WHAT'S HAPPENING IN THE ORCHARD?

WINTER

*Like many living things, apple trees need to rest for part of the year. This resting time is called dormancy. In January, while the trees are dormant, pruning begins. Limbs are sawed off and clipped so that the tree gets as much sunlight as possible. Pruning allows the tree to produce larger, better colored, higher quality and more valuable fruit.

✤Equipment repairs and maintenance occupies the days of February and March that are too cold or stormy to be outdoors.

SPRING

April is the time to prepare for spring planting. The average tree will bear fruit in three years, with full production coming in 8-10 years. Most apple trees planted today are on dwarf stock, which are smaller trees that grow more fruit than older traditional trees. This allows for more efficient use of valuable land and labor.

Since apples do not grow true to their seeds, young trees are grown in a nursery from cuttings. Root-stock is selected for size and vigor, which then receives grafting of the desired variety. Grafting involves taping rootstocks and the budwood of a particular variety so that the wood grows together to create a new tree. After the new trees are established they are transplanted to the orchard site.

Spring is a busy time in the orchard. The brush from pruning is picked up or mulched back into the orchard soil. Grass is mown since it competes for the soil nutrients and harbors pests. Growers start using Integrated Pest Management techniques like monitoring the weather while hanging various insect traps to collect data. Temperature, humidity, and rainfall are recorded in orchard weather stations to predict disease outbreaks and identify effective pest management tools. Both harmful and beneficial insects are counted to determine spray schedules. Spraying is done only when absolutely needed to protect the tree and fruit.

The most important spring activity is pollination, the process by which new apples begin to form on the tree. Sometime around the beginning of May, the buds begin to swell. Apple trees are covered with beautiful clusters of fragrant blossoms as May goes on.

The "King" blossom is the largest and center-most of clusters which contain five blossoms. The opening of this blossom signals the time for pollination to begin. Bee colonies rented from bee keepers must be moved in quickly, usually at night when the bees are not as active. Sunny mild days are needed during bloom to encourage strong bee activity. Apples need pollen from more than one variety for the cross-pollination that ensures good fruit set.

SUMMER

Every Fertilizing and tree training round out the busy June calendar. Small fruit begins to form. Limbs must be tied up or weighted down to spread the young tree into the perfect shape. The science and art of growing apples, which is known as pomology, has become a very refined practice, and apple producers attend regional meetings and classes to keep abreast of the latest information and technology.

 \heartsuit In some dry years, irrigation must be used during July. Fruit size and firmness are affected by moisture in this critical month. Spraying, mowing, and shaping practices continue, and some summer pruning is done to expose growing fruit to the sunlight for better ripening and color.

August is the last growing month before the apples begin to ripen. Red apples need the assistance of cool nights during harvest to trigger an enzyme which increases the amount of color or "blush". Mowing is completed and bins are positioned throughout the orchard. Ladders are repaired and the harvest logistics are carefully planned.

Storage rooms must be cleaned and their refrigeration systems tested. Most growers store some of their fruit in Controlled Atmosphere (CA) rooms where the temperature is rapidly brought down to between 32° and 38° , depending on variety, and the oxygen is lowered and replaced with nitrogen to slow the ripening process. Apples come out of these rooms months later as fresh as the day they were picked.

FALL

©Apples bruise easily and must be hand picked. Additional harvest workers are hired both locally and from other areas to help get the crop in on time. When picking begins around the end of August, there is a constant buzz of activity until the last of the fruit comes off near the end of October.

©It is now the job of the farmers to market their fruit; either through their own farm store or packed and shipped fresh to supermarkets, restaurants, and schools nationwide and around the world. During the harvest season, some farms invite the public to come for the fun of picking their own apples.

[©]Many apples are processed into sauce, pies, slices and dried snacks. Some apples are also pressed into fresh cider and processed apple juice. Certain apple varieties are designed specifically for this market.

©With the harvest complete, it is time to prepare again for winter. Growing an apple takes all year, and there is always something going on in the orchard. If you look closely, you can even see the promise of next year's crop in the bud at the top of each branch in the snow.