

Fruit Growing in Newfoundland



BY TODD BOLAND
RESEARCH HORTICULTURIST



Memorial University of Newfoundland

The Basics



- Site selection
- Soil preparation
- Choosing the proper cultivar
- Planting
- Fertilizing
- Pruning
- Winter care

Site Selection



- Fruiting plants need full sun.
- Site should be sheltered to allow insect pollinators to perform at their max.
- Avoid low-lying areas where frost pockets may occur.
- Southeast to Western slopes are ideal.

Soil Preparation



- Soil needs to be well-drained.
- Generally, you will need to improve the local soil by digging to at least 12 inches (deeper for trees) and adding organic material such as compost, aged manures and peat (but not just peat).
- Raised beds work for the ‘shrub’ fruits.
- Addition of lime beneficial except for blueberries.

Choosing the correct cultivar



- Most fruit plants have several to many cultivars available.
- Some cultivars are early-season, others late-season.
- For fruiting trees and grapes, you need to select early cultivars; most 'shrub' fruits ripen early enough that ripening-season is not important.
- **Exception:** avoid early strawberry cultivars as they are more prone to late spring frosts.

Planting



- The ideal time to plant is late April-mid-May before the fruit plants leaf; this is critical if moving them bare-root or transplanting from one area to another.
- Container-grown plants can be planted anytime in the growing season.
- Fall-transplanting is often recommended in books but not recommended in NL.

Fertilizing



- Fruiting plants require fertilizers that encourage flowers.
- A ratio of 1-2-2 is ideal ex. 6-12-12
- If using 6-12-12 then general rule is 60 grams per square metre of planting area; scratch into top 2-3” of soil
- Apply just as the first leaves appear.

Pruning



- This practice varies depending on the fruit plant and will be discussed individually with each fruit description.

Winter care



- In rural areas, hares and moose may browse the bark of fruit trees; plastic tree guards will help.
- Fruit shrubs may be tied together in late fall with soft twine to help prevent splaying of the shrubs by heavy snow.

Fruit Choices – Shrubs and Vines



- Strawberries
- Raspberries/blackberries
- Gooseberries
- Currants (black, red and white)
- Blueberries
- Elderberries
- Saskatoons
- Grapes
- Kiwi

Strawberries



- Two types: June-bearing (July in NL) and everbearing – June-bearing best in NL
- Plant so that the roots are positioned downwards and spread them a little; the midpoint of the crown should be level with the soil surface.
- Space at least 30 cm apart
- In the first season, do not allow any flowers to develop as this will drain the plants.
- Runners should be positioned so that new plants will be 15 cm apart.



- Individual plants will fruit for 3-4 years then need replacing.
- Best to select late varieties in NL to avoid late spring frost which can damage flowers.
- Recommended cultivars include: Sparkle, Bounty, Kent and Micmac

Raspberries/blackberries



- Raspberry and blackberry have similar growing requirements; raspberries are generally upright while blackberries are more arching to trailing.
- Both have biennial stems; unbranched canes are produced one year which then branch and fruit in the second year. The cane then dies so should be removed in fall or spring
- Red and yellow raspberry sucker so new canes may arise some distance from the parent; purple and black raspberries do not sucker.



- Best planted in rows. Space red and yellow raspberries 60 cm apart while the others are spaced 80 cm apart.
- Do not allow them to produce fruit in their first season.
- Recommended red raspberry cultivars include ‘Boyne’, ‘Festival’ and ‘Nova’; the best purple raspberry is ‘Royalty’; best black raspberries are ‘Bristol’, ‘Jewel’ and ‘Huron’; the best golden raspberry is ‘Honey Queen’; the best blackberry cultivars are ‘Chester Thornless’ and ‘Illini Hardy’.

Gooseberries/Currants



- Prefer cool, moist soil (but not soggy).
- They are self-pollinating so one plant will produce fruit.
- If growing several plants space them 1-1.2 m apart
- Do not allow any fruit to form in the first year.
- Plants fruit best on 2 and 3 year old stems; any stems older than 3 years should be removed in early spring; ideally plants should never have more than 12 stems at any time.



