

Growing Guide for Apples

Apples have been a part of the New England landscape for several hundred years contributing much to the culture, economy, and beauty of the region. Apples are still a popular plant choice for the home garden. Along with the old standbys of years past, there are many new varieties to choose from, many are nice for small spaces and offer disease resistance and early fruiting.

Light	Full sun, no less than 8 hours:
Soil: (pH)	Most soil types that are well drained; pH 6.0-6.5
Zone:	3-9
Moisture:	minimum 1" water/week
Fertilizer:	10-10-10 or equivalent, in spring
Plant Height:	Dwarf 8-12'; semi-dwarf 12-20'; standard- 25' or more
Pollination:	Apples need two or more varieties to insure fruit set. Crabapples can be used as pollinators. Varieties with overlapping bloom times will increase fruit set.

Varieties

Cortland	Freedom
Empire	Macoun
Winesap	Fuji
Frostbite	Honey Crisp
Granny Smith	Ginger Gold
Mcintosh	Royal Gala
Red Delicious	Royal Red Honeycrisp
4-way grafted	6-way Espalier



Plant Care

Choose varieties that are hardy in your area. Dwarf varieties bear fruit earlier than standard trees and are easier to manage than larger trees. Choose a site with good air drainage to reduce risk of frost damage in the spring, and one that receives 8 hours of sun per day. Adjust the soil pH if needed and add compost to planting site. Control weeds and grasses that may compete for nutrients and water (bark mulches or wood chips are good choices to retain moisture and repel voles). Maintain adequate soil moisture during the growing season. Stake dwarf and semi-dwarf trees. Spray and prune the trees to reduce insects and diseases and to promote annual harvests. Plan to protect the tree from deer and rodents, since they can cause serious damage during the winter.

Pruning

Apple trees are generally pruned to a central leader system (a strong vertical stem with branches spaced horizontally up that stem). Apples should be pruned annually. Pruning promotes light and air penetration and strong branching that will hold a heavy crop. At planting, the vertical shoot (leader) should be cut back to force side shoots to develop. Annual pruning should include the removal of dead, damaged or diseased branches, as well as branches that cross one another or any branches that have a crotch angle (area where branch meets trunk) less than 45°. Water sprouts (vigorous shoots that grow vertically on branches) should be removed as well as any sprouts that grow around the trunk at ground level.

Fertilizer

Generally, apple trees need fertilizer each year. Nitrogen is the most important essential nutrient. Two other nutrients, phosphorus and potassium, are needed in greater amounts when the tree is young; after it reaches maturity, it usually requires only nitrogen. A month after planting broadcast 8 ounces of 10-10-10 around the tree; be sure to keep the fertilizer away from tree trunk. Increase the amount of 10-10-10 applied by 0.25 pound per year to 2.5 pounds per tree for a mature dwarf tree, 5 pounds per tree for a semi-dwarf, and 10 pounds per tree for a mature standard tree. Don't forget to maintain the soil pH at 6.0 to 6.5.

Insects and Diseases

Apples are subject to insect damage and diseases and do require some spraying if high quality fruit is to be harvested. One way to control pests and diseases is through careful monitoring, sanitation, and choice of disease resistant varieties. Diseases and insects can overwinter on bark, twigs, debris, and weeds. Control measures include spraying the trees with pesticides at critical stages of fruit development. For home garden use, a combination spray such as Bonide Fruit and Nut spray, offers protection when used at the appropriate growth stage (before bloom, just after bloom, and several times during the growing period) always according to label directions. A pressurized sprayer or hose end applicator work well when using these products.

Harvest, Storage and Use

Apples are ready for harvest when the fruit separates easily from the branch while lifting the fruit upwards while giving it a slight twist. If is not easily removed, leave for a few more days. If storing apples, they should be harvested early, while slightly unripe, and kept at near freezing temperatures with high humidity. Apple varieties ripen at different times. Apples are eaten fresh, in pies and other baked good, as well as sauces and jellies.

For more detailed information, use the following links:

<https://extension.unh.edu/resource/growing-fruits-low-input-tree-fruits-nh-home-orchards-fact-sheet-0>

<https://extension.unh.edu/resource/growing-fruits-care-mature-backyard-apple-trees-fact-sheet>

https://extension.unh.edu/resources/files/Resource000589_Rep611.pdf

<https://extension.unh.edu/blog/how-do-i-prepare-my-backyard-fruits-winter>

<https://www.mygardenlife.com/recipes-edibles/pollination-charts-for-fruit-bearing-trees-and-shrubs>





Wentworth Greenhouses

Helpful Tips and Information



	Pollen Source																									
	Braeburn	Cortland	Crimson Crisp	Crispin/Mutsu *	Empire	Freedom	Frostbite	Fuji	Gala	Ginger Gold	Granny Smith	Gravenstein *	Honeycrisp	Jonathan	Macoun	McIntosh	Northern Spy	Pink Lady	Red Delicious	R. R. Honeycrisp	Spartan	Suncrisp	Triumph	Winesap *	Wolf River	Zestar!
Braeburn	✗	✗			✗	✗	✗	✗	✗	✗	✗															
Cortland	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗							✗	✗	✗	✗	✗	✗	✗		
Crimson Crisp	✗					✗		✗	✗	✗	✗															
Crispin/Mutsu *	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Empire		✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Freedom	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Frostbite	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Fuji	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Gala	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Ginger Gold	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Granny Smith	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Gravenstein *					✗																				✗	✗
Honeycrisp	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Jonathan	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Macoun	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
McIntosh	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Northern Spy	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Pink Lady	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Red Delicious	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Royal Red Honeycrisp	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Spartan	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Suncrisp	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Triumph	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Winesap *	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	
Wolf River	✗	✗	✗		✗	✗	✗	✗	✗	✗	✗													✗	✗	
Zestar!	✗	✗			✗	✗	✗	✗	✗	✗	✗													✗	✗	

* triploid variety - has sterile pollen and will not pollinate others