production, bee keeping, and flower pollination. The success of theses industries made way for the commercial production of ferns, tropical foliage, and ornamentals.

The decade of the 1980s was a challenging period for citrus farming in the region. In January 1981, central Florida was hit by the first in a series of severe freezes that shrunk the industry from 243,267 acres of production in 1978 to just 64,498 in 1992, a reduction of over seventy-one percent. In the 1990s and early 2000s, the industry made a mild recovery, growing to just over 51,000 acres of production by 2002. However, most of the groves affected by the freezes were being sold and developed. In August of 2004 Hurricane Charley plowed through central Florida devastating the citrus industry by spreading disease, destroying crops, and eradicating millions of trees. In 2007 there were less than 28,000 acres of citrus groves remaining in the region. There is a concentration of groves outside of the region in the southern and western counties.

Table 1. Decline in Citrus Acreage

	1978		1982		1987		1992		*1982-92 Acreage Decline*
County	Farms	Acres	Farms	Acres	Farms	Acres	Farms	Acres	
Brevard	359	18,203	324	16,634	273	9,772	264	10,390	***-37.54%***
Lake	1,253	133,487	1,111	125,599	530	31,757	570	22,734	***-81.90%***
Orange	744	57,925	619	49,216	360	20,207	330	12,107	***-75.40%***
Osceola	212	17,002	199	19,394	191	15,398	186	14,559	***-24.93%***
Seminole	283	6,159	253	4,659	120	2,550	88	1,816	***-61.02%***
Volusia	429	10,491	399	9,816	156	2,127	179	2,892	***-70.54%***
ECF Region	3,280	243,267	2,905	225,318	1,630	81,811	1,617	64,498	***-71.37%***

Table 2.

County	1997 Farms	1997 Acres	*82-97 Acreage Decline*	2002 Farms	2002 Acres	2007 Farms	2007 Acres	*1978-07 Acreage Decline*
Brevard	230	11,602	***-30.25%***	216	8,533	199	4,648	***-74.47%***
Lake	568	25,610	***-79.61%***	570	19,251	489	12,381	***-90.72%***
Orange	246	11,884	***-75.85%***	261	9,723	191	8,165	***-85.90%***
Osceola	183	17,113	***-11.76%***	136	11,051	83	Information Unavailable	Information Unavailable
Seminole	87	1,703	***-63.45%***	77	874	87	846	***-86.26%***
Volusia	148	1,885	***-80.80%***	165	1,583	205	1,790	***-82.94%***
ECF Region	1,462	69,797	***-69.02%***	1,425	51,015	1,254	27,830	***-88.56%***

Source: U.S. Census of Agriculture

VI. CATTLE INDUSTRY

The Spanish *conquistadors* were the first to bring cattle and horses to Florida when they arrived in the 1500s.[v] The first commercial herds were established in the 1700s by rancheros and Franciscan Friars, succeeded by the native Florida tribes in the later part of the century. In the nineteenth century control of the herds passed hands to the Florida territorial cowmen who shaped and expanded the cattle industry to its modern form.

The cattle and livestock industry reached the East Central Florida region in the early 1800s, by way of the native Florida tribes, when lands near Kissimmee where used for grazing. The first white families to raise herds settled around Osceola in the mid 1800s. When rail projects began in the 1870s Florida cattle and agricultural industries were limited, and most cattle exports, mainly to Cuba, were being challenged by Texas and Mexico. By the early 1900s rail transit provided reliable connections to the North and Midwest markets, enabling an agricultural boom that shaped the industry and the region.

Photo Courtesy: Archbold-Station Wetland Restoration

The introduction of the railroad also changed the nature of cattle raising in the region. Central Florida ranchers began sending cattle to finish, or grow to maturity, in western states, specializing the industry to simply raising calves. From the beginning of the 1950's until the end of the 1960's the region's cattle numbers more than doubled, growing from 122,286 to 258,630. The 1974 Census of Agriculture showed numbers of cattle started to decline for the first time in Orange and Osceola counties. However,

cattle raising continued to increase in all other counties in the region. The opening of Walt Disney World in 1971 and the subsequent growth in the southwestern portion of the region helped maintain this trend. Cattle numbers today are similar to the industry of 1959. However, there are a greater number of farms raising cattle in the region than ever before, contributing to the small and medium farm rural character cherished by farmers, ranchers, gardeners, and urbanites alike.

Table 3. Cattle in the Region

	1950		1959		1964		1969	
County	Farms	Cattle	Farms	Cattle	Farms	Cattle	Farms	Cattle
Brevard	125	14,200	77	18,764	56	12,096	91	33,717
Lake	347	10,863	275	20,912	263	22,962	263	26,707
Orange	448	21,947	309	27,466	246	31,294	185	36,305
Osceola	283	49,504	232	77,043	220	98,578	253	134,497
Seminole	106	12,616	97	24,328	109	31,242	107	9,297
Volusia	293	13,156	290	22,732	249	19,327	224	18,107
ECF Region	**1,602**	**122,286**	**1,280**	**191,245**	**1,143**	**215,499**	**1,123**	**258,630**

	1974		1978		1982		1987	
County	Farms	Cattle	Farms	Cattle	Farms	Cattle	Farms	Cattle
Brevard	107	36,377	114	43,063	131	25,948	112	18,662
Lake	301	27,071	295	24,064	388	18,585	394	26,826
Orange	203	19,053	207	19,424	237	18,335	223	11,396
Osceola	222	127,641	239	114,981	277	117,870	267	108,878
Seminole	93	9,750	112	7,023	135	7,485	155	8,640
Volusia	235	20,463	257	14,218	305	18,639	309	15,012
ECF Region	**1,161**	**240,355**	**1,224**	**222,773**	**1,473**	**206,862**	**1,460**	**189,414**

