

Building Production Efficiencies to Improve Profitability



Cindy Fake, Horticulture & Small Farms Advisor
University of California Cooperative Extension
Placer & Nevada Counties

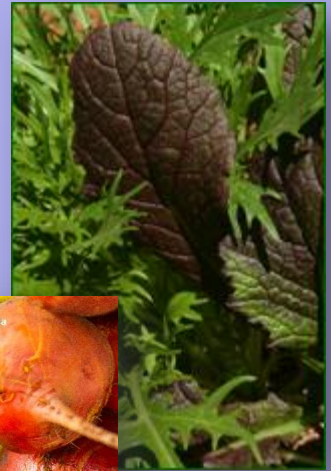
Why is efficiency so important?

- Economies of scale are not realistic for most of you ...but building efficient systems can reduce your labor costs and increase profitability.
- Bottom line: When you're more efficient, you get more done,
- When you get more done, you make more money!



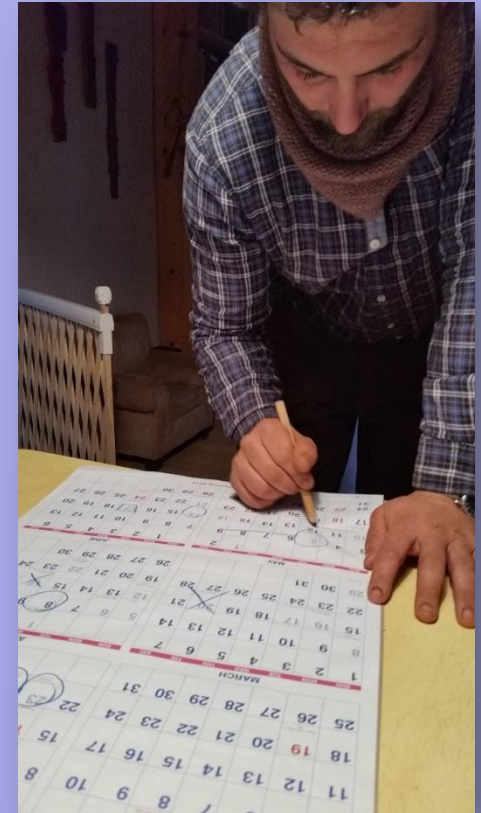
1. Crop Planning

- Limit diversity of crops to increase efficiency and profits.
- Diversity and/or small quantities of a crop waste a lot of time.
 - different tasks
 - different hand tools, implements, picking containers, etc.
- Aim for ½ acre blocks of a commodity – may be different varieties, but treat the same.



1b. Crop Planning

- Plan ahead- build a calendar by backing out from market targets.
- Figure out where and how much product you can sell...then figure out how much you need to plant for each succession.
- Plan around key activities that take a lot of time/labor.



2. Production

- Can you mechanize production in a cost effective manner?
- What is the payback period for the appropriate tractor? Pay as you go as much as possible...
- What are the key implements needed to mechanize prep, cultivation, weeding, harvest?



2b. Production

- Standardize bed orientation, length, width, then set up equipment for it.
- Systematize your implements so you change or adjust them as little as possible.
- Prepare the whole field at once.
- Succession planting – instead of turning over beds, move to new block.
- Then plant into stale seedbeds.



2c. Production

- Set up your implements, tools, picking bins, etc. so it is easy to get to them.
- Create a kit/tool belt of all the small tools needed for pruning, harvesting, etc.
- Only make the trip to the field once!



3. Labor

- Labor efficiency: consider teams that:
 - Perform specific tasks - weeding, harvesting, etc. or
 - Are responsible for single crop blocks
- Include owner labor in your calculations - production, management, sales time w/wholesaler, etc.



3b. Labor

- Systematize your labor calendar...esp. for part-time labor.
- Is farm labor available? Skilled?
- Is 4 hours/day generally better than 8 hours for efficiency? Would that be a deterrent to working?
- Large format calendars, whiteboards, clipboards for organization and for employees to understand tasks, see the big picture, and record what is happening

3c. Labor: Train your employees

- Train by showing them how you do a task, e.g. transplant lettuce or harvest and bunch radishes. Break the process down into steps, show them how to do it, do it together, then watch them do it.
- Make sure staff know what the next task is. Standing around between tasks costs money!
- Keep track of task prep time, and work on minimizing it.



3d. Labor: Train your employees

- Train employees to not just do production tasks, but keep records, clean, maintain tools, etc.
- Cross train them so they can do multiple jobs.
- Train employees as teams and develop systems manuals.
- Create a culture/work ethic with your staff – hold staff meetings - explain the whys and the big picture



3e. Labor efficiency

- Always be thinking:
 - How can I do this faster?
 - With less labor?
 - How can I reduce nonproductive time?
- Conduct time & motion studies – sample how long it takes to do a specific task.
- Teach your staff benchmarks and reward them for being fast and accurate.
- Recognize staff achievements.



3f. Labor efficiency

- Plan for when assigned tasks are finished, what are the priority tasks that need to be done – post in a visible location
- Scheduling: Monday is weeding, Tuesday is picking for Wed sales, etc.
- Keep an eye out for employees with management potential – goal is a farm manager or the next generation - who can make a living wage

4. Harvesting

- What is the most efficient way to harvest?
- Can you mechanize?
- Do not pick unmarketable produce.
- Handle produce only once:
 - Can you field pack?
 - Do you have shade to keep it cool until you take a load to the packing shed?
- Quality control person—pick and pack the right size, quality, or ripeness.
- Benchmark amount needed to pack & haul to be cost effective or stack functions.



5. Infrastructure & equipment

- Planning and layout is critical
- Develop a farm map for movement of product, people, vehicles
- Plan for transport & delivery: e.g. truck has to work for you on the farm and with distributor's dock
- Make and follow a maintenance and cleaning schedule
- Organization saves time - A place for everything and everything in its place...

6. Marketing

- Build sales relationships
 - Be open to learning from buyers and teaching them about what you know
 - May be able to change buying decisions
 - 1-3 minute sales speech
- Know your price points
 - Recordkeeping is critical: know how much planted, picked, packed, and sold
 - Know your costs of production, marketing, and overheads so you can offer a price that will be profitable to you.



7. Hire professionals

- Hire an accountant or payroll expert to do the books or other professionals as needed - more efficient and cost effective. And less risky.
- Know your skills but consider professionals for fixing tractor, pump, refrigeration, etc. Farmer Jim says “you’re not getting paid as a farmer for fixin’ your tractor!”

Key take home messages

- Limit crop diversity
- Consider blocks of crops
- Systematize your farm to increase efficiency and profitability
- Evaluate the efficiency of your practices and keep refining them
- Train your employees
- Avoid wasting time:
 - going back & forth in the field
 - preparing for tasks
 - between tasks



Thanks to my colleagues



Carol Arnold



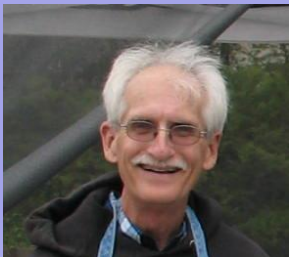
Dan Macon



Allen Edwards



Jim Muck



Roger Ingram



Molly Nakahara

Parting thought: Forbes' 6 words for 2016

- Think big
- Start small
- Learn fast



Thank you

3. M

- la

