Outlook
ORANGE COUNTY PLANNING DIVISION
Research and Strategic Planning Section

Orange County's Agriculture and Food Supply

Issue 6

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At the national level, rising environmental awareness and food safety concerns have led to increase scrutiny of the nation's food production system. Consumers are asking themselves where their produce is coming from and how far it has traveled before reaching their table. These concerns have led to an increase in the availability of organic products and a demand for more locally grown produce. In the context of these national trends, this article provides an overview of Orange County's agriculture production.

Local Agricultural Production

When it comes to supporting a thriving local agricultural sector, urban counties such as Orange County face several challenges. Freezes, a high population growth rate and escalating land values have affected local agriculture production. Notwithstanding these concerns, Orange County's agricultural industry has continued. According to Orange County's Property Appraiser, more than 118,000 acres, or about 34 percent of all land, was used for agriculture purposes in 2007 (Table 1). The majority of agricultural land in Orange County is used to graze cattle, followed by groves and ornamental horticulture (Table 1).

Orange County's agricultural land is concentrated in three areas. The biggest section is in southeast Orange County, east of Central Florida Greeneway (SR 417). Other lands are in the southwest part of the County, within the Horizon West planning area. Another cluster of agricultural land is in northwest Orange County near the City of Apopka.

Table 1: Acreage by Agricultural Industry in Unincorporated Orange, 2007

Agricultural Industry	Acres
Cropland	558
Groves	13,299.60
Horses	893.06
Ornamental Horticulture	2,623.81
Other Animals	89.54
Grazing	100,118.73
Timber	1,016.10
Total	118,598.94

Source: Orange County GIS, 2007

While anecdotal evidence suggests that local agriculture has continued to decline as Orange County urbanizes, the USDA Agricultural Census tells a different story. Even tough agricultural acreage declined through the years, the number of farms remained relatively stable (Table 2). Eighty-nine farms closed between 1992 and 2002. However, forty-nine new farms opened during the next five years (USDA, 2007) .

Table 2: Total Number of Farms in Orange County, 1992 to 2002

Year	Farms
1992	990
1997	862
2002	901

Source: USDA Census of Agriculture 1992, 1997, and 2002

Table 3 depicts the average size of farms

noted in these three Censuses and may provide an insight into this matter.

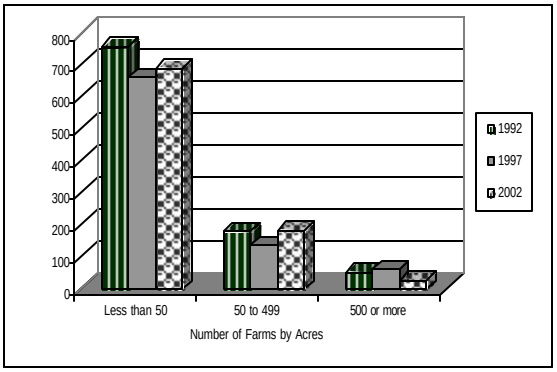
Table 3: Average Size of Farms in Orange County from 1992 to 2002

Year	Average Size in Acres
1992	140
1997	203
2002	163

Source: USDA Census of Agriculture 1992, 1997, 2002

As the average farm size increased 63 acres in 1997, when compared to the previous Census, it appears that there was some consolidation within the agricultural industry that created larger farms. In 2002, the number of farms increased by 29, while the average size of the farms only decreased by 40 acres. Figure 1 depicts Orange County's total number of farms by size, and farms that are less than 50 acres predominate .

Figure 1: Farms by Size in Acres for Orange County, Florida 1992, 1997, and 2002



Source: USDA Census of Agriculture, 2002

As noted in Table 1, the major agricultural industries in Orange County are citrus, nursery and foliage, and beef cattle. Other agricultural industries with less impact include timber, vegetable growing, and other livestock. The following section of the report describes each industry.

Pasture Land and Cattle

Pasture land is used to produce hay for beef and dairy cattle. The main pasture plant grown in Orange County is Bahiagrass, followed by Bermudagrass, limpogras, and pangolagrass (Doolitle and Schellentrager,1989). Most of the cattle industry is located in southeast Orange County. Pasture land tracts comprise about 166,000 acres. More than 80 percent of cattle farms in Orange County produce animals for beef. The number of cattle farms has continued to increase over the years, as noted on Table 4. The number of animals decreased between the last two Censuses, but is higher than 1992. Most of these animals are taken outside of the state to be processed.