	1992		1997		2002		2007	
County	Farms	Cattle	Farms	Cattle	Farms	Cattle	Farms	Cattle
Brevard	111	25,305	115	23,757	150	25,864	147	25,405
Lake	388	28,552	495	34,442	713	28,812	767	21,319
Orange	176	10,377	180	15,989	202	11,592	221	11,073
Osceola	277	106,646	258	105,404	283	99,890	217	102,116
Seminole	114	6,796	97	6,504	101	5,107	140	5,558
Volusia	262	15,946	290	12,843	377	11,190	429	12,447
ECF Region	**1,328**	**193,622**	**1,435**	**198,939**	**1,826**	**182,455**	**1,921**	**177,918**

Source: U.S. Census of Agriculture

VII. FLORICULTURE/NURSERY AND LANDSCAPE INDUSTRY

Florida's floriculture industry, also known as the nursery and landscape industry, encompasses a wide range of businesses, including nurseries and greenhouse growers; lawn and garden suppliers; equipment manufacturers; landscape design, installation, and maintenance services; lawn and garden stores; and other retail stores selling plants and related lawn and garden goods. The commercial nursery industry emerged in Orange County in the early 1880s to supply seedlings to local citrus growers.[vi] Horticulturists began to experiment with other crops for commercial production, and as a result the region's fern industry developed prior to World War I. By 1927 local nurseries were shipping over one million ferns, many to major department stores. The 1934 freeze highlighted the need for greenhouses to protect the plants. By 1949 Apopka had 49 greenhouses with others rapidly being built. In 1980 the third largest tissue culture facility in the country opened in Plymouth, showcasing a new method of propagation. Northwest Orange County has long been known for its floriculture industry, and an economic cluster of related businesses has developed to support this sector. A cluster is defined by the relationships of nearby firms, and in this case includes organizations from a variety of industries including farm supply stores, agricultural research, and landscaping services. Today Florida's nursery and landscape industry ranks second only to California in the US in terms of overall industry value, estimated at $15.2 billion annually. Statewide over 300,000 jobs are provided by this industry, and four of the East Central Florida

region's six counties are among the top fifteen in the state for employment impact. These same four counties, Lake, Orange, Seminole, and Volusia, all rank in the top fifteen counties in Florida for overall sales. In fact, Orange County ranks second in the state and sixth nationally in annual sales of nursery and greenhouse crops. A 2005 study showed significant growth for this industry in Florida since 2000, but curiously few resources are devoted to promoting and further developing this economic sector.

VIII. FRUIT AND VEGETABLE CROPS

Florida's climate makes it ideal for growing a wide variety of products. Major crops include citrus, sugarcane, tomatoes, peppers, cotton, watermelons, peanuts, snap beans, and potatoes. Timber is also an important agricultural commodity for the state. Florida ranked first or second in receipts for 12 of the nation's top 25 agricultural commodities in 2000. These crops included not only citrus, but also tomatoes, corn, bell peppers, snap beans, cucumbers, eggplant, and strawberries[viiviii]. Ten of these twelve commodities were fresh fruits and vegetables, and combined represented over 45 percent of the state's agricultural receipts. It is estimated that the state's vegetable industry generated a total economic output impact of $3.14 billion in 2001. Orange County is the industry leader in East Central Florida, ranking fourth in the state.

IX. FOOD SYSTEMS PLANNING

The "food system" refers to the relationship between food production, processing, distribution, consumption, and waste management. This system contributes significantly to a community's economic development, environmental impact, and overall health, safety, and welfare. The food system influences and affects other aspects of the urban and rural landscape, including housing, transportation, and land use decisions. Understanding the interrelated relationship of all these elements can help local governments develop public

Photo Courtesy of: South Eastern Nursery

policy to achieve the goals of the Central Florida 2050 Regional Vision.

X. MODERN INDUSTRIALIZED FOOD SYSTEM

There are many stakeholders in the food system, operating at different scales and influencing the system to varying degrees. Perhaps the most dominant stakeholder in any food system is the "industrialized food system" (IFS), providing great quantities of inexpensive food that is grown, processed, and distributed using a large-scale industrial model.

Photos Courtesy of Agri-Systems and Allposters.com

The industrial approach to agriculture developed and embraced over last sixty years differs greatly from historic food cultivation practices. Fueled by inexpensive energy, government subsidy of crops, unbalanced international trade laws, and a dependence on emerging science and technology, the American food system developed into a global industrial system, seeking and expanding into world markets. Food became a commodity, and the system was redesigned to benefit massive production and shipment on a global scale. This model measures short-term success in terms of profits, and costs are kept low and risks reduced through the vertical integration, or consolidated ownership, of agricultural inputs, processing, and retailing. Advances in technology have led to a more efficient industrial food system. This has resulted in the emergence of new markets, such as seed and biotechnology companies using genetic modification to alter food. Genetically modified crops can be grown, shipped, stored, and processed in a more industrial efficient manner. The costs of this system are generally externalized, relying on inexpensive fuel costs to import and export food around the world and government subsidies to produce crops at below market value.

Image Courtesy of *Hardscape/Landscape: design for an edible urban environment*

However, this system suffers from high exposure to other world economic markets. For instance, when energy prices rose in 2008, communities saw firsthand that the cost of food increased as the price of fuel increased. Indeed energy, in particular natural gas for fertilizers and fossil fuels for transportation, plays a key role in the availability of food in the IFS. A 2002 study from the John Hopkins Bloomberg School of Public Health estimated that under this industrialized system three calories of energy were required to create and transport one calorie of edible food. The average food item in the United States travels 1,500 miles from farm to the family table.[ix]

Table 6.

Categories:	Food Security	Food Insecurity
Descriptions of conditions in the household	**High Food Security** No reported indications of food-access problems or limitations.	**Food Insecurity without hunger** Reports of reduced quality, variety, or desirability of diet. Little to no indication of reduced food intake
	Marginal Food Security One or two reported indications of anxiety over food sufficiency or shortage of food in the house. Little to no indications of changes in diets or food intake	**Food Insecurity with hunger** Reports of multiple indications of disrupted eating patterns and reduced food intake

Chart Courtesy of: Food Security in the United States: Definitions of Hunger and Food Security

However, the argument against the global model involves more than just energy. Despite the apparent benefits, both urban and rural communities face numerous problems with respect to food production, distribution, and consumption. Millions of Americans are food insecure, with Florida contributing about nine percent, or over 600,000 people to the national total.[x] This is in spite of the fact that US per capita food consumption grew in the 1970s from 2,234 calories per person per day to 2,757 calories in 2003. In addition, annual corn sweetener consumption increased in that same time period 400%, largely attributable to high-fructose corn syrup, a low-cost substitute for sugar in beverages.[xi] As the country's most heavily subsidized crop, corn finds its way into most commonly found foods at the grocery store.

