

Names of Group Members: \_\_\_\_\_

## Thanksgiving Then and Now, an Energy Comparison

**Objective:** In this activity you will decide whether the Thanksgiving feast shared by Pilgrims and Wampanoag Indians in 1621 had a larger or a smaller impact on the environment than a Thanksgiving dinner has today.

**Background:** An 'ecological footprint' is a measure of how much nature we use compared to how much is available. It describes the relationship between the assets of a region – its productive forests, pastures, fisheries, croplands, built-up land, and energy – and the demands on those assets. Scientists measure ecological footprint to determine whether the use of natural resources and the generation of waste are putting stress on an environment. If resources are not renewed as quickly as they're used, the environment can't recover.

**Your Assignment:** Work in small groups and use the questions below to guide your thinking. Then discuss the environmental impact of each meal and form an educated opinion.

### Guided Questions:

1. Plimoth Plantation had fewer than 100 English settlers in 1621. The Wampanoag had a number of small villages in the area, but there was a lot of forest surrounding them. Do you think it was easy or hard to find enough deer, duck, wild turkey and other game meat to feed people in 1621?
2. Plimoth Plantation grew into the modern-day town of Plymouth, Massachusetts. In 2010 the human population was 56,468. About one-third of the forested areas used by English settlers and Wampanoag in the seventeenth century is gone. Do you think the forest around Plymouth, Massachusetts provide enough game meat for the 56,000 people who live in the area?
3. Farmers today can increase the amount of food they harvest by using chemical pesticides and fertilizers. Fossil fuels are used to manufacture these chemicals.
  - a. What is a 'fossil' fuel?
  - b. Where does the energy stored in fossil fuels come from?
  - c. Are fossil fuels renewed as quickly as they are used?
4. What impact does the packaging and transportation of food have on the environment?