## Student Activity Sheet: Let's Cruise!!!

- 1. Define the term "timber cruising."
- 2. Describe how to determine the age of a tree.

3. Describe how to determine the volume of a tree.

4. If your tree was worth \$60.25, and you had 80 of these trees on an acre, how much would that acre of trees be worth? How much would 50 acres just like this be worth?

## Teacher Answer Sheet: Let's Cruise!!!

1. Define the term "timber cruising."

Answer: Timber cruising involves measuring trees to estimate the volume of wood in a forest.

2. Describe how to determine the age of a tree.

Answer: As mentioned in the video, foresters use an increment borer to determine the age of a tree without cutting it down. After extracting the core sample, we count the growth rings to determine the tree's age. One light ring (early wood) plus one dark ring (late wood) make one year, so count one or the other to get the age of the tree, but not both. We counted the dark rings and learned that the tree featured in the video was 65 years old!

3. Describe how to determine the volume of a tree.

Answer: To determine the volume of a tree, begin by measuring the tree's merchantable height and diameter. Then, using a volume table, read down from the merchantable height and across from the diameter. These lines intersect at the tree's volume.

4. If your tree was worth \$60.25, and you had 80 of these trees on an acre, (A) How much would that acre of trees be worth, and (B) How much would 50 acres just like this be worth?

Answer:

Part A: 80 trees per acre x 60.25 per tree = 4,820 per acre.

Part B: \$4,820 per acre x 80 acres = \$385,600.