Garden Clippings [®] Lunass

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An educational newsletter for gardeners in New England.

March, 2013

March is the Month to . . .

* Start cole crop seeds indoors by mid-month. The cole family includes cabbage, broccoli, cauliflower, and Brussels sprouts. These plants grow fast. Place seedlings under bright light in a cool location. If you have a cold frame, move the plants there when they are about 4 inches tall.

* Mix sand with very small vegetable seeds to make sowing easier. Another technique is to mix fine seed in very soft gelatin. Put the gelatin/seed mix in a squeeze bottle and squeeze out the mix in containers indoors or down the middle of a prepared garden row outside.

* Start seeds of eggplant and hot and sweet varieties of pepper indoors mid- to late month. Although related to tomatoes, these crops should be started a few weeks prior to tomatoes because eggplant and pepper are slow growers.

* Transplant vegetable seedlings to larger containers when they have developed their first set of true leaves. This set of leaves appears to be the second set of leaves since the first set is actually the seed leaves, or cotyledons. When transplanting, hold seedlings by the leaves, not the stem. Fungi that cause damping-off disease are too easily spread by touching seedling stems.

* Take a pruning saw and hand pruners on walks around your yard. Look for dead, damaged, and diseased branches on trees and shrubs and prune these. Also prune branches that may be crisscrossing and rubbing against one another (cut one of the offenders in a pair), branches that may be growing back toward the center of a tree or shrub, and branches that have simply grown out of bounds.

* Prune to ground level a few of the oldest stems on multistemmed shrubs such as forsythia, spirea, ninebark, beautybush, lilac, mockorange, and weigela. Otherwise, these shrubs may get overcrowded with stems which reduce air flow and light penetration into the center of the plant. Re-

Jennifer Kujawski, Horticultural Consultant

moving the oldest stems every year or two will keep these shrubs healthy and productive.

* Reapply deer repellents to shrubs in the landscape after heavy rainfalls. Vary the repellents used to keep deer from becoming accustomed to one type.

* Start seeds of marigolds, zinnias, impatiens, and other annuals toward the later part of the month.

* With the ground thawing, soils are very wet and prone to compaction from excessive foot traffic, or from vehicles parked on lawn areas. Few things are as damaging to the health of lawns as soil compaction.

* Change the oil, replace spark plugs, tighten bolts, sharpen cutting blades, replace hopelessly dirty air filters, and clean debris from engine parts in lawn mowers.

* Activity of adult deer ticks is at a peak in late March and early April. Inspect the yard for areas of tall grass that harbor the pests and make plans to cut these back. Protect yourself when working outdoors.

* Beware of potted palms that develop shabby and rusty looking leaves - this is a sign of spider mite infestation, a common problem, especially when room temperature is kept high. Spray infested plants with strong blasts of water in the shower or tub, or treat with a mite control material labeled for use on palms.

* Keep forced bulbs such as tulips, hyacinths, hardy daffodils, and crocus growing as long as possible after they have flowered. Keep the soil evenly moist, provide some plant food, and make sure the plants get plenty of sunlight. When their leaves begin to turn yellow, stop the watering and allow the bulbs to dry; then plant them outside in the garden.

Pruning and Training Backyard Apple and Pear Trees

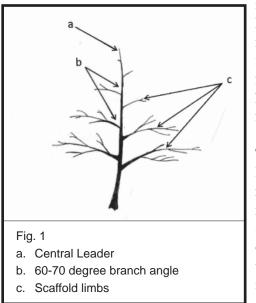
Russ Norton, Barnstable County Extension

Pruning and training apple and pear trees often comes with hesitation, even to the most well versed gardeners. There are some basic principles to train and prune apple and pear trees. Once equipped with this information, one should be able to make the correct pruning and training decisions. These principles apply to young and mature trees, even those that may have been neglected or improperly trained.

Cultivars and rootstocks have a significant effect on size and growth habits of apple and pear trees. Training and pruning will not overcome these natural characteristics. Before choosing an apple or pear cultivar or rootstock, research the cultivar and rootstock to make sure you are getting a tree with the characteristics you want.

