Fox Hill Gardens Fruiting Apple Trees

Raising apple trees for fruit, shade, wildlife habitat, gorgeous blooms, and garden aesthetic makes perfect sense to us here at Fox Hill Gardens. Please refer to this guide to familiarize yourself with our selection of apple trees. Many apple trees require cross-pollination for successful fruit set. We recommend specific pollination partners; however ornamental apple trees, like white-flowering crabapples with overlapping bloom times, may also work. *Peruse the last page of this booklet for suggested tree pollination pairings.*

TRIPLOIDS are underlined and require at least two other kinds of apple tree for successful pollination, and will not pollinate any other apple tree.*

'Arkansas Black' **Antique Semi-Dwarf**

- This variety originated in the mid-19th Century in Benton County, Arkansas. Parentage likely from a Winesap seedling.
- The apples grow deep red to burgundy as they ripen. The flesh is decidedly tinged with yellow, very firm, rather fine-grained, crisp, moderately juicy, with a hint of tartness when freshly picked.
- Tree has upright, spreading form. Mid-season bloom, late-season harvest. Vigorous fruiting and completely resistant to cedar apple rust, while moderately resistant to apple scab and fireblight.
- Apples store well in a cool, dark place and will lose the tartness over time, sometimes becoming waxy. Their aromatic qualities make excellent cider. The fruit has complex, interesting flavors and serves as a good dessert apple.



- 'Autumn Gala' Semi-Dwarf
- Autumn Gala was developed in the mid 1990's by Harry Black; it is a mutation of the standard Gala that will ripen on average 4 weeks later in mid to late September.
- Tree flowers in late spring to early summer as a pale pink blossom, and has a tendency for biennial bearing.
- Apple is delicious fresh, and holds its shape and flavor for pies and other baked goods. Firm, juicy, fine textured, yellow-white flesh. A sweet apple with a hint of tart. Hangs well on the tree.
- Versatile pollinator with decent resistance to apple scab and fireblight.



- 'Black Twig' **Antique Dwarf**
- An early 19th century Tennessee apple that was introduced about 1830 as a seedling on the farm of Major Rankin Toole near Fayetteville, Tennessee.
- It became one of the popular dessert varieties in the 19th and early 20th centuries in Central Virginia orchards. Said to be Andrew Jackson's favorite.
- The yellowish flesh is juicy and aromatic, and tannins in the skin add complexity to cider. Apple skin is yellow-green and streaked with red or burgundy. Ripens in October.
- Fruit is very tart, also good for fresh eating and baking. Medium to large apples; excellent if stored in the refrigerator, to reach peak flavor.
- The tree growth is dense and drooping, with some resistance to pests and diseases.



*However, triploids tend to have good disease-resistance and vigorous yields.

'CandyCrisp' Semi-Dwarf

• This apple was discovered relatively recently in the Hudson Valley area of the state of New York as a chance seedling. Parentage from Red Delicious; cold-tolerant in temperate climates with exceptional disease resistance.

- Tree is considered a late season producer (October harvest) with moderate vigor.
- The fruit has a pear-like, mild flavor that tends on the sweeter side, with a firm and juicy texture, and will keep for 1-4 months in cold storage. Some consider it sweeter than Honeycrisp.



Antique Dwarf

'Cox Orange Pippin'

- Cox's Orange Pippin, in Britain often referred to simply as Cox, is an apple cultivar first grown in 1830, at Colnbrook in Buckinghamshire, England, by the retired brewer and horticulturist Richard Cox.
- Mid-season blooms with mid-late season harvests; tree is a spur-bearer and requires some gardening experience to prune and maintain.
- Fruit is the quintessential dessert apple, with unmatched flavor in a good year. Apple is suitable for a wide variety of uses like fresh eating, hard cider, cooking, juicing, and drying due to its exceptional flavor and firm but juicy texture.
- Tree has some susceptibility to mildew, fireblight, and cedar apple rust, and is very susceptible to canker and scab.



