

**Apples, Apples Everywhere**  
**Rick Abrahamson**  
**SD Cooperative Extension Educator-Horticulture**  
**For Week of September 26, 2011**

Often I am asked about apple trees that are producing lots of apples in a particular year. Apple trees are notorious for producing a flush of apples one year and then a highly reduced amount the next year or two. Most people believe that this is a natural cycle of apple production and they let their tree go about its business in this way. Although true to some degree this thinking is not always correct.

Apple trees, like all plants, use light energy to produce sugar in a process called photosynthesis. These sugars are stored in the roots of the tree. During low apple production years, sugar accumulates and eventually the tree goes crazy, producing an abundant amount of apples. Flowering and fruit production requires lots of energy. This energy comes from these stored sugars. Assuming a cycle makes good sense to most people. The tree takes a few years to store energy and then uses it all to produce tons of apples.

There are some definite problems associated with allowing your apple tree to get into this type of a pattern. First, as mentioned above, the weight of all these apples can cause tree splitting and limb breakage. Large wounds occur when a tree splits. Disease and insect problems soon follow. Secondly, as these sugars are used during heavy fruiting years, the general health of the tree can decline predisposing it again to insects and disease. Thirdly, you end up with a whole lot of apples that most people will never use.

The question posed by callers about the splitting apple tree is really a question of what to do to reduce these problems. However, the callers don't know they are asking this question themselves. My answer to these questions always includes a long-term remedy. In the case of the splitting apple tree, fruit thinning comes to mind. In early summer after fruit sets, about the time the apples are marble sized, many of these "extra" apples can be removed from the tree. Apples are born in clusters on short spurs. These clusters have between three and five or even six apples on each spur. Remove all but one or two apples per cluster. The tree will respond by putting all of its energy into these fewer apples.

This practice will accomplish several things from the tree's perspective. The limbs of the tree will not break as easily, sugars in storage will be reserved and replenished quicker, and you will not have to find places to unload billions of apples. In addition to these advantages the resulting quality of your apples will be higher. Sweeter, bigger, and tastier apples are always a hit in the fall. I know what you are thinking. "What good does this information do me now if my apple tree has split?" This is the question that the caller thought they were asking. What should be done about the damaged tree?

First, cut off at least one of the limbs. Staking or tying may seem like a logical thing to do but healing will not take place fast enough to become sufficiently strong to hold all the apples in the future. Secondly, do not paint the wound with pruning paint or any other sealant. This only seals in the bad stuff, like disease, moisture, and insects. The wound needs to be able to breathe for healing. Thirdly, trim up any rough edges as this will help in speeding up the healing process. Fourth, think about fruit thinning in the future as the tree will have other heavy fruit years and may split again later on.

Feel free to call on me at 605-394-2188 or email to [ricky.abrahamson@sdstate.edu](mailto:ricky.abrahamson@sdstate.edu) if you have additional questions or comments about this topic.