Table 4: Cattle Farms in Orange County, 1992, 1997, 2002

Year	Farms	Cattles and Calves Inventory
1992	176	10,377
1997	180	15,989
2002	202	11,592

Source: USDA Census of Agriculture 1992, 1997, 2002

Orange Groves and Other Citrus

In 1982, approximately 48,547 acres of citrus crops were grown in Orange County (Doolitle and Schellentrager, 1989). Destructive freezes in 1983, 1985, and 1989 severely affected citrus concentrate production at the state level. Several groves in the northern and central parts of the citrus belt had to be abandoned. Grove owners in Central Florida have been gradually replanting their groves with varieties of oranges that mature early to escape the freezes. According to the Agricultural Census, Orange County citrus farms grow a variety of products including, grapefruit, Valencia oranges, and tangerines.

Table 5 shows the number of citrus farms and total acreage cultivated for the 10 year period between 1992 and 2002. During this time, the number of acres cultivated decreased, but the number of farms increased. This could mean that smaller groves are becoming more common as

Orange County continues to urbanize.

Table 5: Orange County Citrus Farms and Acreage

Year	Farms	Acres
1992	330	12,107
1997	246	11,884
2002	261	9,723

1992, 1997, 2002
Source: USDA Census of Agriculture, 1992, 1997, 2002

The majority of the groves are located in southwest Orange County very close to the City of Winter Garden and the Reedy Creek Improvement District. This area's growth pressures may be a concern for the long term viability of the citrus industry.

Nursery and Foliage Industry

The greenhouse, nursery, and floriculture production industry category includes establishments primarily engaged in growing nursery stock and flowers or crops of any kind under cover, which is generally defined as greenhouses, cold frames, cloth houses, and lath houses. These crops are removed at various stages of maturity and have annual and perennial life cycles (USDA Agricultural Census 2002). These nurseries serve as climate-controlled environments that protect plants from outside elements.

Table 6: Number of Farms by Floriculture Crops Harvested, 2002

Agricultural Products	Farms
Bedding/Garden Plants	21
Cut Flowers and Cut Florist Greens	4
Foliage Plants	201
Potted Flowering Plants	31
Aquatic Plants	5
Bulbs, Corms, Rhizomes & Tubers	8

Source: USDA Census of Agriculture, 2002

Table 6 shows the number of farms by specific floriculture products. Most of the farms in Orange County are dedicated to the production of foliage plants. In fact, Apopka is considered the capital of foliage production in the United States.

Ornamental foliage and floriculture comprise northwest Orange County's leading agricultural enterprise. Several of these nurseries ship their products all across the United States, Canada, the Virgin Islands and Puerto Rico. Some of these agricultural businesses specialize in tissue culture production and cultivate plants that are unique to the American market, further establishing the area's leadership in these industries.

Other Products

Besides citrus, pasture land, and nursery industries, other agricultural enterprises are practiced at a smaller scale.

Timber sites still can be found scattered across Orange County, mostly in the eastern portion along the Beeline Expressway and in west Orange County. According to the Soil Survey of Orange County (1989), forest resources in Orange County are well distributed.

Hardwoods and cypress are mostly concentrated in the low areas of east Orange County and on the floodplains of the Wekiva and St. Johns rivers in northwestern Orange County (Doolitle and Schellentrager, 1989). Pine flatwoods and sand hills can be found on the central and western parts of the County. The timber industry has been affected by urban sprawl and brush fires.

Most of the livestock operations in Orange County appear to be very small. According to the DOR codes, there are 36 stables in Orange County, comprising 807 acres. The average size of the stables in Orange County is 22 acres. Most of these stables appear to be small and used mainly for recreational purposes.

Finally, there are five farms that raise other types of livestock. All of these farms are less than 10 acres, except for the Froheler Gator Farms. It produces alligator meat and products and is linked to a nature recreation center.

Conclusion

This overview of Orange County agricultural production provides several insights of the local production system. First of all, the variety of the local agricultural production is low.

Citrus, cattle, and foliage are the predominant agricultural commodities produced locally. These products are shipped across the United States and depend heavily on export markets for their success. Furthermore, the survival of each of these industries would depend on its ability to adapt to local conditions, as well as larger market forces and other economic factors.

The local citrus industry has been severely affected by freezes. The long time it takes orange groves to mature and bear fruit also affects the viability of this industry.

The number of cattle farms and animals in Orange County has remained relatively stable through the years. Since most of the grazing land is east of the Econlockhatchee River, it might be less affected by urban growth.

Nursery and foliage is the agricultural industry with the biggest advantages. It does not require large tracts of land, the plants are harvested in climate-controlled environments and do not require years to be replaced, if needed from inclement weather.

Based on these analysis, it could be concluded that at this moment it would be difficult for Orange County to meet its demand for organic and locally grown products. There is still an opportunity for organic faming to take a more important role in Orange County.

Urban agriculture is becoming popular across the United States and farmers markets continue to open across the nation. Because of the interest in this topic, the Research Section has started an agriculture/community food systems project this year. This project will examine several stages of the local food system. While this article focused on food production, future papers would examine food processing and local points of sale. Our final intent would be to provide a set of policy strategies that would help to promote local food production and meet the local demand for fresh produce.

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