Dwarf

'Cripps Pink'

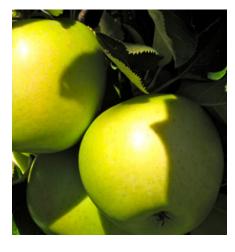
- AKA Pink Lady. This apple was introduced to market in 1985, originally from Australia with parentage between Golden Delicious and Lady Williams. Part of a breeding program to develop late-maturing, long-storing cultivars. Mid-late season blooms.
- The pink-skinned, tart fruit is good for snacking, salads, baking, beverages, pies, sauce, and freezing; medium-large fruit can store up to 9 months.
- Trees grow vigorously and densely; thinning required.
- Other good pollination partners: fruit mature 8 to 9 weeks after those of 'Red Delicious', and 2 to 3 weeks after those of 'Granny Smith'.
- The tree is susceptible to apple scab and fireblight, though resistant to juniper rusts and powdery mildew.



Semi-Dwarf

'Crispin'/'Mutsu'

- Originates from the Aomori Research Station in Japan, circa 1930. Parentage from Golden Delicious and Indo, introduced to the U.S. market in 1948.
- Fruit has lopsided form; good for fresh eating, drying, juicing, and keeps its form in cooked desserts. Sharp, sweet, and aromatic flavor. The dense flesh is very crisp, juicy and coarse-grained with a sprightly flavor. Some tasters detect a slight anise flavor, enhanced by hot, dry weather.
- The apples are free from russeting and will not shrivel in storage.
- Tree flowers mid-season, providing late season harvests; the vigorous producer is genetically triploid so requires at least 2 other pollinators to set fruit. Some resistance to mildew but otherwise susceptible to scab, cedar apple rust, and fireblight.



'Dandee Red' Dwarf

• Dandee Red Gala was discovered as a seedling by Dan Simmons of Peace Valley Orchards in Rogers, Ohio.

- Early MacIntosh type apple, but firmer, ripe in mid- to late August. Stays crisp up to 2 months in storage. Fruit has a range of uses including for fresh eating, sauce, pies, and other baking. The fruits are large and fully red with a pleasantly sweet-tart flavor in the creamy white flesh.
- Moderate to excellent resistance to fireblight, mildew, and apple scab.
- Also like MacIntosh, Dandee Red trees are very winter hardy and can handle a wide range of climate conditions. This cultivar is especially well suited for the northern growing districts where winter hardy varieties are a necessity.

'Enterprise'

- Introduced in 1982 on the Clark Farm tract of the Purdue Univ. Horticulture Farm. Parentage from Golden Delicious, McIntosh, and Rome Beauty.
- Late season harvest followed by three months of storage; a good apple to provide a winter stock for cooking, baking, fresh eating, sauce, and drying. Quality is said to improve after 1 to 2 months of storage, as acid diminishes.
- Fruit has a sharp, sweet flavor; spicy aroma and mild tartness.
- Tree is moderately to highly vigorous and spreading, with a standard bearing habit and round top. Very resistant to scab and fireblight, some resistance to mildew and cedar apple rust.

'Fameuse Snow'

- This apple originates from Quebec, Canada, of unknown parentage, probably from an 18th century French variety. Parent to MacIntosh. Tolerates very cold winters. Mid-season blooms.
- Late season variety with fruit that keeps its flavor for 1-2 months, however crunch is best the day it's picked.
- Fruit is typically small, symmetrical, good for fresh eating, drying, cooking, and juice. Fameuse vary in appearance from a fiery, solid-red to striped-red-over-green skin with bright white flesh sometimes streaked with crimson. The fragrance and taste, however, are consistently aromatic and sweet, the flavor of mulled cider.
- Crop has some resistance to mildew, canker, fireblight, but is very susceptible to scab. Dense branches, moderate vigor, and is fondly requested for its unmistakable, alluring taste.

'Golden Delicious'

- Parentage likely from Grimes Golden, circa 1890's; developed by Anderson Mullins in West Virginia. Mid-late season flower, partially self-fertile.
- One of the most important apples of the 20th century for mass marketing and breeding stock. Home-grown flavor is superior to super market fruit.
- Fruit will ripen to a golden color if left on the vine, tasting of raw sugar cane, rich and sweet. The apple will store for several months in cold storage and is versatile for baking, fresh eating, juicing, and drying.
- Tree is a heavy cropper and recommended for beginner gardeners. This variety has good resistance to blossom frost, but some susceptibility to canker, scab, mildew, fireblight, and cedar apple rust. Golden Delicious has been crossed with more complex apples to parent many new cultivars.



Dwarf



Antique Dwarf



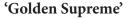
Antique Semi-Dwarf



'Golden Russet' Antique Dwarf

• Thought to be a seedling of an English russet variety, originating from New York State, around 1845. Likely related to an English cousin named Ashmead's Kernel. Early-mid season blooms.

