

# Overcoming the Obstacles to Optimize Dollars per Acre

by Roger Smith

**F**arming in California has become more and more challenging in the last decade. Intense government regulations, concerns over reliable future water supplies, and increasing threats from diseases like HLB are just a few of the obstacles California growers are facing in the 21st Century.

In spite of this, the reality is that our industry is experiencing some of the best returns per acre ever recorded. Yes, it's true the cost of producing citrus has risen to \$2,000-\$5,000 per acre depending on the variety, but it is also true that grower returns after pick, pack and haul have ranged from \$4,000 to as high as \$20,000+ per acre. The California citrus industry has become a place of "have and have nots." Those that "have" great returns and those that "have not" experienced great returns and are likely skeptical these kind of returns are even possible. The purpose of this article is to attempt to unravel some of the obstacles a

grower faces to achieve success in citrus farming in the 21st Century.

## IDENTIFY THE OBSTACLES

Why do some growers enjoy great returns while others do not? Simply stated, the successful grower has identified the obstacles robbing them of a great return and have made the tough decisions to address the problem. In navels, for example, a packer once told me, "I can sell 72s and 56s any week of the year at great prices." This translates into the fact that the market consistently wants bigger navels year in and year out. In the recent past, many growers identified small fruit size as an "obstacle" and realized that the only way to optimize fruit size and their returns was to make some radical adjustments to their orchards, whether it was changing their farming methods or redeveloping the block entirely. The navel growers that achieve a high percent of large sizes deliv-

ered to the packinghouse and volumes of 40-60 bins to the acre "have" returns that will sustain their farms into the future. Growers that didn't see the obstacle of small fruit and low production are struggling and are often having difficulty finding a quality packer that will handle their fruit.

Analyzing an orchard on dollars/acre return is essential to identifying obstacles. Each farmer has his own tricks to produce a marketable crop in the style that is unique to them, their soil, and location. **Where the uniqueness stops is analyzing the return.** We'll use navels as an example: assume a budget number for farming expenses of \$2,300 per acre which assumes no land costs. If you combine all the pool returns for the block, then divide it by the acres of that block, you get the \$\$/acre the block generated. Take that value minus the \$2,300 for farming expenses and the result will give you a quick indicator of the net return/acre. **If that result is**



*A mandarin planting using berms, drip irrigation, a wind machine, and an extra hose for microsprinklers for frost protection. Check out Resources at [citrustreesource.com](http://citrustreesource.com) for more information.*

less than \$1,500 per acre, you have some obstacles you need to identify because there is weakness in this block. Your actual cost of farming may be more or less, but by using this method as an indicator, it will offer you perspective about what you must do with that particular grove.

So you have obstacles... how do you dig into the block to find solutions? This can be pretty complicated, but a way to work through it is to ask yourself a series of questions:

- What was the biggest factor reducing my return from the packinghouse? Fruit size? External defects? Can any of this be corrected?
- Is my production/acre adequate by today's standards (navels should be >35 bins/Acre)? If not, are my trees healthy enough to do more? *If not, the only solution is redevelopment of the block.*
- Do I have enough trees/acre? *90/acre is minimum for a mature grove. Also, it takes at least 9 years for a replant to pay for itself. Too few producing trees and more trees declining within the block, means you need to consider redevelopment. Use a drone or a recent Google image for an aerial perspective similar to the photo at right.*
- Did I prune/hedge/top/skirt too hard? *Every time you cut on a citrus tree you reduce production. Too much at once or on the wrong year can really hurt production.*
- Do I have the right variety for today? *What worked in 1998 may not work today.*
- My trees are healthy, so is my irrigation system uniformly supplying water?
- Do I need to rethink my fertilizer program? Is there a way I can improve soil fertility? *Leaf analysis is not enough information these days, you need soil info as well.*
- Do I have weak tree canopies, diseased trees, nematodes, weak root systems, improper or inadequate pruning? *Sick trees don't produce adequate crops and fruit size.*

Identifying the obstacles can lead to solutions for the block, but some problems just can't be solved by improved farming practices. We live in unforgiving times, so no more than 3 years should be invested in turning a block around because you have to also consider the opportunity costs associated with waiting to redevelop to higher yielding or higher return varieties. Always keep in mind varieties like Cara Cara, Nules Clementine, Lemons, Tango, Gold Nugget, Star Ruby Grapefruit and other varieties are consistently returning a lot more \$\$/bin than mid-season navels.



A google Earth image of an older grove shows the non-productive areas that could make the block non-economic. Net returns should exceed \$1,500/acre.

### WHAT DO I PLANT?

So you decided to consider redeveloping.... How do you decide what to plant when there seems to be so many choices? Here are some steps to help you work through the decisions.

1. What do you want to plant? You have unique skills and interests, so first be real about yourself. Don't let anyone talk you into something you're not comfortable farming.
2. Your next stop is your packinghouse. What do they need? If you don't like their answer, check out the competition and see what they say. In today's marketing world, different organizations have specialized programs, so one organization can be doing great with one variety when another is struggling. There's also new technology at work that some packinghouses have that others don't, so there are differences between packing houses. Get some perspectives from multiple sources before you make a decision.
3. Ask yourself what is unique about the property location? Is it cold, does it have unique soil, is the soil calcareous, is it well drained, does it mature early, etc.
4. Don't delay your decision for fear of making a mistake. There are many good choices of

citrus varieties to plant that will be a good return on your investment.

5. Our team has been helping people wade through the "what do I plant?" question for years. We can help you with current trends, international perspectives, domestic trends, as well as technical advice on variety and rootstocks for your location. Not all nurseries offer this degree of expertise, but we're growers too, so we're a good sounding board.

Recognizing the changing times we're in and overcoming the obstacles to future success is such an important part of farming a permanent crop like citrus. Please visit [www.citrustreesource.com/tree\\_source\\_publications.html](http://www.citrustreesource.com/tree_source_publications.html) for more information on the whole process of planting a new grove.



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