

Early Spring Tree Growth Observations

- A. Make a sketch (on the bottom of this page) of your branch in winter (early spring!). Mark one to three girdle scars. Pay attention to the shape, position, and scales of the buds. Label and describe the tree buds (sticky, fuzzy, smooth, brown...).
- B. Measure the size of your winter bud. _____ (cm)
- C. Closely observe bud scale scars to predict annual growth rate of your branch.

Make all your measures in **cm** or **mm**.

Write an operational definition for where you will begin and end each measure:

Measure from the terminal bud to the first bud scale scar	Measure from the first scar to the second bud scale scar	Measure from the second bud scale scar to the third bud scale scar

- 1. Compare the measures you made. What can you **infer** about your tree's growth over the past three years?
- 2. What factors might influence the variation in growth from year to year?
- 3. Calculate the annual rate of upward growth using the measures from the last 3 years.
- 4. Predict: What length twig will emerge from this year's terminal bud? _____

Explain your reasoning.