

THE BEAN GAME

Adapted by Melissa Kaplan, 1992

MATERIALS Selection of different colored beans, including white beans.

DIRECTIONS FOR PLAY

1. Divide group into Mice, Snakes, and Eagles in a 10:4:1 ration (a group of 30 would be allocated as 20 mice, 8 snakes and 2 eagles). Discuss the importance of all parts of the food chain, including the plants that animals eat.
2. Announce "Mice are hungry!" Instruct each mouse to select 4-6 beans from the bean supply. Allow the mice to enjoy their selection and mealtime. Beans should be held in a closed fist ("tummy").
3. Inform mice of bad news: the white beans are contaminated. The farmer who planted the crop used a pesticide that accumulates and stays in the plants. The good news: it takes four white beans to kill a mouse. Survivors stay with the group; the dead mice must sit down or move to the side.
4. Announce "Snakes are hungry!" Instruct each snake to eat 2 mice. As each snake "eats" a mouse, it must take the beans from the mouse. Each snake will accumulate the beans of the two mice.
5. Inform snakes of the bad news: the pesticide accumulates and stays in the mice and is passed on to the snakes. More bad news: research shows four white beans will also kill a snake. Survivors remain; the dead snakes join the dead mice.
6. Announce "Eagles are hungry!" Instruct each eagle to eat two snakes. Each eagle must take all the beans from each snake.
7. Inform eagles of bad news: pesticide accumulates and stays in snakes. Unfortunately, four white beans will also kill snakes. Count survivors.

Questions for Follow-up Discussions

Can animals tell when food is unsafe to eat? If yes, when? If no, why not?

Sometimes pollution is invisible. Can you explain why?

Do you know of anything that makes people ill which takes a long time to accumulate? (Smog, smoking, radon, radiation, trash in landfills, groundwater, etc.)

What does accumulation mean? How does it happen?

Has anything like this ever happened before? (DDT, furins)

What does this game tell us about the role of people in wildlife conservation?

Were there enough snakes for the eagles to eat? If some animals die of poisoning, what will happen to the animals that still survive?