

INSTINCTS FOR SURVIVAL

OVERVIEW: Nature maintains a balance in order to maximize survival of the population not just the individual. We will look at this delicate balance and how natural phenomenon and human impacts can disrupt this dynamic equilibrium.

PRINCIPLES:

- Discuss strategies (adaptations) that the forest creatures have developed for survival.
- Understand the interdependence of the food web in the forest, relate the experience they had to the predator and prey relationship that happens in the forest, and have basic understanding of population dynamics
- Understand how the actions of humans impact the forest, and will be able to make suggestions of how people (including themselves) can better take care of the forest.

VOCABULARY: predator, prey, poaching, stalking, herbivore, omnivore, carnivore, trophic level, niche, habitat, adaptation, carrying capacity, strategies, interdependence, food web, food pyramid, human impact, survival mechanism

OUTLINE :

I. Introduction

Review the 3 respects (Yourself, others, your environment)

Ask: What do animals need to survive? What do they eat? What are animals that only eat plants? And examples? Meat? And examples? Both? And examples? What do the words predator and prey mean? What is their relationship?

Explain the expectations of each animal group – how to find water and food and life bands.

II. Rules of the game

Highly suggested rule: **No Running.** Define running – at any point you have 2 feet off the ground. Define walking – at any speed always having one foot on the ground.

- 1.) Count heads! Know how many folks are playing.
- 2.) Start the discussion by asking “what does every animal need in order to survive? (Food, water, shelter, habitat-space to live). Introduce vocabulary.
- 3.) Explain how the game works:
 - a.) Divide the students by handing out colored bands to represent Carnivores, Omnivores, and herbivores. In a group of 30 consider the ratio of 2 carnivores, 6 omnivores, 22 herbivores. Or in a group of 15 – 1 very active carnivore, 3 omnis, 11 herbs.
 - b.) Explain Boundaries – the Lake, the top of the ridges, and the tapped boundary in the back. If they cross a line – they are out of the game.
 - c.) Explain Game Signals – How they know the game is over and to come back to you – some like the wolf call others a whistle.
 - d.) Explain the plants / water cards – that everyone needs to find at least 2 waters and many need to find a number of plants to live. That they will use hole punches to denote each of the different plants and waters on the course. One cannot use the same water or plant more than once. **Prey are not safe while collecting plants and water.**
 - e.) Explain life bands. If they run out of life bands – aka rubber bands – their animal didn’t survive and they should sit by you in a central location. Not to worry – that you might have special tasks for those that didn’t survive.

- f.) To Survive, each animal must.
- Carnivore – starts w/ 1 life band - needs 9 and 2 waters in the end
 - Omnivore – starts w/ 4 life bands – need 9 bands, 2 plants and 2 waters in the end
 - Herbivore – get 9 life bands – need 1 band, 4 plants and 2 waters in the end
- Carnivores can tag everyone except carnivores and drink water
 Omnivores tag herbivores and eat plants and drink water
 Herbivores don't tag anyone, but eat plants and drink water
- g.) Once the round is over, discuss the results of the role-play.
- h.) Have students determine the proper ratio of carnivore/omnivore/herbivore.
- i.) If there is time, run a 2nd simulation. I like to let the students pick what animal they would like to be. Usually that means most are carnivores and most do not survive – it makes for great de-briefing.
- j.) Discuss the new results and process the significance of the activity.

PROCESSING:

Gather the group in a circle after each simulation. Asking them questions about the experience is a good way to tie the simulation they were playing into life in the forest for animals. Start off by asking who got all the food and water? Did anyone find ways to be successful as their animal? What did you do when you had all the plants and water but were still in danger of being eaten? How many survived and did all the carnivores survive?

Is this a healthy predator/prey relationship and explain reasoning? What modifications could be made to make it more balanced? What would have happened if this ratio were to continue for many seasons? Discuss strategies animals possess to meet ration like herbivores large litters (mice and rodents), having fewer carnivore babies in a lean year., etc.

Did anyone get caught while they where getting food and water? Were there any predators hiding near the food? Any of them hunt in packs? Anyone pretend to be something they weren't (defensive techniques)? Was anyone harder to see than others? Did anyone pretend to be dead? Anyone scream?

Ways to add to the game, bring in different concepts, get a student back in the game that died, and to have more fun yourself:

Poacher (chaperones) may be used to control boundaries. They can take life bands away from any student acting outside of good behavior – or just for fun.

Make one of the water supplies polluted and deadly. How many drank from that supply?

Once students lose all their life bands –

Send them out as parasites, attaching themselves to other players, slowing them down

Send them out as diseases – collecting a life band

Send them out as forest fires, floods, construction companies, taking life bands

Send them in as veterinarians – giving life bands

Carry a water gun – shoot the students as necessary

STRESS SAFETY AND FAIR PLAY!!!!