Critics of the modern industrial model fault the industry and government policies for promoting and providing an abundance of unhealthy foods, contributing to the rise of diet related health problems, and increasing the costs of health care for all United States' citizens. According to a study published in Time magazine in September 2009, a dollar can buy 1,200 calories of potato chips, 875 calories of soda, 250 calories of vegetables, or 170 calories of fresh fruit.[xii] A government-sponsored study found that medical spending for obesity alone is estimated to have reached $147 billion in 2008, an 87 percent increase in the past decade.[xiii]

XI. REGIONAL AND LOCAL FOOD SYSTEMS

Simple Living Institute
Promoting Sustainability in Central Florida

The Simple Living Institute, Inc. was started in 2002 by a group of Central Floridians who sought to create a stronger, more self-sufficient community built on the core values of environmental sustainability and personal health with an overarching mission to create opportunities for sustainable living in Central Florida.

The Simple Living Institute fulfills this mission by:

- Developing working organic farms with effective soil, water, plant, and wildlife conservation
- Providing cooperative education experiences that empower individuals and organizations to become responsible stewards of their well-being and environment
- Core Programs include organic farming workshops, a workshop and speaker series, and a garden start-up program

For more information about the Simple Living Institute, please visit: http://simplelivinginstitute.org

Regional and local food systems include a variety of stakeholders such as community gardening and urban agriculture proponents, neighborhood organizations, food citizens, and public health organizations. Most of these individuals and organizations are community focused, with an urban and suburban base reaching out to surrounding rural areas. Their goals tend to be long-term, viewing food as an individual and community right and touting the economic and social gains linked to a strong local and regional food system. These groups also tend to be critics of the modern industrial system, maintaining that while the system produces a seemingly abundant variety of inexpensive food, there are drawbacks and unintended consequences that ultimately outweigh any perceived benefits.

Proponents of regional and local food systems argue that decentralized production, distribution, storage, and purchasing of agriculture reduces the distance traveled and energy consumed in the production and transportation of food products. The regional system includes not only grocery stores, but also local farmers markets, community supported agriculture groups, farm stands, and community gardens and will be discussed in further in the following sections.

Photos Courtesy of the Simple Living Institute

XII. THE FUTURE OF AGRICULTURE IN THE REGION

With the right opportunities Central Florida's local farms can provide a greater portion of the region's food, such as organic products available at weekend farmer's markets. Additional technology and

research could improve the natural food industry's outlook in the region. Of the more than 100 certified organic producers, handlers, and processors in the state, just a handful are located in Central Florida. The demand for goods that are locally produced, certified organic, or otherwise less resource intensive outpaces the supply. Central Florida growers are well suited to tap into this growing market with help from agricultural and technical assistance programs. Other niche markets offer tremendous potential for the region.

Niche Markets

While some nurseries in Florida are failing during these hard economic times, others are flourishing- *what's their secret?* Tapping into a niche market or specialization. This is a great strategy for local nursery owners to consider, since specialized nurseries can often provide products or services not offered by competitors. There are many success stories to be found across our region:

Orange County

Larry and Sherry Shatzer own Our Kids Tropical Nursery which specializes in bamboo, ginger varieties, and tropical fruit plants. The Shatzer's attribute their success to utilizing demonstration gardens at their nursery to showcase the many varieties of specialized plants they offer. Customers can tour the gardens to see how much fruit each plant produces and how delicious the fruit tastes and leave with plants purchased for their home gardens. *For more information, please call Our Kids Tropical Nursery (407) 877-6883*

Green Marketplace

The Green Marketplace is a cooperative partnership between three local growers, Naturewise, Hise Farms and Country Eight Farm. These small local growers use sustainable methods to grow plants and produce. At the marketplace, customers can find native and edible plants, fresh, seasonal, chemical-free produce, raw honey, farm products like goat milk soap, jellies, and more, as well as natural gardening products. Everything available for sale is made or grown locally, nothing is trucked in.

Brevard County

Kari Ruder started Naturewise in 2004 when she recognized the need for a Nursery in Brevard County that focuses on native plants. Naturewise was started to provide people with native plants and ecological services to create their own sustainable "Florida Friendly" landscapes. In 2007, Ruder partnered with other local growers to form the Green Marketplace, a partnership where local growers pool their resources to provide locally grown produce, heirloom vegetable plants, and other niche products.[xiv] *For more information please visit: http://www.naturewiseplants.com/*

Lake County

In February of 1989, Gary Cox opened Lakeridge Winery and Vineyards opened in Clermont, Florida. In the years since, Lakeridge has become a destination for locals and tourists alike thanks to its scenic rolling hills and great wine. Lakeridge Winery ranks as Florida's largest premium winery

and is a pioneer in the development of table and sparkling wines from hybrid grapes. Lakeridge produces over 200,000 gallons per year, and free tours are offered daily for guests to see how the wine is made. The vineyard also holds several annual events including a harvest festival complete with live music and grape stomping. *For more information please visit:* www.lakeridgewinery.com

XIII. OTHER EXISTING AND EMERGING INDUSTRIES

Florida's dairy industry is an excellent example of Florida agriculture that competes effectively in the local market. Most of the industry's milk and dairy products are consumed in the state, which connects consumers to farmers in a manner that promotes sustainable agriculture and fresh milk/dairy production. According to published reports, Florida dairy producers own 120,000 dairy cows ranking Florida first in the southeast for number of dairy cows, these cows average 5.5 gallons of milk a day. The annual value of fresh milk and other dairy products produced in the state of Florida exceeds $400 million[xv].

