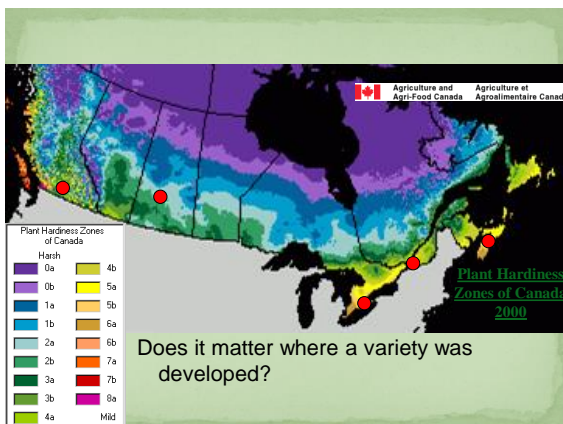
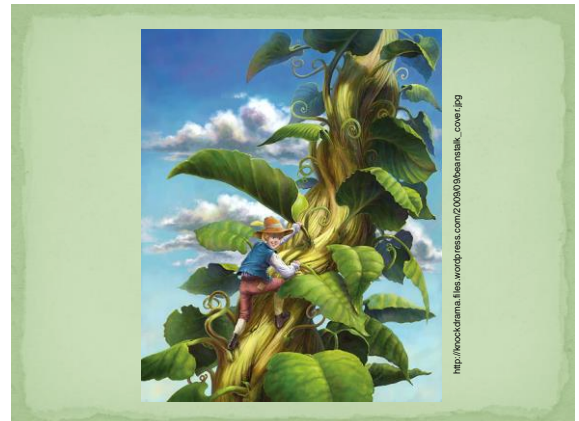


What Fruits should be grown father north?

Dr. Bob Bors

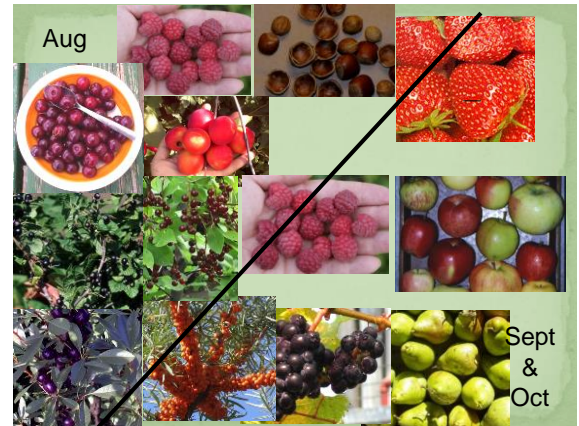
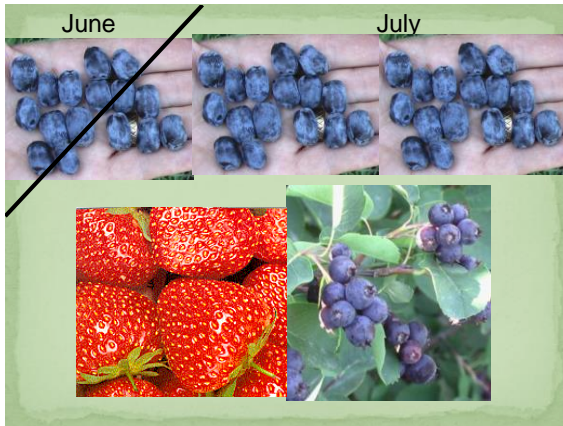


What to plant?



Try several fruit crops

- Find out what you can grow & sell
- Spread out harvest
 - Cash flow
 - Better labour use
 - Repeat customers
- Reduced risk



Early		
• Haskap		
• Strawberries		
• Saskatoons		
Mid Late		
	• Summer Apples	
	• Fall bearing Raspberries	
	• Day Neutral Strawberries	
	• Seabuckthorn	
	• Wild blueberries	
	• Cranberries	
Late		
	• Apples	
	• Grapes	
	• Fall bearing Raspberries	
	• Day Neutral Strawberries	
	• Pears	
Mid		
• Haskap		
• Raspberries		
• Sour cherries		
• Plums		
• Black Currants		
• Choke Cherries		
• Hazelnuts		

Early			Good Quality?		
• Haskap					
• Strawberries					
• Saskatoons					
Mid			Mid Late		
			• Summer Apples		
			• Fall bearing Raspberries		
			• Day Neutral Strawberries		
			• Seabuckthorn		
			• Wild blueberries		
			• Cranberries		
Late			Late		
			• Apples		
			• Grapes		
			• Fall bearing Raspberries		
			• Day Neutral Strawberries		
			• Pears		
Mid			Mid		
• Haskap			• Haskap		
• Raspberries			• Raspberries		
• Sour cherries			• Sour cherries		
• Plums			• Plums		
• Black Currants			• Black Currants		
• Choke Cherries			• Choke Cherries		
• Hazelnuts			• Hazelnuts		

