# TOP TEN THINGS A FRUIT GROWER NEEDS TO DO TO SURVIVE IN THE 21ST CENTURY

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We would like to give you our opinion on what we consider to be the 'Top 10 Things a Tree Fruit Grower Must Do to Survive in the 21st Century.' Our 'Top 10' list is based on an article published in American Fruit Grower, November 2000. Of course not every item will apply to your orchard, but we hope you will consider some of them crucial to surviving in the challenging future of orcharding. Here they are:

1. Take advantage of free money! Contact your local Farm Services Agency Office. Never have there been so many assistance programs available to apple growers at once, including: Special Apple Loan Program; Apple Market Loss Assistance Program; Apple Quality Loss Program for the 1999/2000 crops; 2000 Crop Disaster Program; and Adjusted Gross Revenue (AGR) Insurance. You deserve the assistance—take advantage of it!

2. Have a well thought out business plan. Consider including: a primary aim; strategic objective; organizational strategy; management strategy; people strategy; marketing strategy (more on this later); and systems strategy. 'The E Myth Revisited' by Michael Gerber (ISBN 0-88730-728-0) is a recommended reading reference when first thinking about the business plan process. Hire a consultant if necessary to devise and prepare a business plan that makes sense for your operation. Consider the saying, "If you don't know where you're going, you'll certainly never get there!"

3. Have a marketing strategy. It should start, end, live, and die with the customer! Know who your customer is, i.e. demographics. Know why he buys, i.e. psychographics. Your orchard system will be in part determined by the need for quantity, quality, and marketability of fruit. Like a business plan, a marketing plan will help you stay focused on how to get your fruit sold. Then, your orchard system will follow naturally.

Now, we know you are probably wondering what makes us the experts on these topics? Well, if you don't necessarily believe *everything* we say, we thought you might like to hear from some fellow orchardists in their own words:

New Jersey fruit grower George Melick talks about his retail marketing strategy both on- and off-farm...

> *"Take advantage of suburbia that has moved to you. Try to raise what you can sell to the neighbors or an immediate market where you can control the end, because that is where you are going to get the best dollar for your efforts. I don't see the future in wholesaling out of here. There is no question entertainment farming is a big thing. I recognized there was a future there, say 15 – 20 years ago, and we didn't have the help until one of our sons got out of college because it took his friends and friends of the family to help us. We*

*started to advertise for pick-your-own. Luckily we had an apple orchard that was right close to the barn and we have also a cider mill and we are in proximity to North Jersey and to New York City. It is very accessible. So it was easy to over time advertise, work it up with the media, and now on Fall weekends we are bombarded with people that come out. That is a real plus as far as the ability to earn money from the farm."*

Gary Mount, owner of Terhune Orchard in Princeton, NJ, talks about the evolution of his retail marketing plan...

*"For me the fruit business, especially the apple business, is very bright. We find that people are more and more interested in buying apples from us. True, they might not buy as much each time they come, but they are very interested in types of apples and they're interested in knowing us as the people who grow their apples. They're interested in seeing the different varieties of apples that we have. Here we sell all of our apples retail. We don't wholesale anything so we have to balance our production with our sales. You always hope that you can increase your retail sales, but you can't double the amount. If you have a bumper crop you just can't get another truck and ship another truckload. We started with 55 acres here at the farm. We just had three crops, apples, peaches and pears and we made apple cider, the four things that sell. Now we are open all year and grow about 30 different crops. Apples and peaches are still the mainstays of what we grow. Now we are farming about 200 acres of those 30 different crops. Again, our whole focus is selling things retail directly to the consumers. New Jersey, is an expensive place to farm: our taxes are high, we are very densely populated, and it is hard to get labor and labor costs a lot more than maybe other areas. But there is a plus side too because we have lots of customers. For a future for us, I would see that we still focus on the retail marketing. We try to bring more people but also think of ways that when they come here they will buy more."*

4. Re-plant five to ten percent of your acreage annually to take advantage of new cultivars and improved strains. Remove older blocks first. Use high-density, labor-efficient production systems to get into production within three years, tops.