- Suggested gooseberry cultivars include ‘Pixwell’, ‘Clark’, ‘Fredonia’, ‘Hinnimaki’ and ‘Invicta’ (note that gooseberries have spines)
- Best red currant cultivars are ‘Red Lake’, ‘Stanza’ and ‘Cascade’.
- Best white currant cultivars are ‘White Grape’ and ‘White Pearl’
- Best black currant cultivars are ‘Ben Alder’, ‘Ben Sarek’ and ‘Titania’. Avoid ‘Consort’ as it is prone to diseases.

Blueberries



- Blueberries prefer acidic, well-drained, organic-rich soil.
- Space plants 1 m apart
- Do not allow them to flower for the first 2 years.
- Prune out completely any canes over 5 years old; maintain 6-10 stems per bush.
- Best cultivars include: Bluecrop, Blueray, Northland, Northblue, Northcountry and Patriot.
- Plants are self-pollinating but planting at least two cultivars near each other appears to increase productivity.

Elderberries



- A novelty crop but highly suitable in our climate.
- Plant shrubs 2 m apart; they can reach 3-4 m
- Best to plant two different cultivars for maximum fruit set.
- Prune out all stems older than 5 years as those stems will have reduced fruit production.
- Good selections include 'Johns', 'York', 'Adams' and 'Victoria'.
- Elderberry borer beetle can be a problem.

