

## Fruit Tree Pruning and Dormant Oil Tips

By: Kelly Feehan, Extension Educator

Release: Week of March 13

Mid-March to early April, just before growth begins, is the best time to prune fruit trees. At this time, winter damage to fresh cuts is reduced and sealing of cut surfaces by the tree itself is quicker.

As pruning cuts never heal in trees, sealing is a combination of chemical defenses the tree sends to the wound and development of wound wood within the tree and around the wound. The wound is compartmentalized rather than healed.

Sealing occurs quickest when pruning is done close to or during the spring growth period, when trees are not stressed such as by drought, and when wound dressings or tree paints are not applied to the wound. It is faster if a tree is not pruned excessively and when branches removed are less than four inches in diameter.

This timing is especially true of less hardy fruit trees like peach, sweet cherry and cultivars susceptible to winter injury. While hardier trees like apple and pear could be pruned in January and February, the tree will not seal the wound as quick as when pruned later.

Excessive dormant pruning may cause fruit trees to produce many water sprouts on tree branches. This diverts energy away from fruit growth and development. It is best to limit dormant pruning to cuts that remove damaged, diseased, and dead wood and those that develop the tree's desired shape.

Summer pruning reduces tree vigor, resulting in a reduction in tree growth. This dwarfing effect can be used to balance the growth of overly vigorous trees with fruit growth and development. Summer pruning is best done in early summer, June into July, when fruits are still small.

A question asked is if pruning in March and early April will stimulate early leaf and flower bud development that could be injured by a freeze. Pruning actually has a slight delaying effect. After pruning, a plant has to adjust and begin sending growth hormones to new buds, since the buds at tips of branches removed are now gone. This could take about 10 days.

Another question asked is if pruning after blooming or growth begins will harm fruit trees. While pruning can be done after growth begins, the risk of spreading diseases, like fire blight and brown rot, is much higher, making pruning while still dormant the preferred time to prune.

For information on how to prune fruit trees, do an on-line search for pruning fruit trees plus UNL. You will find our Extension Circular EC1233 titled Pruning Fruit Trees.

Another fruit tree practice completed during March is application of dormant oils when needed. Dormant oil sprays work by smothering adult insects and eggs overwintering on the tree. They do not manage insects wintering off of the plant or in soil near the tree.

Dormant oils are more likely to be effective if applied in mid to late winter when pests are in a weakened state. There is a risk of plants being damaged by dormant oils. Read label directions for use, application timing, and a list of plants dormant oils should not be applied to.

Always apply dormant oils to plants before bud break and make applications when temperatures will remain above freezing for 24 hours. This is the general rule so be sure to read the product label for specific guidelines.

Dormant oils are mixed with water and if temperatures fall below freezing the oil and water separate and effectiveness is reduced. Continually agitate the spray solution. Avoid applying dormant oils to stressed plants as these are at higher risk of being damaged by these products.