

## Ecology Web Quest

### FOOD WEBS

Go to [http://www.harcourtschool.com/activity/food/food\\_menu.html](http://www.harcourtschool.com/activity/food/food_menu.html) and choose one of the three food webs. Put the food web together!

_____ – are living things that need producers to be their food (animals and people)
_____ – living things which take the non living matter from the environment (plants)
_____ – living things which feed off of dead plants and animals (bacteria, fungi)

Using the information in the table above answer the following questions about your food chain:

1. Name a **consumer** in your food web \_\_\_\_\_
2. Name a **producer** in your food web \_\_\_\_\_
3. Name a **decomposer** in your food web \_\_\_\_\_

### RELATIONSHIPS

Use the resources in your ISN to complete the following:

1. List the three types of symbiotic relationships:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
2. Give an example from nature of each of these types of relationships, and explain how each fits that relationship:
  - a. \_\_\_\_\_  
\_\_\_\_\_
  - b. \_\_\_\_\_  
\_\_\_\_\_
  - c. \_\_\_\_\_  
\_\_\_\_\_

### POPULATION – Part 1

Go to [http://www.geography4kids.com/files/land\\_population.html](http://www.geography4kids.com/files/land_population.html) and answer the following questions:

1. What is population?  
\_\_\_\_\_  
\_\_\_\_\_
2. Two things that increase a population
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
3. Two things that decrease a population:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_

## **POPULATION – Part 2**

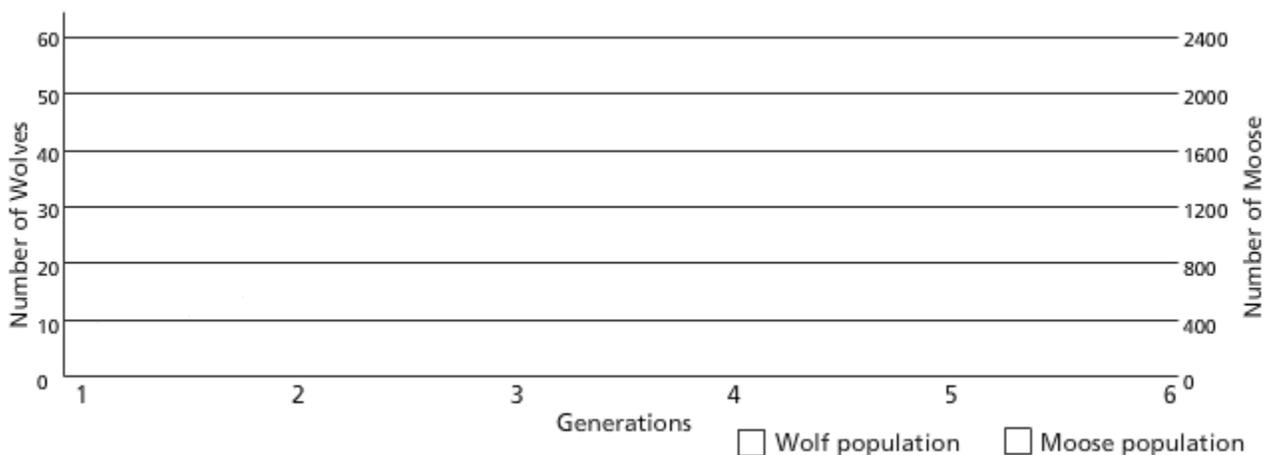
Go to: <http://www.nhptv.org/natureworks/nwep12.htm>

1. Read the paragraph about populations, then click on “limiting factors”.
2. List three abiotic things that would limit a population size:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
3. List three biotic things that would limit a population size:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
4. How can human impact affect population size?
  
5. How can predator-prey relationships affect population size?

## **PREDATION – PREDATOR/PREY SIMULATION**

Go to [http://www.phschool.com/atschool/phbio/active\\_art/predator\\_pre\\_simulation/](http://www.phschool.com/atschool/phbio/active_art/predator_pre_simulation/)

1. Read the Tutorial.
2. Complete the graph:



3. Explain the reason the moose and wolf populations change over the generations.

Go to <http://www.eduweb.com/portfolio/studyworks/predators8a.html>

4. Read the rules of the simulation. Run the simulation.
5. Explain what happens to both the hare and lynx populations as the years advance.
  
6. Click Change Assumptions. Run the simulation again and explain how changing the factors affects the simulation.