Alternative crops are another way for local farmers to diversify the crops they produce and increase their overall income, which will help keep the agriculture industry viable in Florida. Agricultural items that fall under the umbrella of alternative crops include herbs, cut flowers, and specialty mushrooms such as shiitake. Blueberries are also becoming an important crop in Florida. Santa Rosa County Extension agent, Dan Mullins expands on this idea alternative crops by stating, "Hydroponics, greenhouse production, and specialty vegetables benefit the small producer. It keeps the farmer in production[xvi]."

Another emerging market is tourism centered on agriculture or "agritourism." Country markets, picnic areas, hayrides, and corn mazes are some of the more innovative ideas used by farmers to promote visits to their farms[xvii]. While these techniques are still relatively new in Central Florida, festivals that celebrate agriculture in the region such as the Plant City Strawberry Festival and the Zellwood Sweet Corn Festival have been in existence for many years and bring much needed revenue and exposure to communities and area farms.

According to the state's agricultural research universities, the region has great potential to meet the needs of the nation's growing ethanol and biofuels industry, due to the climate and the abundance of biomass fuels. The region is well poised to develop new innovative industries based on the production of these biofuels. Agricultural lands also provide significant opportunities for open space conservation and for the sale of carbon sequestration credits for the retention of land in agricultural or forested use. Providing information, technical assistance, and incentives to implement best management practices can encourage environmentally sound and economically efficient agricultural activities.

XIV. URBAN AGRICULTURE FOR CENTRAL FLORIDA

Photo Courtesy of Hardscape/Landscape: Design for an edible urban landscape

Healthy food access is a concept being embraced by planners in urban areas who are seeking to improve the access residents in disadvantaged neighborhoods have to healthier food options. Residents who live in low income and underserved neighborhoods do not always have access to fresh fruits and vegetables. Recently the region has seen several advances in urban agriculture, which includes urban farms, edible public landscapes, and community and home gardens. Community Supported Agriculture (CSA), local retail cooperatives that distribute fresh food to members, is a model that is also beginning to gain momentum in the region.

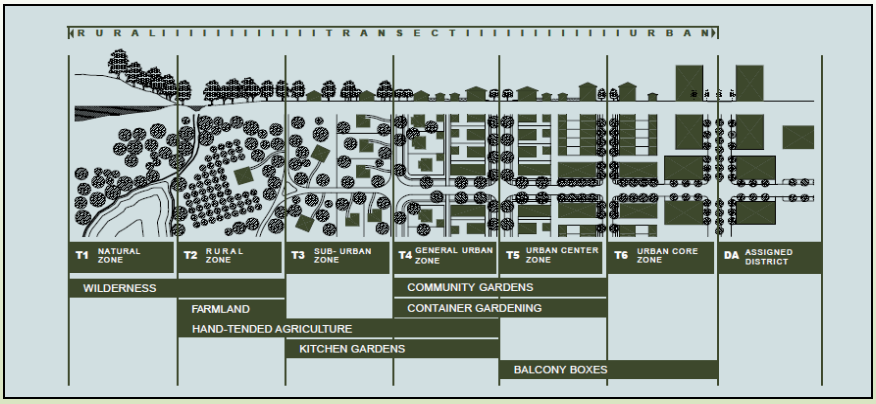
Homegrown in Orlando is an example of a successful web-based CSA that allows members to order local products weekly online and then pick them up at a distribution center nearby.

The region is known for its small and medium farms, and interestingly our most urban counties tend to be the leaders in agricultural sales. Encouraging small scale agriculture in urban areas gives citizens opportunities to learn about their food sources and local agriculture's important contribution to the region. Urban farms should be permitted, where feasible, so long as the operation does not negatively impact the surrounding uses. Care should be taken in siting new residential neighborhoods near existing farmland, as the Right to Farm is protected in Florida[xviii]. Buffering land uses is one strategy to address this issue.

Figure 3.

Foodstuff Transect

A common misconception about agriculture is that it occurs only in the countryside, but as this chart shows, agriculture can take place anywhere. Even in dense urban communities, food can be grown on rooftops, windowsills, backyards, and vacant lots. Urban agriculture is inherently innovative. As this diagram shows, agriculture can take on many forms in developed residential areas and can be adapted to any amount of space.



Foodstuff Transect created by Duany Plater-Zyberk & Company

A. Edible Landscapes

Edible landscaping replaces plants that are strictly ornamental with plants that produce food. In Florida, the edible plant palette is vast due to the large number of fruits and vegetables that can be grown here. Edible landscaping is a great alternative landscaping solution for public open space and for residential yards.

There are many benefits to including edible landscaping in the overall layout of your yard:

- Improved taste and nutrition of food that comes from eating produce immediately after it is harvested
- Reduced food costs found in certain edibles like tomatoes, cucumbers and other vegetables that are more economical to grow at home than purchase at stores or markets
- Consuming locally grown produce is a sustainable alternative to purchasing fruits and vegetables shipped from great distances that are found at conventional grocery stores[xix]

Photos Courtesy of The Damayan Garden Project

Local governments are encouraged, where feasible, to encourage the planting of edible public landscapes in place of ornamental to promote local food production. Edible landscapes provide significant educational opportunities while adding seasonal interest and promoting nutrition. Several varieties of berry and fruit trees thrive in the region and would be well-suited for edible public landscapes.

B. Community Gardens

Community gardens provide quality growing space for people living in urban neighborhoods, who may otherwise not have access to soil and sunlight.[xx] Residents of the neighborhood are able to lease a small plot for a nominal fee to use for the growing season. The gardens often become a community focal point that can provide open space benefits to the entire community, at minimal public expenditure. The gardens foster community involvement and neighborhood cooperation, resulting in more connected and attuned citizenry. Crime rates in neighborhoods with community gardens tend to decrease and the gardens offer educational opportunities for young growers to learn about their

food system and the importance of sustainable local gardening practices and techniques. The gardens are generally sited on vacant land or city owned land adjacent to other neighborhood facilities, such as parks, schools, and recreation centers.