Training

Training a tree refers to the development of the structure of the tree. Training is crucial in making sure you start with a good framework. For apples and pears, most training is done during the years before production. Most apples and pears are trained to a system known as the central leader (Fig. 1). This training system maximizes light penetration



into the tree. Light is crucial for forming flower buds and for producing high quality fruit.

The central leader system results in a conical shaped tree similar to that of a Christmas tree. The training system has a single trunk,

many scaffold limbs, and a distinct leader. The trained tree has scaffold limbs well-spaced around the trunk and vertically along the trunk. Scaffold limbs are shorter towards the top, so as not to shade the lower limbs.

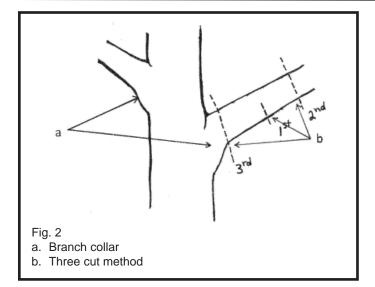
Scaffold limbs are the limbs that bear the majority of fruit production. These limbs need to be well chosen during the training years. The scaffold limbs should have wide crotch angles. Desirable scaffold limbs that don't have wide crotch angles may be trained by tying, weighing, or spreading them. The desired angle for a limb is 60-70 degrees. Narrow angled limbs form bark inclusions. Bark inclusions cause the connection to the trunk to be weak. Weak connections fail under heavy crop loads or snow. The bark inclusions also provide a good environment for pest infestation.

The trained tree should have a distinct central leader. If limbs compete with the central leader they should be completely removed. Any limb greater than half the size of the trunk at the site where it is attached to the trunk is a good candidate for removal. Dwarfing and some semidwarfing rootstocks need support for the central leader. One-inch metal conduit or wooden posts are used to support the leader. Pruning in the training years should be kept to a minimum as excessive pruning at this time can delay fruiting.

Pruning

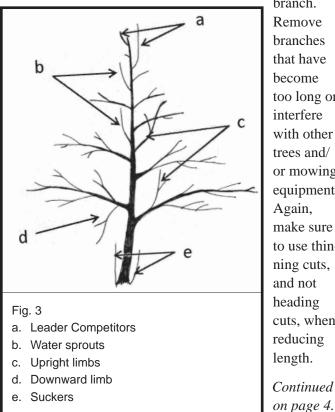
Pruning is done for several reasons: to remove broken, diseased or insect-infested limbs; to control tree size; to improve fruitfulness by improving light penetration and/ or vigor; and to improve pest control. No limb should be removed if there is not a reason. Trees respond to pruning with a localized vegetative response. This response typically involves the growth of water sprouts or suckers; this type of growth is not fruitful. Light to moderate pruning should be done every year to maintain a good balance of flowering and vegetative growth.

There are generally two types of cuts when pruning apples and pears, thinning cuts and heading cuts. A thinning cut is one that is cut back to the intersection of another limb or the trunk. A heading cut is a cut made back to a bud. The majority of cuts made to an apple or pear tree should be thinning cuts. Heading cuts are undesirable because of the vegetative response and growth that leads to dense shading. When removing large limbs, use the three cut method (Fig. 2). This method eliminates the peeling bark damage that would otherwise result. Another important part of pruning is making sure that cuts are clean and made at the outer edge of the collar region. This is important because cuts made here will heal rapidly, reducing the chances for invasion by rot organisms.



When pruning mature trees, the goal is still the same as with training: a conical shaped tree that allows good light penetration and has a single trunk. The first cuts to be made should be those that remove dead, broken, diseased or insect-infested limbs. In trees that have become severely overgrown, this may consist of the majority of cuts. These limbs should be completely removed, leaving no stubs.

