

Rebirth of the

Florida citrus nursery industry



Above photo, the Phillip Rucks Nursery at Frostproof. Photo courtesy of Phil Rucks. Left and right photos: Inside the new budwood facility in Chiefland. Photos courtesy of Ryan Atwood.



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Back at the turn of the century, a mere eight years ago, there were more than 70 citrus nurseries in Florida producing nearly 6 million trees annually (Table 1). But the new millennium has not been kind to citrus nurseries. Citrus canker eradication efforts led to the destruction of 62 percent of nursery stock, 5.4 million trees, as well as 7,951 budwood source trees (1,200 of which were screened), seed trees and the entire screened DPI budwood foundation in Dundee.

Hurricanes Charley, Francis, Jeanne and Wilma in 2004-05 spread canker farther and led to the eradication of a number of nurseries. In 2006 and 2007, there was the discovery and rapid spread of greening in Florida. Now at the beginning of 2008, there are just 35 registered citrus nurseries in the state.

With the end of citrus canker eradication efforts in 2006 and the pres-

ence of greening, strict new state and federal rules were put in place for nurseries in order to limit canker and greening spread. The rules were partially influenced by guidelines developed by an ad hoc committee of the Florida Citrus Nurserymen's Association and the Florida Citrus Production Managers Association. These guidelines evolved into Florida Citrus Budwood Protection Rule 5B-62 and subsequently were incorporated into the Federal Citrus Health Response Plan (CHRP).

These new rules require that as of Jan. 1, 2007, all citrus nursery propagations occur in an enclosed greenhouse, and after Dec. 31, 2007, no trees may be sold unless they were propagated in an approved structure. The new greenhouses must be insect proof, have positive pressure displacement, have double entryways and be on an approved site. Site

Table 1. The number of registered Florida citrus nurseries, approximate output capacity and citrus acreage per year for the period 2001-2008.

Year	Nurseries	Total capacity (millions of trees)	Florida citrus acreage
2001-2002	71	5.8	832,275
2002-2003	60	4.8	797,303
2004-2005	46	2.1	748,555
2005-2006	35	1.4	No date (hurricanes)
2006-2007	41	2.3	621,373
2007-2008 ¹	35	2.5-3.0 ²	607,000

¹Tree capacity and citrus acreage are estimates for the 2007-2008 production year.

²Annual tree loss is estimated at 3.25% or approximately 2.6 million trees, not including canker and greening losses.

requirements include meeting nematode free requirements, have natural or artificial windbreaks, parking outside of facility and adequate well water; no surface water may be used. Additionally, facilities must be fenced and gated with one entry/exit point.

In addition to the physical site requirements, the Florida Department of Agriculture and Consumer Services' Nursery Inspection Department inspects every nursery every 30 days. The department also approves new sites and structures, as well as inspects a one-mile radius around the sites for pathogen and pest risks.

Perhaps the greatest challenge that the nursery industry had to overcome was the loss of the Dundee and Immokalee budwood facilities. These losses have resulted in a critical shortage of budwood for the establishment of scion and increase blocks to supply nurseries. In response to the loss of the Dundee facility, FDACS recently built a new budwood facility in Chiefland that meets all the new nursery regulations. The new facility is 83,000 square feet, with 314 different clonal selections and 956 trees; soon it will reach its maximum capacity of 1,180 trees.

This new site is on the Division of Forestry's Andrews pine seedling nursery. Future plans include building an office on site and a back-up facility in northern Alachua County at Boston Farms (an IFAS beef research farm). The total cost of this project is about \$2.5 million. Although the location of the new facility, away from the main concentration of the citrus industry, reduces disease risk, cold weather is an issue. During the recent cold spell in early January, the budwood facility was able to maintain 55 degrees inside (using only half of their heaters) while outside temperatures dropped to 20°F.

The facility is just coming into production and had its

first budwood sale in January. The new nursery regulations require that all budwood be registered with and originate from DPI screened budwood sources, such as the new Chiefland facility. In addition, scion trees must be tested annually for pathogens, including greening.

At present, only 15 of the certified nurseries have enclosed scion trees, totaling 3,300 budwood scion trees. Increase blocks must also be enclosed and are only valid for 36 months from the time of budding. Currently, 83 percent of all budwood scion trees are less than 1 year old in the new protected scion blocks.

Abiding by these new rules comes with a high price and monumental risk for the nurseryman. Structures that meet the requirements of rule 5B-62 cost \$7 to \$12 per square foot and most are uninsurable. This translates into a tree price of \$8 to \$10 each.

These new facilities must continue to expand if the industry is going to maintain its current acreage. The 35 nurseries in operation today have a combined annual capacity of 2.5 to 3 million trees, a number roughly equal to annual tree losses before accounting for greening. To assure availability of trees in the future, growers will need to contract their trees at least one year in advance.

These facilities represent the beginnings of the new Florida citrus nursery industry. It is an industry faced with mountains of regulation and oversight, but one that will ensure the production of disease free trees, albeit at a high cost, but can you put a price on the future of Florida citrus?

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