Growing Challenges on the Front Range

Walt Rosenberg, Masonville Orchards
Current Orchard Trends

- High density planting
- Spindle methods
- Labor management
- Pest control
- Disease control
- Organic/Sustainability methods
- Farmers’ Markets/On Farm Sales/ CSA’s
- Collision of science/philosophy/beliefs (reality vs. perception)

Operational Efficiency
Many resources available

- Consider:
  background/expertise/experience/knowledge base and *agenda*
  - Internet – volume of information available – no such thing as an unbiased search
  - Engineering background – data & facts driven, value knowledge & experience of people in the field (i.e. growers)....minimal use of chat room, media reports or common internet info
Growing Challenges

- Wind
- Water
- Hail
- Soil
- Temperature
- Pests
- Diseases
Growing Challenges

- Soil
- Wind
- Water
- Temperature
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Exceptions: Hail, Frost & Pests

Diagram:
- Rootstock
  - Variety
  - Production
Rootstock(s)

- M-7
- M-111
- M-106
- B-118
- Standard – Antonovka
- Most commonly found are dwarfs: M-26, Bud-9, G-11, Nic 29
Variety Challenges

• Late ripening varieties
  • Granny Smith
  • Braeburn
  • Pink Lady

• At the end of the day....plant varieties that you and your customers like!
Pest Control

- Organic and conventional methods, primarily for codling moth and apple maggot

- “The Bible” – Commercial Tree Fruit Production Guide (CSU/Utah State)
Disease Control

• Powdery mildew (fungus)
• Fire blight (bacteria)
• Greater difficulty using organic methods
• Antiques & Heirlooms vs. New Varieties
• US-European Trade Agreement-2012
Water Availability

- Drip vs. flood
- Well water
- Domestic water
- Irrigation/Ditch water
Temperature

- Variety type – late blooming
- Wind machines – agitators
- “Modified smudge pots”
- Chemical Sprays (potassium salts)
- Landscape (ie hilltop)
Summary

• Growing on the Front Range:
  • Is challenging
  • Variable growing conditions – microclimates, soils, water, pests, disease
  • Barriers to entry (commercial operations)
  • Success is driven by individual decisions
  • Doing your homework pays off
  • Don’t be afraid to experiment!
  • Have fun with it!