Name	Date	

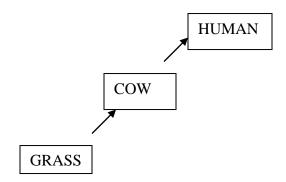
Cat Drop

BACKGROUND

In the early 1950's, the Dayek *people* in Borneo suffered from malaria. The World Health Organization (WHO) had a solution; they sprayed large amounts of DDT to kill the *mosquitoes* which caused the disease. The mosquitoes died and all was well... so far. Then the side effects began. First, *thatch* roofs of people's houses began to cave in. It seemed that the DDT was also killing a *parasitic wasp* that had previously controlled thatch-eating *caterpillars*. Worse still, the DDT-poisoned insects were eaten by *geckos*, which were eaten by their predator, the *cat*. The cats started to die, the *rats* flourished, and the people were threatened by outbreaks of sylvatic plague and typhus, which are carried by rats. To cope with the problems, which WHO had created, they were obliged to parachute live cats into Borneo!

FOOD WEB REMINDERS!

<u>Food webs</u> are a way to illustrate the flow of energy (food) through an ecosystem, as well as the predator/prey interactions between populations in a community. It is composed of two or more FOOD CHAINS linked together. The following is an example of a food chain:



RULES OF CHAIN/WEB

- 1. Write the name of each organism only once.
- 2. The web/chain should always start with a producer (like grass/trees/etc.)
- 3. The web/chain should always end with a consumer (like a human, etc.)
- 4. The arrows in the diagram point from the organism being eaten (prey) to the organism doing the eating (predator).

ACTIVITY

1. The organisms involved in this exercise are in **bold**. List the organisms below, indicating what they eat. I've done the first two for you.

Organism	All foods in passage
Human	Nothing involved
Rats	Humans (indirectly, diseases)

2. Use the information above to draw a food web diagram showing the interactions between the organisms involved. Remember to use the rules on the previous page to assist you!

3. Refer to your food web to explain what happened when the WHO sprayed DDT to control the mosquitoes. (I want the WHOLE domino effect!)

4. Based on this example, why is it important for us to study and understand ecology?