5. Adopt new computer technology to become a more efficient, informed manager. Good uses of the computer include: business and pesticide record-keeping; decision support such as New Jersey's innovative 'IPMD' (IPM Database); weather data collection and analysis; communication, including subscribing to electronic newsletters and e-mail discussion groups. Keep an eye on the evolving role of web-based/internet information dissemination and decision-support applications. Also, watch closely the role of precision agriculture and GIS in future orcharding.

New Jersey grower Gary Mount talks about how he uses technology in his day-to-day orchard operation, including e-mail and digital pictures to Extension specialists...

*"As far as computers and the internet and e-mail, it's been pretty helpful. There have been several occasions where I've had problems with crops and I've taken a picture with my digital camera. I e-mail that to one of the Rutgers Specialists. I also grow vegetables, and I'm particularly new at vegetables and don't know a lot of what can happen, and most of our vegetable specialists are in the southern part of the state which is a two hour drive to anybody either there or back. So for me to be able to take a picture of some cantaloupe that had some physiological problem I had no idea what it was, and to e-mail that to a specialist at Rutgers who could look at it that day and give me a call or e-mail me back—that was a terrific thing!"*

6. Develop and religiously maintain block-by-block and/or crop enterprise production records. Growers must know which blocks or crops are profitable, and which are not—get rid of

blocks as soon as you determine they are not making you any money. The computer application 'Finpak' (University of Minnesota) is particularly useful for cash flow, balance sheets, budgeting, and profit-and-loss analysis.

Massachusetts wholesale apple and peach grower Bill Broderick talks about his use of computer software to keep track of block-by-block production and financial records...

> *"One part or one piece of new technology that I've used for the last 4 years is this particular software that I can do a much better job of recording and comparing the inputs for each individual block instead of just having averages for the whole farm. We do a pretty good job of comparing block-to-block data so that we know when blocks have become very unprofitable and it's just time to start up the chainsaw and cut it down. There is one block, this one here in particular, that was removed this year because of that. We use this technology to do our very best to keep track of every detail of every hour of every individual who worked in the block and we can express the dollars that were spent there and have a pretty good handle on exactly how profitable or unprofitable we are being in each different block—that helps me to make decisions."*

7. Controlling costs and maximizing efficiency are critical—there is no room for waste in today's competitive fruit production environment. Therefore you must identify and establish orchard systems that maximize efficiency and minimize cost of establishment. Examples include: inexpensive support systems with low maintenance; minimal input tree training and pruning; long rows or big blocks to maximize crop protection and labor operation efficiency. Labor is often one of your biggest expenses—every effort must be made to reduce labor costs and adopt labor-efficient management practices in the field and right on down through the storage and marketing operations.

8. Orchard system design must maximize sunlight interception to optimize yields. Tree and row spacing and the training system used need to make sure seventy percent (70%) of available sunlight is captured. To achieve this, row width should be no more then one and one-half times planned tree height. In-row tree spacing should be carefully considered using knowledge of scion, rootstock, and soil vigor.

9. Fruit quality must be optimized in the design and implementation of all orchard systems. This includes early tree training, skillful pruning, and careful handling of harvested fruit. Attentive pest management is also integral to producing top-quality fruit.

Andrew Martin, Honey Pot Hill Orchards in Stow, MA talks about the importance of producing only the highest quality fruit in today's competitive marketing environment...

