

## March Hiker Activity – Helping the Habitat Apple Trees



### Instructions:

1. Gather the hikers around the Habitat apple trees. If you stand facing the Habitat with the shed behind you, these are the two trees in the back left quadrant. It is the same quadrant containing the compost bin. Alternatively, the large apple tree by the main entrance to the school may be used.
2. Ask the hikers whether they think the tree is alive or dead. Then ask them to investigate the tree for signs it is alive. Hopefully they will notice the buds on the branches!
3. Use the provided activities to help students understand why winter pruning is important for fruit bearing trees.
4. Work with the students to select up to three branches for pruning.
5. Use the twig diagram and information provided to study your twigs. How much did the twig grow during the last year? How old is the twig?
6. Follow the directions for forcing the branches into bloom. **Please check with the teacher first and provide your own vase. Also, fill the bucket indoors as water isn't available in the Habitat during March. The bucket provided should be dried out and returned to the activity box in the shed.**
7. Observe the branches over the next few weeks. What happens?
8. Visit/observe the stink-o-lantern patch and refill sharecrows/bird feeders as time allows.
9. This activity may be combined with the February tree measuring hike if the class's February hike was cancelled due to weather.
10. Comments and photos for use on the Habitat website may be sent to [m.hauer@sbcglobal.net](mailto:m.hauer@sbcglobal.net).

### Contents:

- Step ladder
- Pruner – adult use only
- Pruning instructions and activities (1)
- Bucket
- Twig Diagram (10)
- Tape measures (5)

**Please contact the Habitat Committee if box needs to be replenished.**

**Also, feel free to offer suggestions for improving this activity.**

## Pruning an Apple Tree

- 1) Ask the hikers to hold their arms out wide and pretend they are tree branches blowing in the winter wind. Then ask them to pull their sleeves up a bit and briskly rubs their bare arms together. This is what happens when crossed tree branches blow in the wind. Explain that after a lot of rubbing the branches chafe (get hurt) and this could make the tree sick (sort of like a cut that gets infected). **When two branches are touching it is best for the health of the tree to remove one.**
- 2) Ask the hikers which branches are better able to support fruit – those that stretch out to the side or those that reach straight up. They can give their answer by holding their arms either straight out or up. Answer: Branches that form a narrow “V” angle to the trunk (i.e. ones that point sharply up) are not as strong as those that make a wider angle (i.e. ones that point out). **When pruning, favor the wider-angled limbs and remove those with a narrow “V” attachment.**
- 3) Ask the hikers to imagine how uncomfortable it would be at school to share their desk and all their supplies with another student (i.e. double the number of students, same number of resources). It is also hard for apples to grow if the branches are crowded. **Good air circulation lessens the risk of a fungal infection.**

