Using Data to Answer Questions

The effect that too many deer have on the park can be measured by looking at the plant life in the region. A healthy forest has trees ranging from the smallest seedlings to towering giants. The forest floor is covered with many different kinds of wildflowers, including large expanses of white trillium. The different layers of the forest support a great variety of birds, insects and other wildlife.

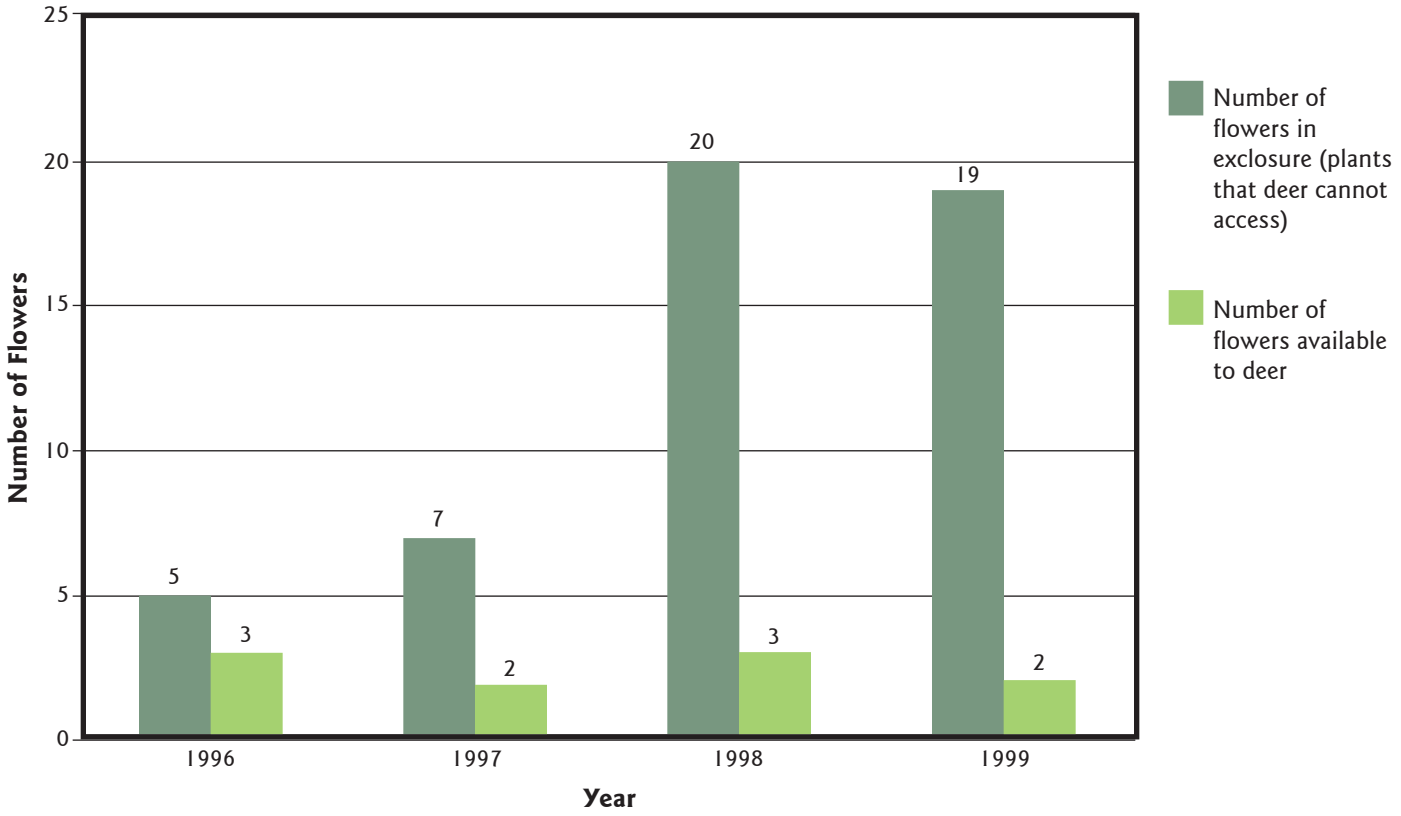
When walking in our forests today, observe how many woodlands differ from a well-balanced ecosystem. You see a few young tree seedlings and the larger trees have been browsed below three feet, leaving the lower forest layers nearly bare. You will likely find few, if any, trillium and other native wildflowers. In their place is an abundance of garlic mustard and other invasive, exotic plants.

This situation reflects the impact of large deer populations on the forest as understood by scientific studies. Scientists consider trillium an indicator species for white-tailed deer impacts since it is a preferred food that fails to flower when browsed by deer. If the deer eats a trillium flower, the plant won't grow another that year. If the plant is repeatedly browsed by deer year after year, it cannot store enough energy to produce flowers and reproduce.

Discuss the graph with your team. Decide what you think the graph is telling you and write down your description. You will then report your findings to the rest of the class.

Trillium Flowers 1996-1999

The difference in proportion of flowers available to deer vs. those unavailable was not significant in 1996, but is significant in 1999.



What conclusion do you draw from the graph?