X = higher quality varieties can be grown in warmer regions
 ? = low consumer acceptance

Early			Mechanical Harvesting		
• Haskap					
• Strawberries					
• Saskatoons					
Mid			Mid Late		
			• Summer Apples		
			• Fall bearing Raspberries		
			• Day Neutral Strawberries		
			• Seabuckthorn		
			• Wild blueberries		
			• Cranberries		
Late			Late		
			• Apples		
			• Grapes		
			• Fall bearing Raspberries		
			• Day Neutral Strawberries		
			• Pears		
Mid			Mid		
• Haskap			• Haskap		
• Raspberries			• Raspberries		
• Sour cherries			• Sour cherries		
• Plums			• Plums		
• Black Currants			• Black Currants		
• Choke Cherries			• Choke Cherries		
• Hazelnuts			• Hazelnuts		

*need special harvesters that can't be used on other crops

Early			Potential for large scale: Good Quality & Mechanical Harvesting		
• Haskap					
• Saskatoons					
Mid			Mid Late		
			• Fall bearing Raspberries		
Late			Late		
			• Fall bearing Raspberries		

Super Cold Hardy species:



• Haskap



• Saskatoons



• Seabuckthorn



• Black Currants



• Chokecherries

Super Cold Hardy species:

- Haskap / honeyberries
- Saskatoons
- Seabuckthorn
- Black Currants
- Chokecherries

It doesn't matter where they were developed, likely they will be hardy enough!

Bred to be more Cold Hardy:

- Apples
- Sour Cherries
- Plums
- Pears
- Raspberries
- Grapes



More likely to have winter damage & need extra care

Bred to be more Cold Hardy:

- Apples
- Sour Cherries
- Plums
- Pears
- Raspberries
- Grapes



More likely to have winter damage & need extra care **Yum!**

Bred to be more Cold Hardy:

- Investigate:
 - Where were they bred?
 - Where do they grow well?
 - Are they well tested?
 - Do they need a special care to survive
- Plant a few, if they do well plant more



Groundcover fruits:

Need insulation of snow or straw to survive winter

- Strawberries
- Sandcherries
- Many wild berries



Natural habitats of Groundcover fruits:

- Disturbance zones
 - Fires, floods, construction
- Wetlands
- Mountain tops
- Rocky areas with little soil



Groundcover fruits problems:

- Might not survive winter if not insulated
- Weeds
- Most have low yield
- Bend over to pick



Cross Pollination

Self Compatible:
need only 1 variety

- Strawberries
- Saskatoons
- Raspberries
- Sour Cherries



Self-incompatible:
Need 2 compatible varieties

- Haskap
- Currants
- Apples
- Plums
- Sandcherries
- Apricots
- Pears
- Sweet cherries

Wind Pollination

- Male or Female Plants
 - Seabuckthorn
- Complete or female plants
 - Grapes
- Complete flowers on all plants
 - Hazelnut

What to plant?



Production Sequence

Plant
System
Product
Market

Planning Sequence

Market
Product
System
Plant



What crops are easiest for new fruit growers?

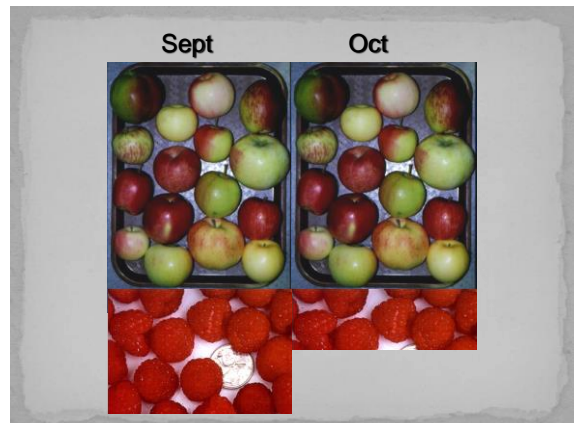
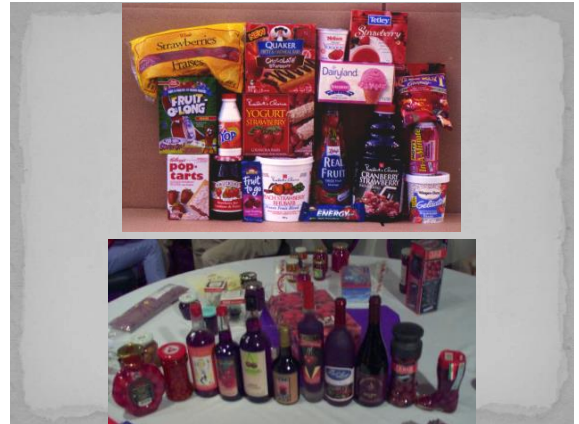
Berry Crops

- Fruit in 2nd or 3rd year
- Less pruning
- Smaller plants



What crops go good together?