Parramore Community Garden

"Pride Grows Here"

Four decades ago, Parramore was a thriving downtown Orlando neighborhood with a vibrant business community and residential neighborhoods. Today Parramore has become an impoverished, fragmented community facing major challenges from high levels of crime and unemployment.

Numerous efforts have been made over the years to help revitalize the Parramore neighborhood culminating in 2005 with the implementation of Mayor Buddy Dyer's "Pathways for Parramore" program aimed at comprehensively revitalizing the area. The ultimate goal is to restore the Parramore community to a safe, livable, and prosperous place for Orlando citizens.

Above: Photo Courtesy of Mike Levin Flickr Photostream
Below: Photo Courtesy of the Central Florida Future

One community building project encompasses the importance of community supported agriculture, the Parramore Community Garden. The garden is Orlando's first true community garden with membership open to the entire neighborhood.

The garden consists of 18 raised beds for growing fruits and vegetables. It was officially opened in March of 2009, and all citizens of Orlando are welcome to visit the garden anytime.[xxi]

Similar community gardens are transforming other neighborhoods in cities like Eatonville, Winter Garden, and Daytona Beach.

UCF Organic Community Garden

The University of Central Florida Organic Community Garden is a one acre garden[xxii] located within the UCF Arboretum that contains a variety of fruits, vegetables, and herbs. The garden features plantings native to Florida, as well as other varieties that can withstand the Florida climate. Students and community members who regularly volunteer their time share the produce from the garden.

"To date, more than 100 students have contributed more than 500 hours of volunteer work to support the growth of plants within the garden," said Alaina Bernard, assistant director of the Environmental Initiative & Arboretum and the Student Sustainability Alliance adviser. "Their hard work is a meaningful sign of the commitment of UCF's student body to eco-friendly projects on campus."

Since its founding 25 years ago, the Arboretum has stood as a symbol of UCF's dedication to educating students and the community about nature, while protecting the environment. The mission of the Arboretum is to provide students and the greater community of Central Florida with a comprehensive environmental and outdoor living laboratory for education, research, and recreation. Interpretive programs for school and organizational groups are offered.

C. Regional Food Cooperatives

Homegrown is one local model of Community Supported Agriculture, developed by the Florida School of Holistic Living in 2007. The idea for a food cooperative in Central Florida grew from a desire of participants to develop a sustainable local food network that connects consumers to area farmers. The organization seeks to promote a local sustainable food system that ensures fresh, safe, and ethically produced products for all co-op members. Homegrown operates an online food distribution program that has grown to serve and connect over 300 members with dozens of local farmers. A significant amount of the food and other goods currently offered are produced locally. The ultimate goal of Homegrown is to source all food and other products from within a 150 mile radius of the Central Florida region.[xxiii] Homegrown is currently expanding with a new location in Orlando on Orange Ave. and distribution points located throughout the region. (CSAs are discussed further in the next section)

D. Farmers' Markets

Community farmers' markets are featured in many Florida towns and cities in the region. Farmer's markets reflect the area's bounty by selling produce and other products grown locally. Fruits, vegetables, nursery plants, honey, and other products are available on a seasonal basis at markets such as the one pictured here in Leesburg, Florida. Farmers' markets offer consumers the benefits associated with buying local products. Local food is fresher than most food found in conventional supermarkets and as a result it is tastier and more nutritious. It also benefits local economies- buying directly from family farmers helps them stay in business.

XV. RECOGNIZING THE VALUE OF AGRICULTURE

Communities and regions in the State of Florida have at their disposal a combination of planning tools and policy recommendations that will help ensure that agriculture maintains its positive impact on the state's economy. The planning tools discussed below can be used in concert to promote and retain agricultural infrastructure that includes functioning open space, productive farmland, and natural areas.

A. Green Payments and Other Economic Incentives

Local and state governments can utilize economic incentives to help area farmers turn a profit, allowing them to keep their land in agriculture and preserve the rural character of Florida farmland. Economic incentives for agriculture recognize farms as a vital segment of the local and state economy.

Green Payments are an example of economic incentives. These payments allow farmers to engage in conservation practices while farming that result in tangible environmental benefits that serve the broader community. As an example, the City of Columbus, Ohio pays farmers $10 an acre within its reservoir watershed to avoid certain fertilizers, thus reducing dangerous nitrate releases into the water supply. In the context of Green Payments, crops are viewed as only one of a wide range of products and services a farm or agricultural lands can provide. Other services provided by these lands include the protection of wildlife habitat, conservation of open space for recreation, carbon sequestration, and storm water attenuation and treatment through retention, filtration, or reuse. The economic value of these services on rural and agricultural land becomes a part of the rural landowner's business plan and an additional revenue source.

Carolina Farm Stewardship Association Farm Incubator Program

The Carolina Farm Stewardship Association is using a technique first honed in the business world to develop new and fledging businesses to jumpstart and encourage young farmers to diversify the rapidly aging population of the state's farmers.

Incubators are educational farms where new growers can lease parcels of land and gain access to equipment and knowledge without having to make the costly personal investment normally associated with farm startups.

The Carolina Farm Stewardship Association has four goals within their Farm Incubator Program:

1. Encourage young farmers to continue the strong agricultural tradition of the Carolinas and ensure our food supply for the future.

2. Give new farmers the chance to develop farming skills without them having to personally invest a significant amount of money.

3. Provide business planning assistance to farmers participating in the farm incubator project

4. Organize people and institutions to create incubators in each of the Carolinas' major climate regions

For more information please visit: http://www.carolinafarmstewards.org

Other agricultural economic incentives include providing loans and grants, assistance with preparing businesses plans, and direct marketing. States and communities can also work to remove zoning and land use regulation obstacles that will allow farmers to diversify their operations and expand into new markets.

B. Purchase of Development Rights (PDR)

In order to protect their land from development, landowners can voluntarily sell a conservation easement to either an interested private conservation organization or government agency. An easement is then placed on the landowner's deed and runs either for perpetuity or for a period of time specified on the easement document. The landowners receive compensation in return for the restrictions placed on their land, and still have the right to use their land for agricultural purposes. A PDR program assists landowners who are land-rich and cash poor and gives them another financial alternative to selling their land for development. It protects valuable agricultural land in a community and ensures more liquid capital that landowners can use for reinvestment in their farming enterprises.