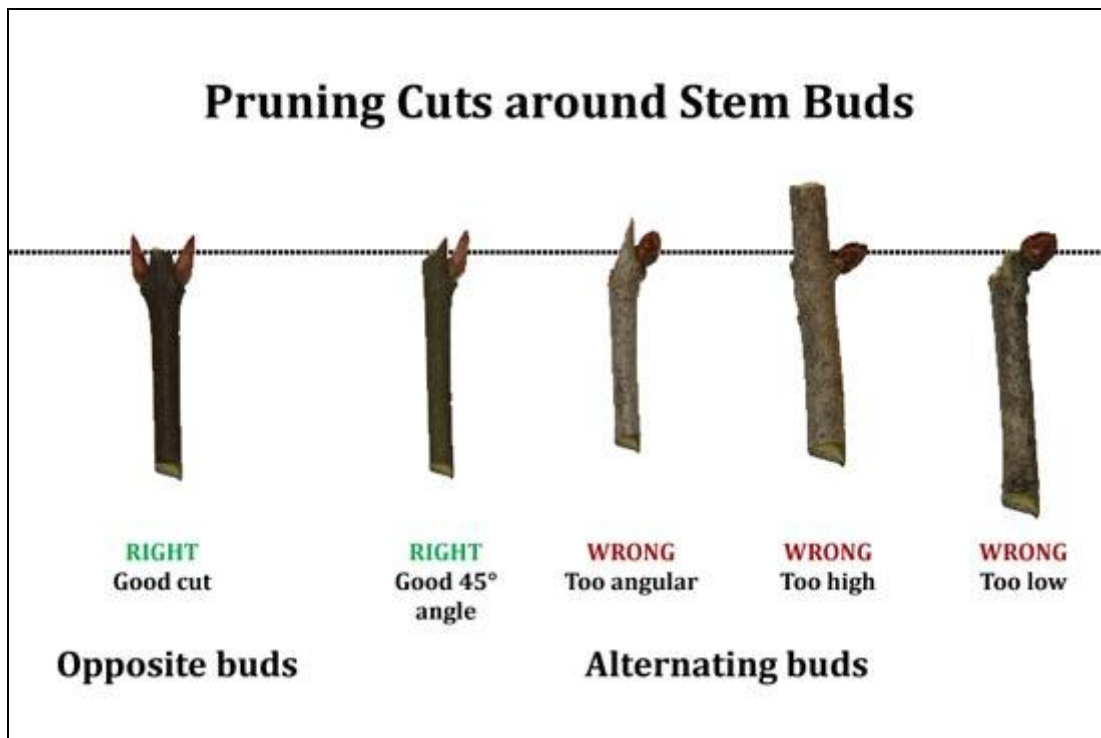
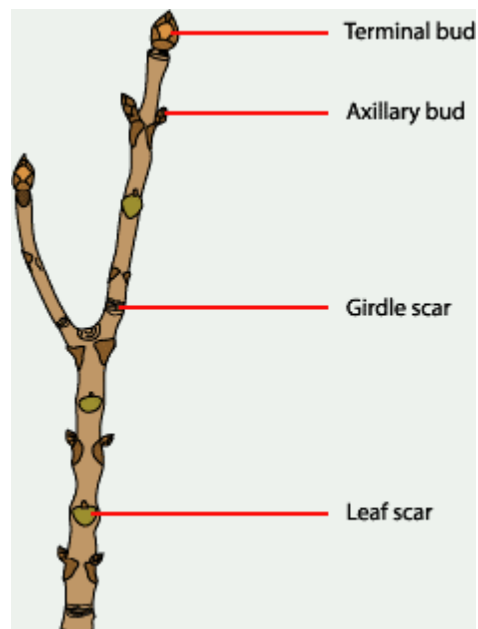


Diagram source: [greenviewfertilizer.com](http://greenviewfertilizer.com)

## Parts of a Deciduous Winter Twig



**Terminal bud:** The bud located at the tip of the stem.

**Axillary bud:** A bud located on the side of the stem. Also called a lateral bud.

**Girdle scar:** Scars left by the previous year's terminal bud. These form a series of tiny rings around the stem.

The distance between girdle scars indicates the amount of growth that deciduous stems make during one year. The number of girdle scars down a stem indicates the number of years of growth.

In the sample above, there are two girdle scars. This means that the stem is two years old.

**Leaf scar:** When leaves fall from the stem, they leave a scar.

Source: <http://www.westone.wa.gov.au>

## **Instructions for Forcing Branches Into Bloom**

- 1) Don't let the branches dry out. A fresh cut, or better still, smashing the bottoms of your branches gently, will make it easier for the branches to take up water.
- 2) The branches need a period of transition so they will be fooled into thinking it's spring. After placing them in a container of water, place the container away from sunlight, in a cool location.
- 3) Cover the branches loosely with a plastic bag or mist them daily to prevent them from drying out. Check the water in the container daily and change it when it becomes cloudy or discolored.
- 4) The buds should swell and begin to open within 1 - 3 weeks given the branches were cut in March. At this time, move the flowering branches into sunlight.