> *"Pruning on an annual basis and doing a good job pruning. Being right on top of our chemical applications so that we don't use too much but so we can keep our cost down there. But being timely and effective and not missing using anything so we have good fruit when it comes harvest time. Summer pruning so we have good fruit. Chemical thinning effectively, and following up with hand thinning if necessary. Making sure once we get our fruit to harvest that it is harvested correctly, timely and appropriately. I went to a seminar once that said to 'inspect what we expect' and I think most of us, as growers don't inspect our fruit enough when it is being harvested. We just can't afford to have bruising. We can't afford to have stem punctures. It has gotta be almost perfect if we are gonna be really successful and profitable in the future."*

10. Plant moderate to high-density orchard systems, utilizing the most production-efficient dwarfing rootstocks available (trees the size of M.9 and clones, B9, Ottawa 3 up to M.26, and CG.30). They will all be supported and grown on virgin or replant disease-free ground (fumigated or rotated with cover crops).

Again, New Jersey fruit grower Gary Mount talks about his high-density apple orchard systems, which have been particularly effective for him in reducing labor costs and increasing profitability…

> *"Ahh, the system. We started almost 20 years ago with a trellis, a four wire trellis, a very standard trellis that now's sort of old hat but then was quite new. This has worked very well in supporting the trees, spreading the branches out, getting I think fairly good production from that. Like many growers, I always get this thing about not being able to walk through the rows, not being able to walk around the tree, having to walk all the way to the end of the row to get anywhere. We pretty much have gone now in our plantings to an individually staked tree. I'm not too good on the terminology of this tree but I like a tree on M. 9. It is a compact tree where almost all the apples can be picked from the ground. I talked about our labor being very expensive and in addition to that, we are the only orchard in this area, so when we get people to work for us, they're like particular orchard people. They are people that have really decided that they really like working on a farm and they really specialize in it. So they are very, very productive workers and I think that even though we may sacrifice some production by keeping a tree that you can pick everything from the ground—and I'm sure we do sacrifice some production; we could get more if it was a 10' or a 12' tree, maybe like a vertical ax or something like that—but we really can maximize the production of these precious workers."*

11. We know, we added an extra thing for you to do! Plant new and improved fruit varieties to capitalize on profitable, early developing markets for high-quality, in-demand fruit. Also, give the customers what they want. If they come into the store looking for a hot new variety such as Honeycrisp, you don't want to have to send them out the door empty-handed!

Gary Mount of Terhune Orchard talks about his adoption of new apple varieties as his customer's tastes have changed with time...

> *"As far as varieties, well we're so excited about the new varieties, and the reason for that—particularly I imagine they might be a pain in the neck for somebody who's trying to wholesale them and figure out what to ship where—but for us, our customers are really interested in variety. They want to see what's new. They want to have a different taste and so when you can have your old standard, like Stayman Winesap here, and then you bring in, for instance, one of our new plantings, a Cameo right next to it—well people are really interested in comparing the flavors and seeing which one they like best. They take some of both, they take them home, they come back and ask for them by name. So things we planted recently might be Fuji, Cameo, Honeycrisp, Pink Lady."*

We want to extend special thanks to the growers who gladly offered their wisdom and experience in front of the video camera:

George Melick
Melick Town Farm
Oldwick, NJ

Gary Mount
Terhune Orchard
Princeton, NJ

Andrew Martin
Honey Pot Hill Orchard
Stowe, MA

Bill Broderick
Sunnycrest Orchard
Sterling, MA

And for more information, visit these web sites:

- http://www.virtualorchard.net for general production and marketing information and on-

line communication resources such as the apple-crop e-mail list

- http://www.ne183.org for new apple variety information
- http://www.nc140.org for rootstock and orchard systems information
- http://www.idfta.org for dwarf fruit tree production information
- and http://www.umass.edu/fruitadvisor/ for UMass fruit Extension and research information

Some last thoughts from New Jersey fruit grower George Melick on how rapid change is now, and how it will continue to affect the fruit industry...

> *"Well, in the fruit industry it is no different than any other industry involving technology. Whatever has happened in the past, we think it has happened very fast, but in the future it is going to be even faster and it's gong to be unbelievably fast."*