The next set of cuts are those used to control tree size. Trees that have grown too tall for harvesting or spraying need to be reduced. Remove the upright growth by making a cut back to a well-developed horizontal lateral



branch. Remove branches that have become too long or interfere with other trees and/ or mowing equipment. Again, make sure to use thinning cuts, and not heading cuts, when reducing length. Continued

Upcoming UMass Extension Pruning Workshops

Pruning Fruit Trees, A Hands-on Workshop March 9, 1:30 to 3:30 pm

Location: Sholan Farm, Leominster MA

One of the key steps in successful fruit growing is pruning the trees. This can seem daunting and complicated, but it's not once you understand the principles involved. Participants will have the opportunity to conduct actual pruning and gain both experience and confidence in pruning apple trees. Instructor: Jon Clements, UMass Extension Specialist. For a registration form, go to www.UMassGarden.com or call 413-545-2254. Cost: \$50

Growing & Pruning Blueberries March 16 - 10:00 am to 1:00 pm

Location: Tougas Family Farm, Northboro, MA Blueberries are among the most popular fruits to grow in the home garden. They are healthful and well suited to grow in our New England conditions. Come learn the basics for growing blueberries in your home landscape. The workshop will include some hands-on pruning lessons. Bring your own tools or use ours. Instructor: Sonia Schloemann, UMass Extension Specialist. For a registration form, go to www.UMassGarden.com or call 413-545-2254. Cost: \$50

Fruit Tree Pruning March 23, 9:00 - 11:00 am

Location: Crow Farm, 192 Rt.6A, Sandwich, MA Join Russell Norton, Horticultural Specialist for Cape Cod Cooperative Extension, as he demonstrates pruning techniques for both peach and apple trees. The demonstration will also cover general cultural practices for tree fruits. Please dress appropriately as the entire workshop will be held outside in the orchard. No charge, though preregistration required. To register, contact Chris St. Pierre, 508-375-6638, cstpierre@barnstablecounty.org.

Growing & Pruning Grapes March 30 - 10:00 am to 12:00 pm Location: Kimball Farms, Pepperrell, MA

Grapes are one of the most universally enjoyed fruits, and many of the new varieties have excellent taste, are winter hardy, and can make excellent wine. Grapes are fun to grow but present some challenges. Sonia Schloemann, UMass Extension Specialist, will help participants through the basics and give them the tools to overcome some of the challenges. Participants will have the opportunity to conduct actual pruning and gain both experience and confidence in pruning and training grapes. For a registration form, go to www.UMassGarden.com or call 413-545-2254. Cost: \$50

More Workshops for Home Gardeners

The University of Massachusetts Extension Agriculture and Landscape Program is again offering its annual *UMass Home Garden Series* for backyard gardeners in 2013. Workshops are taught by UMass Extension Specialists and UMass Amherst faculty, March through May.

March 23	Grafting Apple Trees (Belchertown): \$75
April 13	Backyard Apple Orchard Fruiting Wall (Leominster): \$75
April 20	Insect Pests and Diseases of Apples (Leominster): \$50
May 4	Edible Forest Gardens (Amherst): \$50
May 25	Native Pollinator Conservation (Weston): \$50

For more details and a registration form, call 413-545-2254 or go to www.UMassGarden.com

UMass Extension French Hall 230 Stockbridge Rd. Amherst, MA 01003-9316



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Next, remove those limbs that are unfruitful. All water sprouts and suckers should be removed; these vigorous limbs will not produce fruit (Fig. 3). Also remove those limbs that hang down or have narrow crotch angles (Fig 3). These limbs are also likely to be unfruitful, or are weak and will break under a heavy fruit load.

The last set of cuts should be those that improve sunlight and pest control penetration into the canopy of the tree. These cuts should be focused in the upper portion of the tree and should consist of only thinning cuts. The cuts should be made to remove limbs that shade lower limbs or prevent effective penetration of pesticides. Don't forget, if there is no reason to remove a limb, don't remove it.

Now that you know the basics of training and pruning apple and pear trees, hopefully you will have the confidence to go out and prune yours. March is a perfect time to prune your apple and pear trees.

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