

## Look to the Future: Trends, Challenges, and Opportunities®

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### INTRODUCTION

Jolly and I are honored to be here in Montreal to visit with our long-time customers and friends. I recall a generation ago attending I.P.P.S. meetings to hear those old bald guys wax on and debate the merits of this hormone dip or that seed stratification method. I'd take copious notes, read the proceedings and call them after the meeting ended, and wonder how those folks got so smart. Now, as I look out there and a new group of propagators is growing among us, I realize that they're looking at me up here as one of those old bald guys who knows everything. The truth is, we just know more questions.

New plants, information, and technology are always the hot topics in the trade magazines and shows, and certainly that keeps us all interested. But my sense is that what distinguishes a consistently profitable nursery or garden center is attention to the fundamentals. We will look forward and review some critical ones in my experience: **labor and water** management.

Finally, we'll close with a dozen or so items of more traditional interest for you — specific ideas that you might implement to help you do a better job in the coming growing season.

Imagine you had but 2 years left in your present position? How would it be different starting tomorrow? The reality is, if you're keeping up with the sweeping changes about to overtake this industry, you will have your present position only a few years anyway. What changes is your company facing within the next year or two? Some major areas to consider opportunity and change:

- Production,
- Marketing,
- Financial management,
- HR management, and
- Technology.

I would offer that the most important discussions in your firm are not related to imminent threats and opportunities but to strategic mission and competitive advantage — strategic direction. The other matters are of tactics and daily, weekly, monthly operations.

I will spend the most important part of my talk right away on strategic management of staff. I am now a people propagator, not a plant propagator, primarily.

### LABOR

Let's first consider labor. Within the context of a well thought out or established business plan, the largest single expense in a firm begs obvious question: "*What can you do to contract labor, or eliminate it?*" We have substantially free trade in goods, but highly restrictive constraints on labor. Yet, shouldn't we look at the labor "problem" as a labor opportunity — not what it costs, but what it pays? We're in a labor intensive industry, so we must ask this obvious question: "*Which tasks add*

*value to my product?*” If not, can you outsource it or change the way you do a task so that it adds value?

Little things add up to serious value addition if you are careful:

- Forcing all purchasing in town to a single afternoon — no employees running in circles, disorganized, and increasing company liability on the public roads.
- Setting all production activities with clear priorities, key partners, and deadlines — reconciled weekly on a certain day and emailed to other partners.

Bigger considerations save labor and increase employee comfort and safety: **Production ergonomics** — example: our grafting wagon and its linear + circular workflows at the actual worksite.

But these action items are all tactical in nature: we must first have a strategic approach to get the best use of labor.

### **Staff Management.**

**Position Plans.** Explicitly define what is expected of each employee, from owners to recent entry-level hires. Employees want to know two things:

- “*What is expected of me?*” — clearly stated.
- Once they know, they need a sense that you notice what specific value they contributed and tell them often. A friendly, genuine, “*Thank you*” and “*How may I help you?*” go a very long ways in busy workdays.

### **Position Plan—Concept.**

- Uniformity, with accountability and responsibility statements, measurable results.
- Employee knows exactly what is expected, how it is measured, what he/she is doing well and what he/she is not.
- Idea is to remain nimble on your feet according to changing seasons, market conditions, and changing profile employee mix.
- The idea is to cultivate leadership: give job away, be a mentor, do cross training, and inspire.
- Collaboration emphasis — communication effectiveness, not just connectedness
- Finding employees outside of horticulture — accounting, HR, graphics artists for web and print media, programmers.

**Summary.** Employees need to know explicit expectations, and want “strokes” — to know they are appreciated. The happy circumstance in this environment is that work is exciting and stimulates creative problem-solving and opportunity identification. Employment claims are reduced to near zero. Employees take ownership of the firm and its mission because they identify with it personally. It becomes part of who they ARE, not just what they do for money in exchange for their time.

**Managing the Communication Relationship With Your “Boss.”** In our firm, long-tenure key people take time to cultivate this relationship carefully: The person who is being supervised is responsible for this communication relationship, not the other way around, as most think.

1. Think about it: if you don't keep your boss updated, or don't ask questions, if you fail to present him options or ideas, he'll think one of several things, namely that you:
  - a. Are such an expert that you have no need for supervisory input,
  - b. Aren't energetically engaged in your work,
  - c. Don't care,
  - d. Aren't an effective communicator, or
  - e. Lack curiosity about your work.
2. Always analyze labor demands carefully, but more important, take the time to make a labor strategic plan, just as you would a business plan. Define your employees' position plans carefully — show an example:
  - a. Title (seasonal changes?),
  - b. Most recent revision date,
  - c. Essential functions — seasonally,
  - d. Accountability areas — the “buck stops here” idea,
  - e. Responsibility areas — employee owns aspects of the work but is not ultimately accountable — is a “stakeholder” only, makes proposals for another person's decisions,
  - f. Evaluation criteria and scale of 1–4.
3. What do you want your “boss” to think about your work?
  - a. Find out how your boss likes to get information. Give it to him regularly — call, email, note left in box, or smoke signals: whatever is effective.
  - b. Make updates for your boss revolve around imaginative solutions you offer. Sooner than you think, you will gain the authority to make those decisions on your own.