- Fruit is good for fresh eating, drying, hard cider, juice, and cooking since it keeps its shape. Late season production that keeps 3 months or more in proper storage. May store on the tree into winter.
- Honey-scented apple and when pressed, core and all, the fruit releases spicy, peppery, almond and cinnamon notes. Fresh eating is like eating mulled cider in apple form. Highly russeted.
- Tree has average vigor, some resistance to scab; and some susceptibility to cedar apple rust. Tolerates cold winters and temperate climates.



- Tree was discovered as a chance seedling in 1890 in Clay County, W.Va., and was originally named Mullin's Yellow Seedling. Renamed in 1916, its parents are thought to be Golden Reinette and Grimes Golden. Mid-season variety, bears a red blush.
- Golden Supreme is a medium sized apple with a firm cream colored flesh. Apple good for drying, baking and making cider. Keeps very well, up to 3 months in cold storage. High natural sugar level prevents browning in salads and calls for less sugar in pie recipes.
- Fruit has the deep, rich flavor of honey. Very low acidity with a clean aftertaste; however lacks the depth of more well-balanced apples.
- White-blossom crabapples also recommended as pollination partners.

'Granny Smith'

- The classic apple! Likely originated from a French crabapple and a Rome Beauty, in Australia in 1868.
- Fruit is bright green with a slight pink blush if cool nights precede harvest. Firm, medium grain, bright white flesh that resists browning when sliced, strong tartness resembling that of a lemon. Good in salads, for baking, sauce, and in ciders. Best left to mellow on the tree to fully ripen.
- Mid-season, heavy cropper; some resistance to cedar apple rust, some susceptibility to scab, mildew, woolly aphid, and fireblight.

'Honeycrisp'

- Bred at the University of Minnesota in the 1960's, parentage from the Keepsake, another UofM cultivar. Ripens in late September. Mid-late season blooms.
- Fruit is very crisp and tasty with a bright red color. Fruit is typically russet free, wonderful for fresh eating and drying due to its undeniably sweet flavor. White, light flesh, peardrop aroma, and simple sweet taste makes this a reliable and well-loved apple. Fruit reaches optimum flavor after 7-10 days of cold storage, but bruises easily.
- Tree has below-average vigor, however tolerates warm or cold climates and is very resistant to apple scab. Some resistance to fireblight, although somewhat susceptible to cedar apple rust, bitter pit, and mildew. Overall, a successful producer for backyard growers.



Dwarf



Semi-Dwarf



Dwarf



'Northern Spy' **Antique Dwarf**

• This variety developed by a farmer named Oliver Chapin in the 1840's, in Rochester, NY. A very late-season producer, fruit can store up to 3 months or longer. Parentage from the Duchess of Oldenburg. Late-season blooms.

- Apple is red/green with cream/white flesh; typically grows into a sizeable fruit with high Vitamin C content. Good for fresh eating, cooking, drying, and juice. Aromatic scent with honeyed, sharp flavor.
- Tree is vigorous with poor disease resistance, especially susceptible to cedar apple rust and fireblight, however is very resistant to wooly aphid. Atypically-long bearing time compared with other fruiting apple trees, may lapse into biennial bearing.
- Tree makes good rootstock for other apple grafts due to its wooly aphid resistance.





'Pound Sweet' Antique Dwarf

- This cultivar originated in Connecticut, circa 1834. Ripens for a late-September harvest. Typically takes 2-5 years to bear; cold-hardy.
- Fruit is notably large and delightfully sweet. Productive tree bears fruit that has a yellow-green skin with a darker flush where it meets the sun. Slight russeting is not uncommon. Flesh is crisp and keeps it form, excellent for cooking and desserts. Melds together well with other fruit, like quince, for exquisite culinary delights. Excellent choice for apple butter.
- Tree is vigorous with moderate resistance to apple scab and mildew. May bear biennually and ripen unevenly, and fruit tends to watercore, but an older variety worth keeping around.

'Red Jonagold'

- The Jonagold originates from Geneva, New York, circa 1943, a cross of the Golden Delicious x Jonathan at the New York State Agricultural Experiment Station. Mid-season blooms with mid-late season harvests.
- Fruit is usually russet free, of medium to large size with white to pale creamy flesh, great for fresh eating, cooking, juicing, hard cider, and drying. Honey-scented fruit with sweet, sharp tang, full-bodied with good acid balance.
- Tree is vigorous and can be heavily cropped; however it is moderately susceptible to canker, scab, fireblight, and cedar apple rust.