C. Community Supported Agriculture (CSA)

Community Supported Agriculture centers around or near urban areas and helps farmers directly market and sell their products to residents of nearby communities thereby connecting residents directly with their food suppliers (See Regional Food Cooperatives in the previous section.)

Community Supported Agriculture has been gaining momentum since its introduction to the United States from Europe in the mid-1980s. Today, CSA farms in the U.S., currently number more than 400. Many are located near urban centers in New England and the Mid-Atlantic States.

CSA's consists of a community of individuals who pledge support to a farm operation with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or "share-holders" of the farm or garden pledge in advance to cover the anticipated costs of both the farm operation and farmer's salary.

Photo Courtesy of Four Hands Farm, City of Cocoa. http://www.fourhandsfarm.com/

In return, they receive shares in the farm's production throughout the growing season. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests. By direct sales to community members, who have provided the farmer with working capital in advance, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.

Although CSAs take many forms including farmer's markets and food cooperatives, all have at their center a shared commitment to building a more local and equitable agricultural system, one that allows growers to focus on land stewardship and still maintain productive and profitable small farms[xxiv]

D. Rural Land Stewardship Program (RLSP)

The RLSA is an incentive-based system established by the Florida Legislature in 2001. The purpose of the RLSA is to promote economic growth and diversification in sustainable rural environments, thus strengthening and retaining agriculture. Rural Land Stewardship Areas enable counties to designate all or portions of land classified in the future land use element as predominately agricultural, rural, open, or open-rural.

In 2004, the application process was streamlined and the minimum size threshold was reduced from 50,000 acres to 10,000 acres and the maximum size threshold was removed. The State of Florida supports Rural Land Stewardship Areas as an alternative to the fragmented approach of development that does not maintain agricultural viability, protect rural character, or discourage sprawl.

For more information about Rural Land Stewardship Areas, go to www.dca.state.fl.us.

Volusia Forever

Modeled on the statewide program, Florida Forever, Volusia Forever is a $191 million long-term land conservation program based in Volusia County. It was created in 2000 when Volusia County voters endorsed a tax (.2 mills) over the next 20 years to protect the county's natural resources *in perpetuity*. The county is stretching these funds further by matching them with other funds and forming partnerships to promote land conservation. To date, the funds have been used to protect 26,500 acres through a combination of fee simple acquisitions (40 percent of the protected acres) and purchase of conservation easements (60 percent of the protected areas). The decision to sell is voluntary. Examples of protected landscapes include environmentally sensitive land, water resource protection and outdoor recreation land, and agricultural lands. Agricultural lands protected through easements include cattle and sod operations. A nine-member citizen advisory committee provides assistance to the county staff, who administers the program through the county's Land Acquisition and Management Division.

(More information on the Volusia Forever program is available from volusiaforever-echo.com.)

XVI. AGRICULTURAL PROFILES BY COUNTY

A. Brevard County

According to James Fletcher, Director of Brevard County Agricultural and Extension Services, land for agriculture in Brevard has remained fairly steady since the housing boom from 2004-2007. Brevard County's agriculture lands decreased by approximately 50,000 acres during this time. Most of the current agriculture lands remain in five or six large farms where cattle play a large role. Mr. Fletcher stated he does not see this changing anytime soon. The remaining agriculture lands are small farms. This includes citrus and other fruits, and vegetables. Brevard County has seen an increase in these small producers, and Mr. Fletcher believes this trend will continue over the next few years. As producers search for new crops, Brevard County is seeing an increase in potato, leafy greens, watermelon crops, and a shift towards organic and hydroponic production.

Table 7.

Million Dollars (2007)		Million Dollars (2007)		Full & Part-time Jobs	
Industry Output	Total Output Impacts	Direct Value Added	Total Value Added Impacts	Direct Employment	Total Employment Impacts
2,239.6	2,507.0	1,173.6	1,332.9	32,441	35,172

	2002	2007	% Change
Number of Farms	555	531	-4
Land in Farms (Acres)	187,570	167,059	-11
Average Size of Farm (Acres)	338	315	-7
Market Value of Production • Crop Sales $39,762 (85%) • Livestock Sales $6, 919 (15%)	$42,159	$46,682	11
Average Per Farm	$75,961	$87,913	16
Government Payments	$52,000	$21,000	-60
Average Per Farm	$8,718	$2,595	-70

Top Livestock Inventory Items	Number
Colonies of bees	25,405
Cattle and calves	2,675
Quail	1,605

Top Crop Items	Acres
Sod harvested	5,798
Oranges, all	4,093
Corn for silage	Information Unavailable
Forage-land usesd for all hay and haylage, grass silage, and greenchop	1,328

B. Lake County

More people are doing work in their own yard in Lake County. This is good, says Extension Agent Charles Fedunak, and it means people are saving money and taking personal responsibility in their yards. He has also noticed a switch from primarily ornamental plants to residents growing more fruits and vegetables. Lake County is known for its abundant ornamental wholesale operations, however the economic downturn has forced some of the growers to diversify their crops and adapt to current trends. Indeed, the region's (and Lake County's) story of agriculture is one of adaptation. Winter freezes have turned citrus groves into homes, as Lake County transitioned quickly in the last decade from a landscape that was generally rural to a mostly suburban county. The County's upland topography also contributed to this trend. Although the county has had a 36% reduction in the number of farms since 1959, the county remains the region's leader in number of farms with 1,814 farms in operation.

Table 8.

