Will Florida citrus growers take full advantage of change?

Mechanical Harvesting and Other Changes

By Fritz Roka and Bob Rouse

Thirty years ago, a TV commercial aired a single glass of water. The narrator asked a simple question: Was the glass half full or half empty? By answering "half full," you were identified as a candidate to be a Peace Corps volunteer. The Peace Corps believed that people who held an optimistic view of the world would be more likely to affect positive changes among communities not blessed with abundant resources.

At the beginning of the 2006-07 harvest season, the image of a half-filled glass symbolizes the Florida citrus industry. Whether industry players, both individually and collectively, view the industry's unprecedented challenges as problems or opportunities could set in motion decisions that will dictate future economic viability of citrus production in Florida.

Four hurricanes, endemic citrus canker and the presence of greening have left many producers in the Florida citrus industry depressed and bewildered as to what direction the industry is heading. In the span of two seasons, production of oranges and grapefruit fell by 90 million and 20 million boxes, respectively.

The early 2006-07 forecasts predict that the orange crop will fall to levels not seen since the devastating freezes of the 1980s. The July 12 Citrus Forecast by the Florida Agricultural Statistics Service estimated that since the 2002-03 season, the industry has lost more than 10 million bearing trees of round oranges and 3.7 million bearing trees of grapefruit. If one assumes average tree densities of 132 and 108 trees per acre for oranges and grapefruit, respectively, more than 110,000 acres of bearing citrus have been lost.

Federal and state officials have abandoned the canker eradication program, leaving growers with a vacuum of uncertainty as to what the appropriate canker control measures should be.

The canker eradication program devastated the capacity of the citrus nursery sector and significantly limited the availability of registered budwood to produce trees for replanting. The disruption in nursery tree production will likely persist for several years as new production protocols are implemented throughout the nursery industry.

Gone are the days a grower can buy a field grown nursery tree, and even less likely, find a "certified" tree that costs less than $4. The new rules require production from seedlings to saleable tree, as well as all budwood material, to be grown inside insect exclusion structures. Stricter sanitation procedures will add time and expense to the production process. For new nursery growers, facilities will have to be located with a minimum of a one-mile buffer zone from the nearest commercial grove. The new rules for nursery tree production will at least double, if not triple, the cost of a nursery tree.

In large part because fruit production has been reduced, prices for processed oranges and fresh grapefruit are at historic highs. During the early months of 2003, the futures market for FCOJ contracts hovered between 60 cents and 70 cents per pound-solids. Chet Townsend reported in his Aug. 3, 2006 newsletter that those same contracts were selling for nearly $1.70, more than a 250-percent increase.

The limited availability of citrus nursery trees within Florida and indications that Brazil's citrus industry may be tempered by market forces, such as land competition for sugarcane, suggest that the current high market prices for both juice oranges and fresh grapefruit within the United States may continue for several years.

Federal and state officials have abandoned the canker eradication program. Somehow, Argentinean growers have learned to live with endemic canker and still export fresh citrus to Europe. More importantly, research efforts into canker control and management by IFAS and USDA scientists will not be hindered by eradication policy.

The loss of nursery capacity and commercial production acreage affords the opportunity for growers, harvesters and processors to rethink the entire production stream of the Florida citrus industry, from nursery tree to packaged juice carton. The design and implementation of new production practices may induce new technology that in the end could actually lower overall costs and boost on-tree returns.

EXAMPLE: MECHANICAL HARVESTING AND HIGH-HEADED NURSERY TREES

Mechanical harvesting has the potential to reduce harvesting costs by as much as 50 percent, a savings of 75 cents per box. To realize these savings, trees and groves have to be planted and maintained in ways to enhance the efficient operation of the shake-and-catch systems. The late Galen Brown noted that the standard practice of continually resetting existing groves creates old plantings with significant non-uniformity. Such grove conditions are not conducive to the efficient performance of shake-and-catch harvesting systems. The loss of more than 100,000 bearing tree acres represents an opportunity to work with a "clean slate" of citrus land.

Efficient performance of shake-and-catch systems requires trees to be planted in straight alignment with trees headed at 24 inches to allow at least 20 inches of clear trunk height, and canopy skirts raised to between 30 inches and 36 inches at the drip line. In addition to enhancing harvesting operations, skirting has important horticultural advantages. Herbicide booms are less likely to spread canker bacteria when trees are skirted, as opposed to brushing against low hanging, unskirted branches.

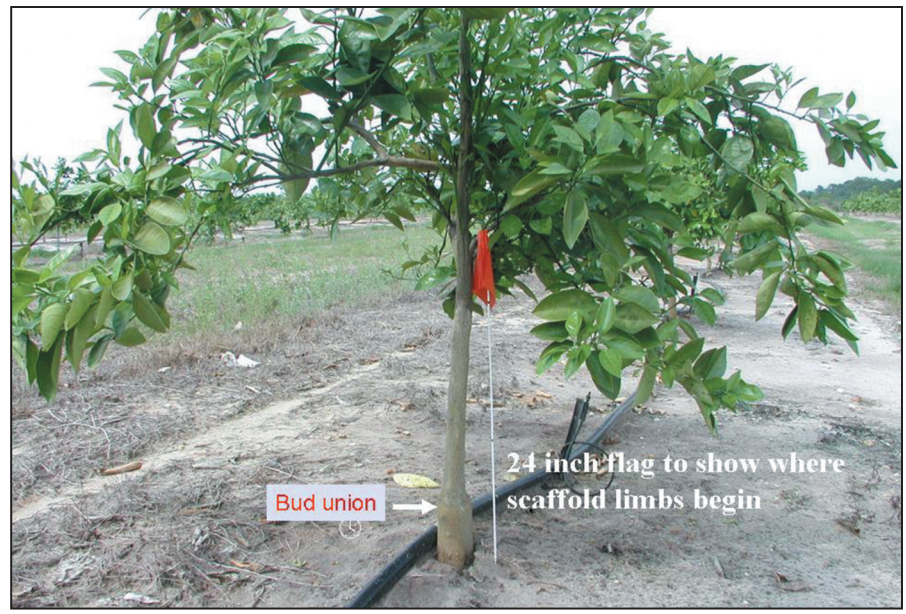
Now is the time for commercial growers to be planning for mechanical harvesting options as they order new trees and as

nursery growers restart their operations. Requesting a "high-headed" tree for replanting is an important example of how a grove owner should be working with a nursery grower. Producing a high-headed tree may require four to six additional months of growing time in the nursery, and hence, further increase the cost to grow out a nursery tree.

Offsetting this cost, however, would be the lower cost to prepare (retrofit) a block for mechanical harvesting as it comes into production. Even within the semi-uniform blocks of Southwest Florida, growers are spending between $70 and $125 per acre to prepare blocks for mechanical harvesting. Much of these costs could be saved if the block had been initially planted with "high-headed" trees.

Unquestionably, the citrus industry is facing unprecedented challen-ges. These challenges, particularly with respect to pests and diseases, are forcing significant changes on the industry.

Within two years, the Florida citrus industry has gone from worrying about how to manage record crops to wondering whether citrus acreage will freefall to below 500,000 acres. Canker and greening have replaced eradication and tariffs as buzzwords for USDA and federal support.



Change is becoming normal. Without a plan and vision for the future, change can be unsettling and can result in a paralysis of inaction. With a plan and vision for the future, however, change can become the catalyst for embracing new ideas and technology that could lay the foundation for a new golden age of Florida citrus.