'Ruby Mac'

- Early-season bloom; most likely a sport from a MacIntosh cultivar or a cross between Rubinstar and MacIntosh.
- The fruit's flesh is more fine-grained than coarse and quite juicy, tinted green, and crisp though not hard. The flavors are balanced, though with some pleasing tartness, and present vinous flavors. There's also a little bit of raspberry, a nice touch, and some spice in the finish. Great for fresh eating, drying, and applesauce.
- Moderate vigor and disease resistance. Early fruit drop is unlikely with this variety.





Dwarf



'Sheepnose/Black Gilliflower'

• Antique variety, originates from Connecticut, circa 18th century. Coldhardy. Ripens in late September.

- Fruit is prized for baking and desserts due to its subacid flavor. Unusual oblong shape and deep burgundy skin with yellow-white flesh and firm texture. Dry flesh when harvested tends to mellow and moisten after a month of storage.
- Apple is rarely russetted and has a faint aromatic scent. Tree is spur-bearing, which means double the fruit production due to compact spurs that bloom off from the main branches.



Antique Dwarf

<u>'Shizuka'</u> Antique Dwarf

- The Shizuka cultivar originates from Japan, circa 1908. Its parentage is from Golden Delicious and the Indo apple, which is the same as the Mutsu/Crispin variety. Fruit ripens in mid-October. Mid-season blooms.
- Large to extra large apple resists browning, good when cut in salads and for fresh eating. Flesh has a velvety texture with subacid flavor, but is not overly sweet. Apples will keep for up to 4 months in cold storage.
- Triploid apples like Shizuka need at least two other pollinators for effective fruit set, such as a different fruiting apple tree and a white-blossom crabapple. However, triploids tend to produce larger trees with larger fruit, and tend to have naturally good disease resistance.



Antique Dwarf

'Smokehouse'

- Originates from William Gibbons' Smokehouse in Lancaster, Pennsylvania, circa 1837. April blooms with early to mid-season harvests beginning in late September/October.
- Fruit has crisp, yellowish flesh with a fresh cider flavor, honey-scented and aromatic. Great for fresh eating, baking, and cooking since it holds its shape and contributes full-bodied flavor. Apple will keep well in cold-storage until March of the following year, excellent for holiday pies and apple crisps if supplies last.
- Tree is spur-bearing, which means double the fruit production due to compact spurs that bloom off from the main branches. Resistant to fireblight and apple scab.



Semi-Dwarf

'Snowsweet'

- Bred at the University of Minnesota and released in 2006; parentage from Sharon and Connell Red. Mid-season blooms and late season harvest in mid to late October.
- Fruit is sweet with a slight tart balance and rich, buttery overtones; snow-white, firm flesh does not oxidize quickly when cut, good for salads, prepared snacks, and fresh eating, as well as for baking.
- Cold-hardy testing has proven this variety withstands temperate climates to Zone 4, and fruit withstands freeze-thaw cycles that occur when seasons change.
- Tree is moderately susceptible to scab resistance, with medium resistance to fireblight and cedar-apple rust.



'Wolf River' Antique Dwarf

• Parentage most likely from an Alexander seedling, circa 1870's. Midlate season blooms and late season harvest, cold-hardy to northern North America.

- Flesh is creamy white to greenish-yellow; fruit is variable in shape and ranges in size from medium to very large, some russeting possible. Apple is good for cooking, fresh eating, drying. Fruit will keep 1-2 months in cold storage after harvest. Well-known as an American cooking apple because it keeps its shape. Fruits tends to sweeten with frosts, to balance its tartness.
- Tree is a spur-bearer, with some resistance to canker and cedar apple rust, some susceptibility to fireblight, yet this cultivar is very resistant to scab and mildew.



'Yellow Transparent'

- A Russian cultivar, circa 1870. Early to mid-season flower with a tendency to bear biennually. Spur-bearing variety with very early season harvests, winter-hardy. Also known as White Transparent or Glass apple.
- Fruit skin sometimes appears pure white in the sun. Flesh is white, sweet, acidic, light-textured, juicy, and refreshing. Apple is good for cooking, drying, wine, and purees, though it only keeps its fresh qualities for a few weeks in cold storage. Excellent for sauce, somewhat mild when eaten fresh.
- Apple size ranges from medium to large, and fruit is typically russet-free.
- Tree is a precocious spur-bearing variety, with average disease resistance to scab and cedar apple rust, some susceptibility to mildew, and is very susceptible to fireblight.

