


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)
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- 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

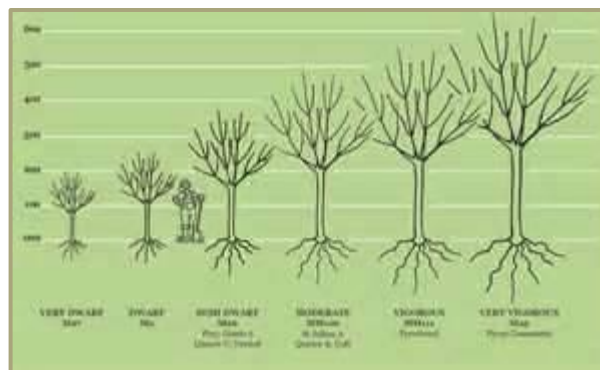
- Soil
- Wind
- Water
- Temperature
- Diseases



- Exceptions: Hail, Frost & Pests

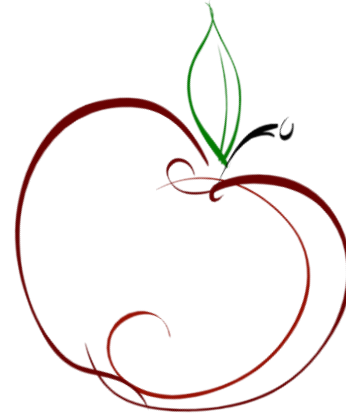
Rootstock(s)

- 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!