February Hiker Activity – How Big Is That Tree?

Instructions:

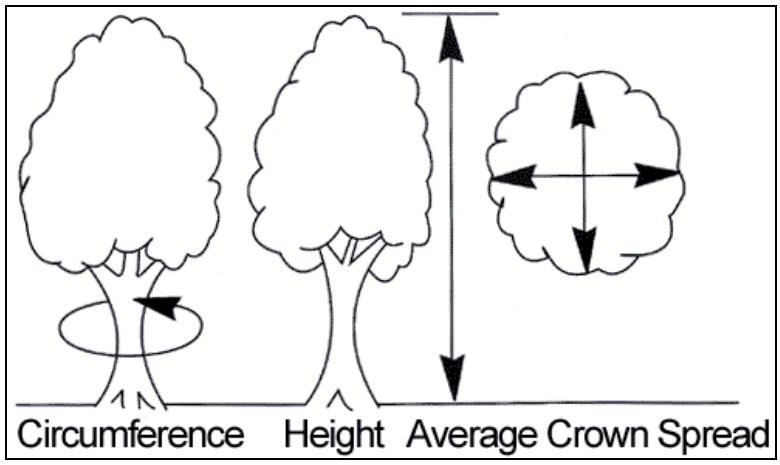
1. Choose a single trunk tree **<u>on level ground</u>** and follow the directions on the record sheet (use one per hike please).
2. Completed record sheets may be posted on the Habitat bulletin board in the school lobby.
3. Visit/observe the stink-o-lantern patch and refill sharecrows/bird feeders as time allows.
4. If the students really enjoy the measuring wheel, each can measure an area of their choice, time permitting. Ex: How long is the shed? How far is it from the compost bin to the birdbath?
5. Comments and photos for use on the Habitat website may be sent to m.hauer@sbcglobal.net.

Contents:

- Record sheets
- Clipboard
- Tape measure
- Measuring wheel (on workbench)
- Stakes
- Mallet
- Pencils (5)
- Pencil sharpener

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

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



Created by Melanie Hauer
January 2011

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Record Sheet

Sources: (1) Kid Style Nature Crafts by Gwen Diehn and Terry Krautwurst
(2) Science for Plants and Schools online

1. Describe the chosen tree and its location. _____

_____

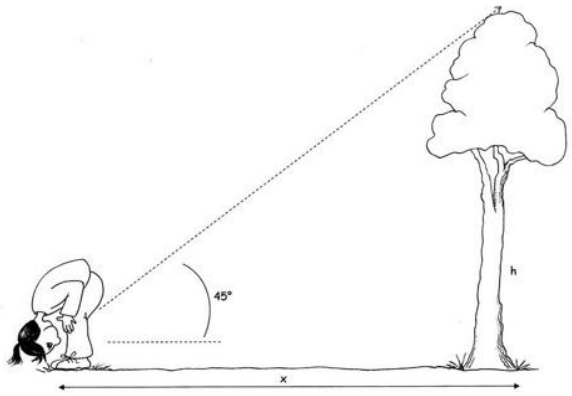
2. How big around is it? _____

First measure 4.5 feet up the trunk from the ground, which is what tree experts call *breast height*. It's the proper point to use when measuring a tree's trunk. Then wrap the tape measure around the trunk at it's breast height and record the measurement above.

3. How tall is it? _____

Walk away from the tree, but at regular intervals bend forward and look through your legs back to the tree. Stop when you are at a point where you can just see the top of the tree. Measure the distance along the ground from the tree to you and record it above.

This method uses the fact that if you view a treetop at a 45-degree angle then the height of the tree is equivalent to the distance that you are from that tree.



4. How wide is it? _____

The distance that a tree's branches reach from one side to the other is called its *crown spread*. Make an outline of the tree's crown by pushing stakes into the ground beneath the outer tips of the branches. (Alternately, have the children on the hike take the place of the stakes.) Then, using the tree's trunk as the middle point, measure the distance between the two stakes farthest apart on opposite sides, and the two closest together. Average these two measurements using the equation below and record the result above.

$$\frac{(\text{longest measurement} + \text{shortest measurement})}{2} = \text{average crown spread}$$

Grade _____ Teacher_____

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