Saskatoons

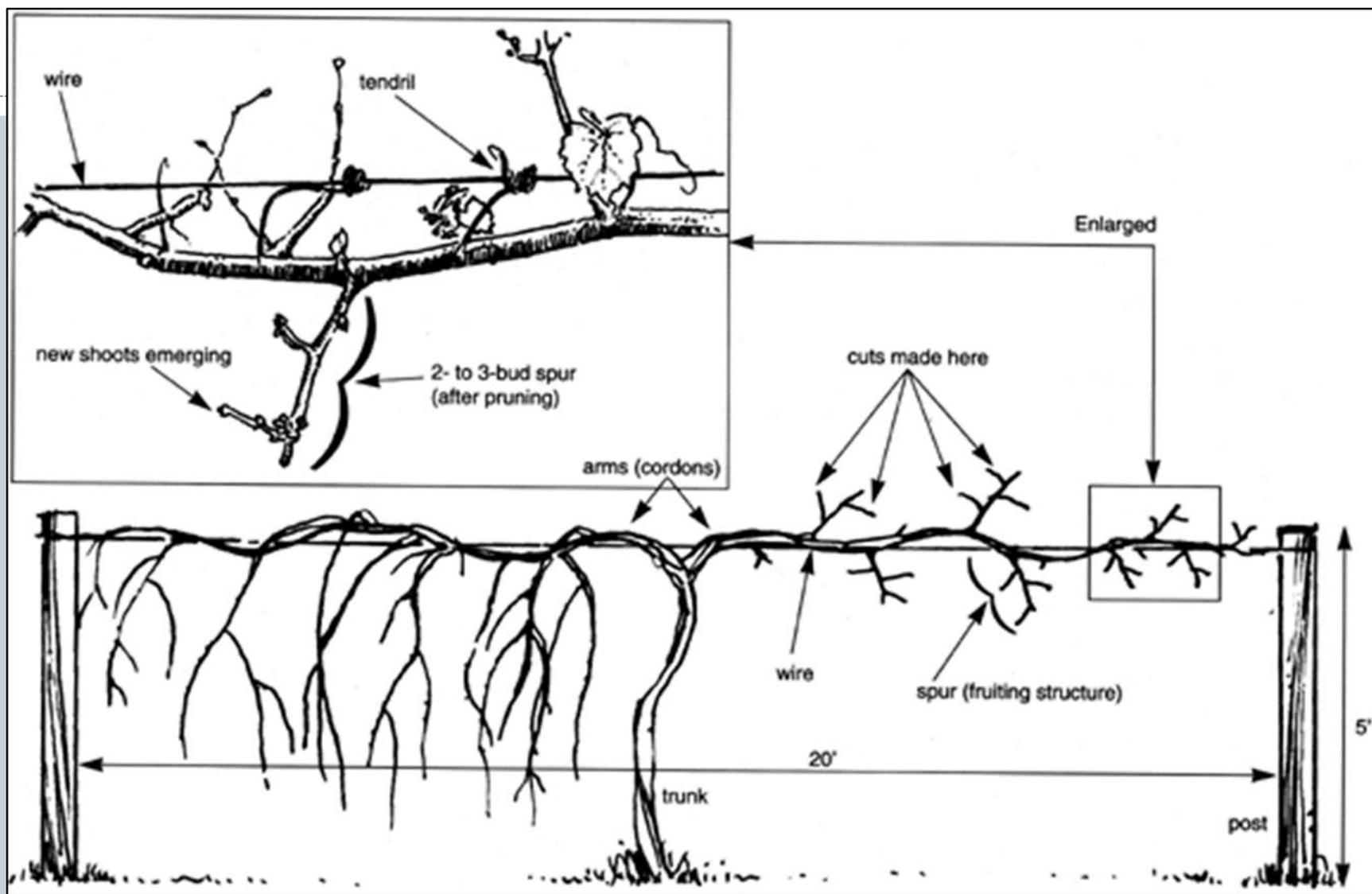


- Popular on the Prairies; local species (chuckley-pears) are generally not as productive as the true Saskatoon berry.
- Shrubs grow 4-6 m and should be spaced 2 m apart; only one shrub is needed for fruit production but better productivity if two or more are planted.
- Recommended cultivars are 'Smoky', 'Pembina', 'Northline', 'Theissen' and 'Honeywood'

Grapes



- Plants are easy to grow in our area but rare to ripen fruit outdoors; they are self-pollinating.
- Select as warm a site as possible.
- Choose early-season cultivars; ‘Canadice’ (red), ‘Frontenac’ (purple), ‘Niagara’ (green), ‘St. Croix’ (purple) and ‘Himrod’ (green) are among the best for our area.
- For wine, the best cultivars are ‘Frontenac’, ‘Marechal Foch’ and ‘Baltica’
- Grapes are trained with 2-3 main stems; all side branches are cut back to 2-3 buds in early spring.



Kiwi



- This twining vine (to 5 m) requires a long growing season so select a warm site
- They are lime-lovers
- Must plant a male and female (like holly) to obtain fruit.
- Fruit taste like a regular kiwi but are grape-sized.
- Recommended cultivars include ‘Ananasnaja’, ‘Geneva’ and ‘Meader’.

Fruit Choices - Trees



- Apples
- Pears
- Plums
- Cherries
- Peach

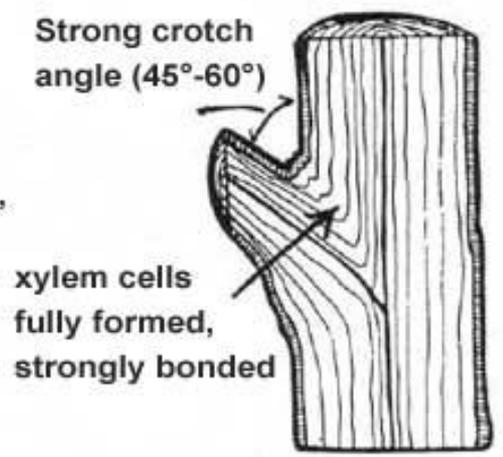
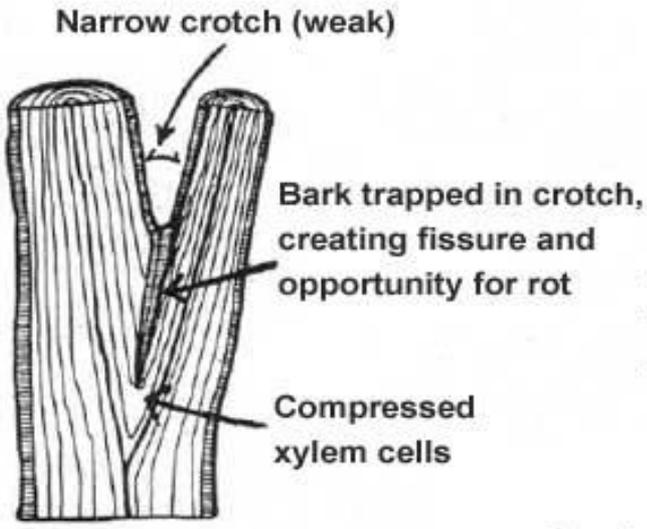
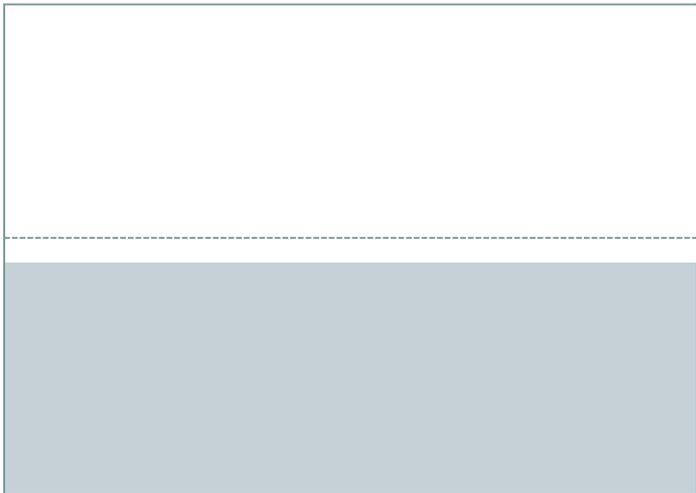
Fruit Trees in General