Antique Dwarf



'Zestar!' Semi-Dwarf

- Developed by the University of Minnesota and introduced in 1999. Parentage from State Fair and another MN variety (1691). Very early season blooms and harvests (around September 1). Hardy in Zones 3-5.
- Fruit has a well balanced sweet/tart flavor with a hint of brown sugar, and is excellent for fresh eating and cooking. Skin is yellow with up to 75% red blush when ripened in the sun. Flesh is white with a crisp texture, but tends to brown and is preferred for cooking over prepared fresh snacks.
- One of the few early apples that stores well.
- Tree has some resistance to mildew, cedar apple rust, and fireblight, though is very susceptible to scab.



DID YOU KNOW?

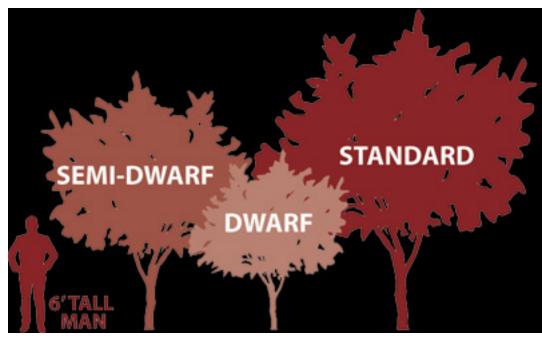
Biennial Bearing: Some apple trees bear biennually, i.e. Northern Spy, Golden Delicious. They overbear one year and then rest the next. To ensure an annual harvest, these trees can be thinned during the overbearing year.

Russeting: Though russeted skin is expected from some cultivars, i.e. Golden Russet, Pound Sweet, russeting can lower fruit quality if caused by chemical spraying of emulsifiable concentrates in humid weather, excess nitrogen in the soil, fungal or bacterial pathogens, or a late frost followed by rainy weather. Regular pruning and conducting soil tests can help reduce the risk of wet, overfertilized apples developing a russet.

Consume russetted fruit first if storing apples for prolonged periods of time.

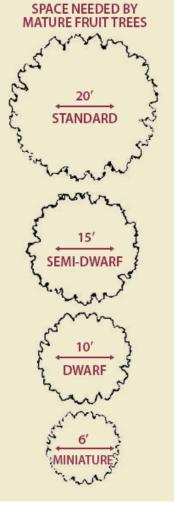
Spur-Bearing: The apple tree will produce double the harvest due to compact spurs that bloom off from the main branches, i.e. Cox Orange Pippin, Wolf River; however, proper pruning is required to maintain good circulation of air and light to inner branches. See next pages for tips on installing and maintaining your apple trees.