## **WATER**

No doubt the world's most critically threatened resource: we cannot live without it. We can do without gasoline for weeks, and during most of mankind's history we did without petroleum, but not without water. There are substitutes and alternates for fuel, but not water. Water will be one of the most challenged resources in the world within the next 20 years (Postel, 2000).

We must train staff to not over-water, which can result in leaching nutrients excessively. We must strive for watering uniformity by testing for it. A metal or plastic panel with ribs every 4 to 6 inches can be set out under an irrigation boom with water collection bottles at the base of each rib. Water collection cans or jars can be set out under other watering systems or sprinklers to measure irrigation uniformity, essential to water without waste and for best plant health. Test water nozzles annually for wear. Moreover, during the irrigation season, over 80% of the water from sprinkler systems may be lost through runoff, drainage, and evaporation (Irmak et al., 2003).

## **CONTAINER CULTURE**

What is possible with imaginative new ideas to save money, reduce inputs, reduce pesticide use, and save labor?

1. 6-pak Quick-Pot® root systems as compared to the #1 container for maples. Better roots with less soil, and on a tighter spacing. Handle 12 plants at once vs. two... (Weigh 12 vs. two #1 containers) with less effort and risk of injury. Plants don't tip over in the wind so easily if outside and spaced for caliper development.
2. Salts monitoring — we over-fertilize to start, leach too heavily, and as a result we tend to wasting fertilizer, growth opportunity, and diminish overall facility potential. Salinity meter — how many propagators routinely use one, including the calibration solutions? In our experience, fleshy-rooted woody plants like *Cornus*, *Magnolia*, and *Hamamelis* are extra sensitive to over-application of water.
3. Porosity testing (also see our catalog). Modify watering practices with specific training to avoid over-watering as early autumn days shorten and cool to prevent staff members from continuing to water like it is mid-summer. Employees get called on the carpet for letting plants dry out, but seldom are asked to account for root disease from over-watering or uneven watering practice. Roots fill pore space, water excludes air with its life-giving oxygen necessary for root respiration. Remember, the tops of plants produce oxygen but roots respire, consume it. Train staff to test container moisture by a simple “lift test.”
4. Bridge crane allows automated bench handling — labor savings, freeing up staff to do cultural tasks that require judgment.
5. Movable benches, not rolling benches but stackable — allow full, complete greenhouse cleanup.
6. Circular workflow and moving material to comfortable employees vs. moving employees to the plants: contrast the budding of plants in the field and stooping to budding on a trailer at bench height.
7. Inventory barcode scanners plus active radio frequency identification chips — to monitor crop inputs, costs, and create first-in first-out inventory.
8. Weevil bait plants, thrips baited to mums on border of grass seed field, mouse bait stations in PVC pipe.
9. Cooler — two sections of different temperatures created by simple Thermax wall and roll-up curtain.
10. Basket culture of seedlings and use of same for “benches” to air prune root systems, as opposed to field culture. Benefits: slow-release fertilizer, increased porosity as compared to field soil, ability to air-prune roots vs. leave half of them or more in the field at harvest, ability to protect from frost on shoulders of the season, ability to dry flats down to harden seedlings off in October before killing frost. Ability to sell row-run plants mid-season to other growers who re-pot them into bands for grafting a year ahead of time.
11. Drip irrigation.
12. Mycorrhizae — work well and can reduce fungicide use.
13. Endangered species propagation.
14. Sulfur vaporizer to control mildew in the greenhouse.

15. Ebb and flow sub-irrigation possibilities — keeping foliage dry.  
Hard to water the whole nursery in a single day and still leave foliage dry at night.
16. Old equipment modified and adapted to current needs.

### **SUMMARY**

To close, I want to simply challenge you to look around you in your own firm and perhaps use some guidelines I have presented in this short talk to create value, inspire your staff, and move forward with innovative actions during a time of drastic change in the industry.

### **LITERATURE CITED**

- Irmak, S., D.Z. Haman, A. Irmak, J.W. Jones, K.L. Campbell, and T.H. Yeager.** 2003. New irrigation-plant production system for water conservation in ornamental nurseries: Quantification and devaluation of irrigation, runoff, plant biomass, and irrigation efficiencies. *Applied Eng. Agr.* 19:651-665.
- Postel, S.** 2000. Redesigning irrigation agriculture. In: *State of the World 2000*. W.W. Norton, New York, New York.