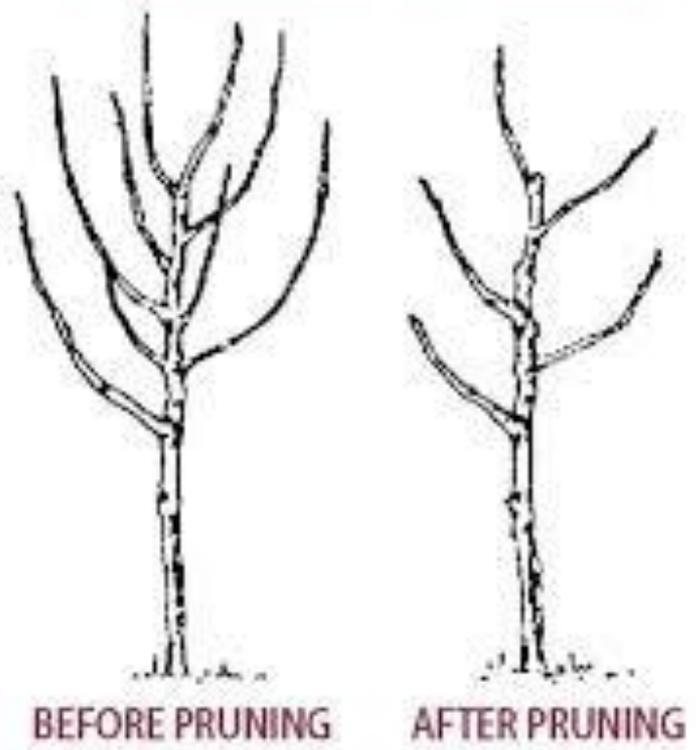
- All fruit trees require full sun and a well-drained site.
- All fruit trees are grafted.
- Depending on the type of graft, the tree may be standard sized, semi-dwarf (Malling 26) or dwarf (Malling 9) (cherry, apple or pear).
- Space standards 8 m apart; semi-dwarfs 6 m and dwarfs 3 m.



