

Activity 1: Feeding yourself for a year

From "Introduction to the Ecological Footprint," a lesson from Creative Change Educational Solutions,
<http://www.creativechange.net>

Imagine that for one year, you will be responsible for growing all of your own food on your own self-contained farm. You will grow all the vegetables you eat, grow all your grains (such as rice or wheat for bread), catch all the fish you eat, and raise animals if you want meat. (You also have to grow whatever the animals eat, or have enough pasture land for them to graze). Finally, you need space to store the food, prepare it, and deal with all the wastes you produce over a year.

How much land would your farm take up? How much cropland would you need to grow everything? What about pasture land? How much water would you need, and where would it come from?

You also need to build your own shelter. On your farm, you have to grow all the trees (or other materials) you need for that. If you are in a climate with a cold winter, you also need enough firewood to stay warm. How many trees do you think you would need? What other materials would you need? How many acres would it take to provide all of that? (Note: An acre is the size of a football field.)

In this activity, you will create a map of your farm and try to estimate how much land it would take up.

Directions

1. Draw map that shows the layout of your self-contained farm, including your shelter.
 - Create a scale that shows how big the overall farm would be.
 - On the map, show areas of different types of land you will need, such as cropland, pasture lands for grazing animals, oceans and rivers for fish, forests for wood, and land with buildings on it.
 - Include a table or list of how many acres you'll need of each kind of land. This will only be an estimate.
2. Then, write an explanation of how you developed your response.
 - How did you calculate the amount of food you would consume?
 - How did you decide how much land it would take to grow it?
 - What other questions did you consider?
3. If you had trouble developing a response, tell why.