Million Dollars (2007)		Million Dollars (2007)		Full & Part-time Jobs	
Industry Output	Total Output Impacts	Direct Value Added	Total Value Added Impacts	Direct Employment	Total Employment Impacts
1,561.5	2,018.3	792.3	1,070.3	18,505	23,452

	2002	2007	% Change
Number of Farms	1,798	1,814	1
Land in Farms (Acres)	180,245	121,422	-33
Average Size of Farm (Acres)	100	67	-33
Market Value of Production	$178,076,000	$188,519,000	6
• Crop Sales *Information Unavailable*			
• Livestock Sales *Information Unavailable*			
Average Per Farm	$99,041	$103,925	5
Government Payments	$103,000	$38,000	-63
Average Per Farm	$2,359	$6,900	-66

Top Livestock Inventory Items	Number
Colonies of bees	21,653
Cattle and calves	21,319
Quail	6,428

Top Crop Items	Acres
Oranges, all	10,643
Forage-land use for all hay and haylage, grass silage, and greenchop	6,738
Nursery stock	2,384
Sod Harvested	1,300

C. Orange County

The most successful farms, according to Orange County Extension Director Richard Tyson, have started small with some outside income and then transitioned into the farmer's primary income. This is a message that he has relayed to the residents of Orange County. More and more people are growing their own food as a means of enjoyment and sustenance. Since 2002, the amount of land in farms has decreased, but the number of farms in the county has increased, mirroring the regional trend. The face of Orange County's agriculture is changing, led by both urbanites and rural dwellers alike. Today you can find young entrepreneurs serving locally grown food or hear discussions of gardening on local college radio.

Table 9.

Million Dollars (2007)		Million Dollars (2007)		Full & Part-time Jobs	
Industry Output	Total Output Impacts	Direct Value Added	Total Value Added Impacts	Direct Employment	Total Employment Impacts
11,523.0	18,023.5	6,272.3	10,191.9	125,859	181,474

	2002	2007	% Change
Number of Farms	901	825	-8
Land in Farms (Acres)	146,637	136,088	-7
Average Size of Farm (Acres)	163	165	1
Market Value of Production • Crop Sales $264,477,000 (98%) • Livestock Sales $5,443,000 (2%)	$242,688,000	$269,920,000	11
Average Per Farm	$269,354	$327,176	21
Government Payments	$45,000	Information Unavailable	Information Unavailable
Average Per Farm	$3,023	Information Unavailable	Information Unavailable

Top Livestock Inventory Items	Number
Cattle and calves	11,073
Horses and ponies	1,760
Layers	1,458

Top Crop Items	Acres
Oranges, all	7,055
Sod harvested	Information Unavailable
Vegetables harvested, all	Information Unavailable
Forage-land use for all hay and haylage, grass silage, and greenchop	1,180

D. Osceola County

Osceola County is comprised of 1,467 square miles, or 939,000 acres. Agriculture plays an important role in the industry and economics of the county. The Osceola County Property Appraiser's Agricultural Department estimates there are 591,837 acres in agricultural use. The primary agricultural products are cattle, citrus, and commercial sod. Ranching has long been the main agriculture enterprise in the county. Florida is the sixth leading producer of beef cattle in the United States, and Osceola County is the state's leading producer. Osceola County is also home to the largest ranch east of the Mississippi River. The Deseret Ranch consists of approximately 300,000 acres, with 181,000 acres located in Osceola County. Citrus has also played an important role in agriculture with approximately 20,000 acres remaining in the county. An emerging market in Osceola County is the commercial sod industry. This industry began as a way for ranchers to supplement income when cattle prices declined. There are also various other agriculture enterprises in the county including tropical fish, winter vegetables, ornamental plants, and timber. While these are usually small enterprises, they do provide agriculture income and jobs for residents.

Table 10.

Million Dollars (2007)		Million Dollars (2007)		Full & Part-time Jobs	
Industry Output	Total Output Impacts	Direct Value Added	Total Value Added Impacts	Direct Employment	Total Employment Impacts
1.237.3	1,674.0	624.8	894.2	16,366	20,780

	2002	2007	% Change
Number of Farms	519	381	-27
Land in Farms (Acres)	652,673	646,290	-1
Average Size of Farm (Acres)	1,258	1,696	35
Market Value of Production • Crop Sales $61,428,000 (68%) • Livestock Sales $29,467,000 (32%)	$64,941,000	$90,896,000	40
Average Per Farm	$125,128	$230,571	91
Government Payments	$186,000	$230,000	24
Average Per Farm	$18,558	$25,523	38

Top Livestock Inventory Items	Number
Cattle and calves	102,116
Horses and ponies	1,307
Goats, all	451

Top Crop Items	Acres
Sod harvested	14,250
Oranges, all	7,459
Forage-land use for all hay and haylage, grass silage, and greenchop	6,039
Grapefruit	718

E. Seminole County

"Agriculture is getting very exciting in Seminole County," proclaims Extension Services Manager Barbara Hughes. "This is the first time in years that the number of farms has increased - by 5 percent; in the past the number of farms has decreased." Agriculture is second to tourism in terms of county revenues, and this has inspired leaders to embrace and market the county's agricultural appeal. The county's tourism website promotes "Agri-tours" allow visitors to pick their own produce, taste locally grown fruits and vegetables, sample locally produced honey, or savor the sights, scents, and tastes of a local farmer's market. Seminole County is also home to a unique agricultural operation. Seminole County Correctional Facility inmates have been growing their own vegetables for more than ten years and are now raising thousands of beneficial bugs that attack insect pests and feed on troublesome weeds found in Florida.

Table 11.

Million Dollars (2007)		Million Dollars (2007)		Full & Part-time Jobs	
Industry Output	Total Output Impacts	Direct Value Added	Total Value Added Impacts	Direct Employment	Total Employment Impacts
2,733.6	3,639.4	1,499.6	2,044.3	33,904	42,382

	2002	2007	% Change
Number of Farms	376	395	5
Land in Farms (Acres)	27,987	35,542	27
Average Size of Farm (Acres)	74	90	22
Market Value of Production • Crop Sales $61,428,000 (68%) • Livestock Sales $29,467,000 (32%)	$19,211,000	$20,828,000	8
Average Per Farm	$52,729	$51,094	3
Government Payments	Information Unavailable	Information Unavailable	
Average Per Farm	Information Unavailable	Information Unavailable	

Top Crop Items	Acres
Forage-land use for all hay and haylage, grass silage, and greenchop	711
Oranges, all	631
Nursery Stock	393

Top Livestock Inventory Items	Number
Cattle and calves	5,558
Horses and ponies	1,124
Layers	936

F. Volusia County

The national trend of personal and community interest in local agriculture has found a home in Volusia County. There has been a surge in home gardening, both soil and hydroponic, and there is an increased need for fresh and local produce. According to IFAS Director David Griffis, the extension had been receiving one to two calls a day, as opposed to one call a month just two years ago. The number of farms in the county has been steadily increasing, while the land in agriculture and the average farm size has been declining. In Volusia there have been recent startups in greenhouse hydroponic tomatoes and strawberries. These farmers are finding that the demand for local and fresh produce is sustaining their agricultural economic ambitions. The nursery industry still dominates in Volusia County, and in 2007 the county had 2,851 acres in floriculture crops.