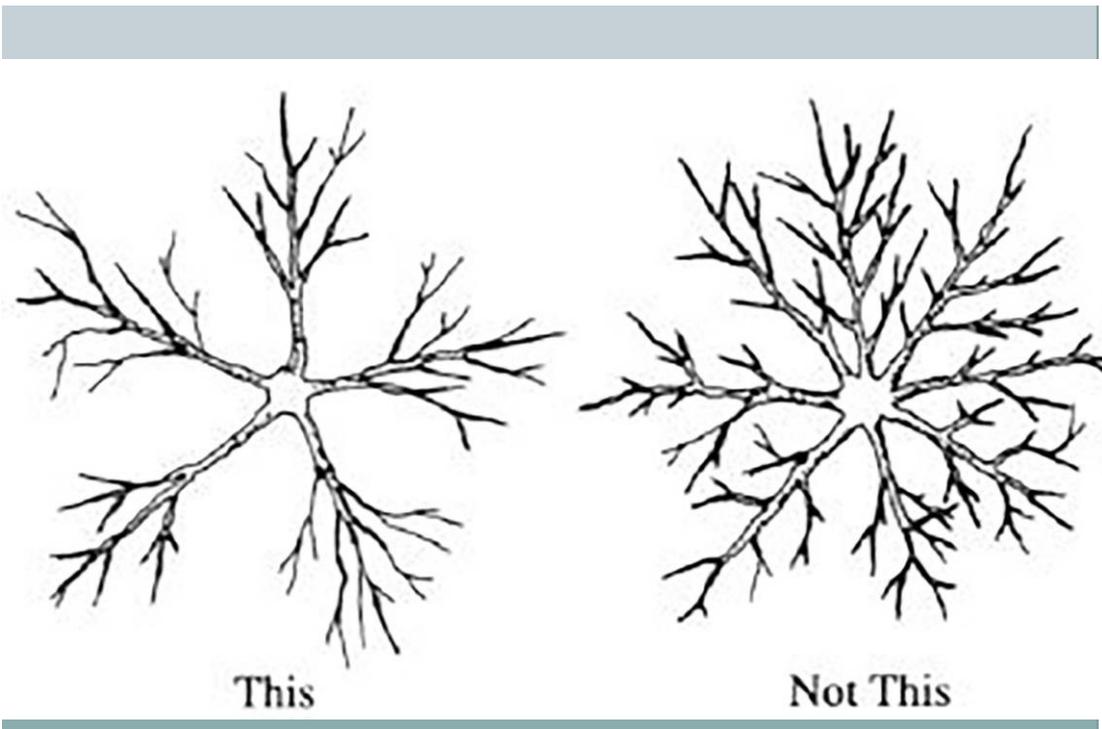
- The graft union should be 2-3 cm above the soil level.
- Apply 10-10-10 fertilizer at 300 gm per year of tree's age, to a maximum of 2.5 kg per tree when mature.
- Prune to reduce the number of lateral branches to about 5, evenly and spirally arranged around the trunk; remove all narrow crotches.
- Retain one leader and remove all suckers.



CENTRAL LEADER TREE TRAINING



Trunk
(longitudinal cross-section)



Pests



- Apples in particular are often attacked by caterpillars just as the leaves unfurl
- Dormant oil and lime sulphur combo can be very effective but timing is critical.
- Select a relatively calm day in April/early May that remains above freezing for 24 hours but with no precipitation.
- Must be applied before leaf buds start to swell.
- Apply in morning so pesticide has dried by evening.
- Do not apply if overnight frost is forecast.

Apples



- Not self-pollinating so need two varieties; crabapples will pollinate an apple.
- Scab is a serious local disease so plant scab-resistant cultivars.
- Recommended early-ripening (October locally) cultivars include 'Redfree', 'Prima', 'Novamac', 'Liberty' and 'Freedom'
- Most crabapples are simply decorative but 'Dolgo' has tart but tasty fruit.

Cherry



- Two types: sweet versus sour
- Sour cherries are self-pollinating; sweet generally are not; a sour cherry WILL NOT pollinate a sweet.
- Recommended sweet cherries are ‘Cavalier’, ‘Sam’ and ‘Hudson’
- some sweet cherries are self-pollinating such as ‘Stella’, ‘Tehranivee’ and ‘Vandalay’, but prone to canker.
- Recommended sour cherries are ‘North Star’, ‘Meteor’ (both semi-dwarf) and ‘Montmorency’
- Black knot more prevalent on sour than sweet.

Pears



- Pears are not self-pollinating so two selections are required.
- Best early pear cultivars are 'Earlibrite', 'Clapp's Favorite' and 'Bartlett'.

Plums



- Two main groups: European and Japanese; both prone to black knot
- European plums WILL NOT pollinate Japanese
- European ‘Damson’ and ‘Green Gage’ are older early cultivars with small fruit; self-pollinating
- European ‘Voyageur’ and ‘Iroquois’ are early ripening, larger-fruited and self-pollinating
- European ‘Mount Royal’ also early but needs a pollinator; can be pollinated by any of the above

Japanese Plums



- Best Japanese selections are ‘Early Golden’, ‘Burbank’ and ‘Shiro’ – all need to be cross-pollinated
- ‘Shiro’ is reasonably resistant to black knot

Peaches



- Bloom quite early thus susceptible to late frosts
- Self-pollinating
- “Reliance” best selections