General Installation and Maintenance of Fruiting Apple Trees



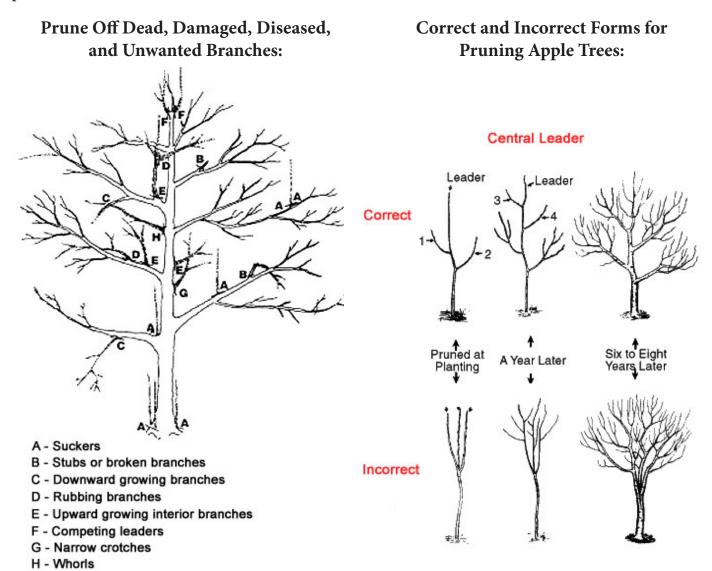
Approximate Apple Tree Sizing

- 1. Choose the right location to plant your tree to provide:
- Cross-pollination.
- Full sun levels and good soil (well-drained, pH 6-7).
- Appropriate spacing; and leave space for future plantings, if applicable.
- Adequate space away from above- and below-ground utilities, sidewalks, and desired views. Contact PA 1-Call for clarification (dial 8-1-1).
- 2. Ensure that the soil is not frozen or water-logged before planting.
- 3. Young trees need monthly fertilization from early spring to July. Trees three years and older need an annual application of an all-purpose or special apple tree fertilizer mix, ideally two weeks before bud break but this one-time application can occur any time before July. Compost that has been tested to ensure adequate nutrient levels can also be applied around the tree to the dripline.
- 4. Mulch around the tree in spring and double mulch in fall, but DO NOT volcano mulch around the trunk of the apple tree (or any woody species).
- 5. Newly-planted trees need at least one gallon of water per week. Fruiting and mature trees should also be watered during periods of drought.
- 6. Apple trees should be pruned every season, even when young. (see next page)
- 7. Some trees take up to five years to become fully productive once transplanted. Fruit may ripen on disparate calendar dates each year depending on the weather and other environmental variables.
- 8. Many apple tree varieties are susceptible to insect pests like aphids, apple maggot, moths, apple borers, and japanese beetles; to pathogens such as anthracnose, bitter rot, black rot, cedar apple rust, fireblight, and scab; and to environmental conditions such as wind, sun, and frost damage, bark necrosis, water stress, and nutrient and pollination deficiencies.
- 9. If you notice disease or damage influencing the health of your apple trees, contact your local agricultural extension office for advice and further information. There are also manuals and guides online for treating apple tree diseases based on symptoms and environmental conditions.
- 10. More information on raising fruit crops: http://extension.psu.edu/plants/gardening/fphg/getting-started.



How to Prune Apple Trees?

- 1. Pruning apple trees improves air circulation and light penetration within the crown of the tree. It also encourages the tree to direct energy towards fruiting and developing a strong core of branches free of dead wood and disease.
- 2. Trees should be pruned in late winter/early spring, well ahead of leaf and bud development each spring. However, early summer pruning may be necessary to control unwanted growth. Avoid pruning in the fall since this stimulates new growth at the same time the tree should be getting ready for winter.
- 3. In general, the tree should have a strong single leader, though some methods encourage the tree to develop several major lateral branches into a vase shape that opens the center of the tree. Apple trees can also be espaliered.
- 4. To keep limbs thick, compact, and fruitful, "head back" last year's growth by 20 to 30%. Cut 1/4" above a bud node facing the direction you want the branch to grow.
- 5. Use sharp, clean shears soaked briefly in isopropyl alcholol between each tree as you trim, to reduce the spread of disease.



For more information about methods for pruning apple trees, please visit: http://www.weekendgardener.net/how-to/prune-apple-trees.htm.

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FOX HILL GARDENS - APPLE POLLINATION CHART	Arkansas Black 3 (triploid, mid)	Autumn Gala 4 (late	Black Twig (mid)	Candy Crisp 4 (mid-late)	Cox Orange Pippin 3 (mid)	Cripps Pink 3 (mid)	Crispin 3 (triploid, mid)	Dandee Red (early-mid)	Enterprise 4	Fameuse Snow 2 (early-mid)	Golden Delicious 4 (late)	Golden Russet 2 (early-mid)	Golden Supreme (late)	Granny Smith 3 (mid)	Honey Crisp 4 (mid-late)	Northern Spy 5 (late)	Pound Sweet (mid)	Red Jonegold 4 (triploid, mid)	Ruby Mac 1 (triploid, early)	Sheepnose 3 (mid-late)	Shizuka 3 (triploid, mid)	Smokehouse (early-mid)	Snowsweet 3 (mid-late)	Wolf River 3 (mid-late)	Yellow Transparent 2 (early)	Zestari (early)
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Recommended Crapapples:																										
Manchurian Crabapple (early-mid)																										
Snowdrift Crabapple (mid-late)																										
Key:																										
# = Pollination Group																										
(Bloom Time)																										
x = Good Pollination Partner T = Triploid (needs at least 2 other dis	stinct nolling	ators)					-									-										
Does Not Cross Pollinate	Jane politic																									
Sources:																										
Orange Pippin Fruit Trees																										
Stark Bros. Boyer Nursery			-															-								