Table 12.

Million Dollars (2007)		Million Dollars (2007)		Full & Part-time Jobs	
Industry Output	Total Output Impacts	Direct Value Added	Total Value Added Impacts	Direct Employment	Total Employment Impacts
2,145.8	2,616.2	1,139.1	1,423.9	31,703	36,606

	2002	2007	% Change
Number of Farms	1,114	1,234	12
Land in Farms (Acres)	93,842	83,274	-11
Average Size of Farm (Acres)	84	67	-20
Market Value of Production	$106,297,000	$125,545,000	18
• Crop Sales $119,110,000 (95%)			
• Livestock Sales $6,434,000 (5%)			
Average Per Farm	$95,419	$101,001	6
Government Payments	$23,000	$47,000	104
Average Per Farm	$2,095	$2,928	40

Top Livestock Inventory Items	Number
Cattle and calves	12,477
Colonies of bees	6,322
Horses and ponies	2,954

Top Crop Items	Acres
Forage-land use for all hay and haylage, grass silage, and greenchop	3,842
Floriculture crops	2,851
Oranges, all	1,559
Nursery stock	1,388

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CHAPTER 11: AGRICULTURE	
Goal	Promote a regional agricultural system that results in gains to the local economy, greater food security, preservation of rural heritage, and improved land stewardship and agricultural practices.
Policy 11.1	Protect and conserve lands for long-term agricultural use.
Policy 11.2	Promote agriculture as a viable land use and protect farming operations from incompatible adjacent land uses.
Policy 11.3	Conserve and promote the integrity of the region's rural character.
Policy 11.4	Encourage best management agricultural practices that reduce impacts to the function and value of natural systems.
Policy 11.5	Recognize agribusiness as an economic asset to the region and a major sector of the region's economic base.
Policy 11.6	Promote incentives that enhance agricultural working lands.
Policy 11.7	Support the development of alternative agricultural products in the region to help diversify the economic base.
Policy 11.8	Encourage the utilization of reclaimed storm water for irrigation of appropriate crops.
Policy 11.9	Promote direct sales to consumers including the emerging agricultural cottage industry, farm stands, farmers markets, and community supported agriculture.
Policy 11.10	Encourage local governments and public institutions (i.e. schools, prisons, youth centers, senior centers, summer camp programs, etc.) to support local agricultural purchases and on-site farm and garden operations.
Policy 11.11	Encourage local governments to conduct community agricultural assessments.
Policy 11.12	Encourage governments to strengthen their local food system by implementing community gardens, urban agricultural activities and edible landscapes.

CHAPTER 11: AGRICULTURE INDICATORS	
Number of acres farmed by county	Baseline (2007): Brevard 167,059; Lake 121,422; Orange 136,088; Osceola 646,290; Seminole 35,542; Volusia 83,274 Source: http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Florida/index.asp
Direct and indirect economic output (agricultural product) by county	Baseline (2007): Brevard 2,507.0 million; Lake 2,018.3 million; Orange 18,023.5 million; Osceola 1,673.0 million; Seminole 3,639.4 million; Volusia 2,616.2 million Source: http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Florida/index.asp
Number of part-time and full-time jobs agricultural jobs by county	Baseline (2007): Brevard 35,172; Lake 23,452; Orange 181,474; Osceola 20,780; Seminole 42,382; Volusia 36,606 Source: To be completed
Average per farm market value of production	Baseline (2007): Brevard $87,913; Lake $103,925; Orange $327,176; Osceola $230,571; Seminole $51,094; Volusia $101,001 Source: To be completed
Number of community gardens	Baseline: To be completed Source: Local Food Alliance

AGRICULTURE SOUNDING BOARD (July 9, 2009 and October 8, 2009)	
LeeAnn Adams	Adams Ranch, Inc.
Mike Aerts	Florida Fruit and Vegetable Association
Michelle Beamon	Osceola County
Dick Boyer	Seminole County
Melanie Corun	Waterkist Farm, Inc.
Leroy Crockett	Central Florida Resource and Development Council
Doris Denis	Sanford State Farmers Market
David Dymond	H&H Sod
Cynthia Fox	Planning & Zoning Manager, Brevard County
Sharon Fox Gamble	University of Florida Institute of Food & Agricultural Sciences, Volusia
Polly Golden	Executive Director Florida Beef Council
David Green	Winter Park Dairy
Debbie Hancock	Haines City Citrus Growers Association
Peter Harrison	Adams Ranch, Inc.
Tom Hill	Florida Farm Bureau
Marjorie Holt	Sierra Club
Melisa Hunt	Florida Department of Agriculture and Consumer Affairs
Dan Lackey	Bronson Ranch
Chris Leffler	Duda Ranch
Andrew Medows	Florida Citrus Mutual
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Steve Moreau	Slow Food Orlando
Dennis Mudge	University of Florida IFAS Orange
Luis Nieves Ruiz	Orange County
Julie Norris	Dandelion Communitea Cafe
Charles Pattison	1000 Friends of Florida
James Payne	Deseret Ranch
Jim Pratt	Florida Nursery, Growers and Landscape Association
Rebecca Reis Miller	Slow Food Orlando
Elaine Renick	Lake County
Emily Ruff	Homegrown Central Florida Food Co-op
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Keith Schue	The Nature Conservancy
Scott Shuman	Winter Park Honey
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