- Similar products
- Similar marketing
- Different harvest season



You Pick Advice:
Tree Fruits are a bad idea,
bush fruits are better

- Tree damage from customers
 - Bending & breaking branches
 - Tear off fruiting spurs
 - Trees are harder to renew
- Fruit wasted
- Insurance risk
 - ladders or tree climbing
- Educate and watch customers

Dried fruit



Jam



Juice



U-pick



PYO – Pick-Your-Own U-pick

- Tree Fruits usually aren't PYO
 - Apples, pears, plums
 - Customers cause too much damage to trees
 - Tall trees too risky: costly insurance, lawsuits
- Appearance important
 - Weed free, aesthetic
- Low or no pesticides important

Pie





Wine or Syrup



Choosing varieties

- Grower guide?
 - Internet information?
- What are other growers doing?
- Where were the varieties developed?
- Experimental ? Proven variety?
 - New = risk; high gain or loss
- Hardiness zone rating?
- What do processors or customers want?

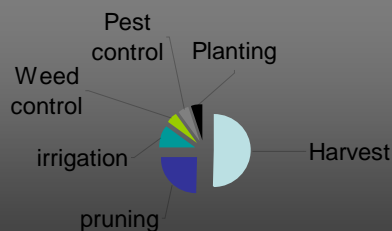
Mechanical Harvesting

- Even Ripening
 - Come off when shaken
 - Not when it gets windy
 - Larger fruits come off easier
- Firm
- 0.5 m to 2.5 meters tall
- Spreading branches best

Mechanical Harvesting

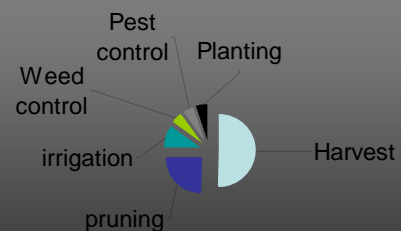
- For processing
- Sort & clean
- Quick Freeze
- Make products later

Orchard chores



How to reduce work load?

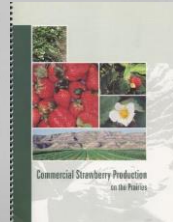
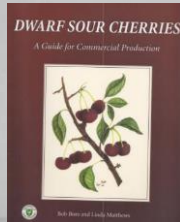
Orchard chores



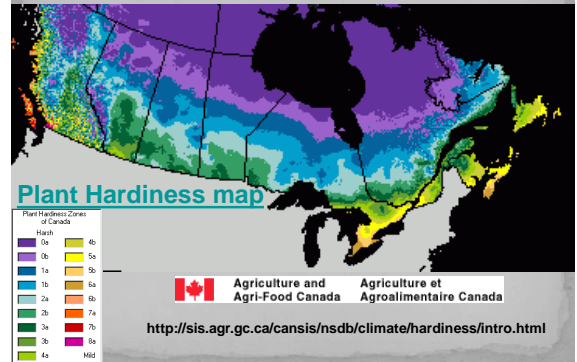
Plant dwarf trees and bushes

Find recent manuals,
publications, websites with
recommended varieties

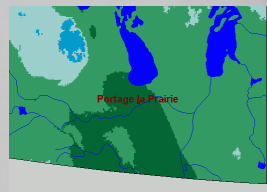
www.fruit.usask.ca



Varieties are adapted to specific hardiness zones.



What Hardiness Zone
do you live in?



What Hardiness Zone
is recommended for
the variety you want?



Size of Fruit Plants at planting time

- Larger trees
 - Backyard gardening and landscaping
 - Less care needed at early stages
 - Expensive \$25 to \$100
- “Plugs”
 - Common for commercial growers planting large acreage
 - Cheap \$3 to \$6
 - Prairie growers use this

Size of Fruit Plants at planting time

- One Gallon Pots
 - Rare in prairies
 - Common in BC
- ‘One Year Whips’
 - Common for most tree fruit growers in North America
 - Usually bareroot
 - Not common in Prairies:
 - Bare root rootstock with grafting in place is more common

**Many Tree and bush fruits:
3rd year 1st fruit, yield
increases as trees grow**

