

Investigation

Measuring Old Growth Forest Loss

How much old growth forest did we actually lose in the past few hundred years? How much was lost in *your* state? In this investigation, you can use image analysis software to determine the percent loss of old growth forests over time by analyzing the four maps on the previous page.

Materials

ForestAnalysis software from the GSS CD-ROM

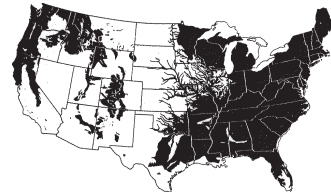
What to do...

1. Launch ForestAnalysis. See "If You Don't Have the Software..." section below, for strategies of how to do "Forest Analysis" without software.
2. You'll find that it is a single-purpose program that allows you to explore the amount of old growth forest lost across the country according to the maps on page 25. The software allows you to draw a box in any area of the map and simultaneous identical boxes are drawn in the other 3 maps, with percentage of old growth shown for each near the bottom of the computer display.

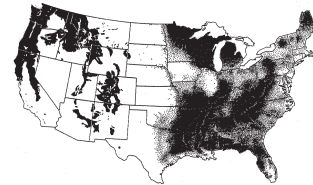
Questions:

- 3.1 How much old growth forest was lost in your state?
- 3.2 How does your state compare with other states in terms of amount of old growth forest lost?*
- 3.2 How does your state compare with the national average and to other states in terms of amount of old growth forest lost? Since you are restricted to rectangular boxes which can't match most state boundaries, your measurements are necessarily approximations.
- 3.3 Which state lost the *least* old growth forest?
- 3.4 How much old growth forest was lost in your region, in a particular size box around your city or town?

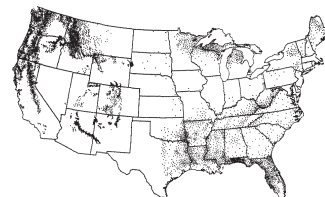
1620



1850



1926



1990



- 3.5 Compare the loss of old growth forest in a particular size box around your city or town with that of identically sized boxes around cities or towns where you have friends, relatives, or a city/town that interests you.
- 3.6 Are there any areas that had an increase in old growth forest during a particular time? If so, how could this happen?
- 3.7 Prepare a written statement summarizing your findings and be ready to present it to your classmates.
- 3.8 What additional questions come to your mind that you cannot answer with the data given? Write these along with your summary statement.

If you Don't Have the Software...

You can still do analysis by superimposing a grid over the maps and counting number of grid squares that have old growth forest in a particular region of interest. Some grid squares will be only partially filled, so you can estimate by counting squares as "full" if they are mostly full (black), "empty" if they are mostly empty, and "1/2 square" if they are close to 1/2 full.

