

Tall Tree Tales

Subjects: Mathematics, Biology, Social Studies

Objective(s): Students will identify and measure large local trees and then compare the largest ones to trees on the state and national Big Tree registers.

Material Needs:

Abney Levels (made in an earlier activity)

Biltmore Sticks (made in an earlier activity)

Activity/Instructions:

1. Explain to the students that they will be utilizing their new found skills with Abney Levels and Biltmore Sticks and going on a “Big Tree Hunt.” They will be working in teams to discover the identities, locations, and measurements of the largest trees in their community. They will then compare those trees to the largest trees found within their own state and across the country.
2. Assign research groups of 3-5 students. Each team will try to track down the largest trees that are growing in the community. (Depending on the size of your community, you may elect to let teams search just neighborhoods near the school or the entire city.)
3. Teams must visually estimate which trees are the largest, obtain permission (if necessary for trees on private lands) to measure the trees, identify the trees, and record their findings.
4. After a specified period of time (possibly 2 weeks), teams must turn in a written report listing species names, heights, diameters, and estimated board feet of lumber. Another option is to have a contest where each team posts their latest results (i.e. largest trees of different species) on a bulletin board.
5. When the teams have finished “hunting,” have them compile the results for the entire class. This will give them a list of large trees that can be compared to other big trees across the state and nation.
6. Next, have students use the Internet to look up the “Big Tree Registers” for your state and for the country. (If you have problems locating these, try asking your local district forester.)
7. Compare the trees by species. How do your local trees compare with the state and national size winners? Are they close in size? If not, have students speculate as to why not.
8. You might want to have the students work as a class to create a display showing, by species, comparisons (of tree heights, diameters, etc.) between the trees locally and across the country.
9. This exercise can also be extended to add research on why different kinds of trees grow in different parts of the state or country, and what factors affect tree growth.