

Quick Freeze Prairie Dogs

(based on Project WILD's Quick Frozen Critters)

Background

Predator -An animal that kills and eats another animal for food.

Prey -An animal that is killed and eaten by other animals for food.

Limiting Factors -There are many influences in the life history of any animal. When one of these (e.g., disease, climate, pollution, accidents, shortages of food or places to live) exceeds the limits of tolerance of that animal, it becomes a limiting factor. It then drastically affects the well-being of that animal. Predators are limiting factors for prey. Prey are limiting factors for predators.

Animals display a variety of behaviors in predator/prey relationships. These are adaptations.

Some prey behaviors to escape detection or capture by predators are: signaling to others, flight, posturing, scrambling for cover and even "freezing" on the spot. The kind of behavior exhibited partly depends on how close the predator is when detected by the prey. Each animal has a threshold for the threat levels. If the predator is far enough away for the prey to feel some safety, the prey may signal to others that the prey is near. If the predator comes closer the prey may try to run away. If the predator is too close to make running away feasible, the prey may attempt to scurry to a hiding place. If the predator is so close that none of these alternatives is available, the prey may freeze in place. The closer the predator comes to the prey animal, the more likely it is that the prey will "freeze" in place. This "freezing" occurs as a kind of physiological shock in the animal. (Shelter or camouflage may also make them invisible to the predator when they freeze.)

Too often, people who come upon animals quickly and see them immobile infer that the animals are unafraid when, in reality, the animals are "frozen", or, as the adage goes, "frozen stiff."

On the short grass prairie, the prairie dog town provides the ecosystem for many predator/prey relationships. Predators like coyotes, bobcats, and foxes hunt on the edges of the towns and capture prairie dogs when they leave their burrows. The badger digs deep into prairie dog burrows while weasels and black-footed ferrets enter the burrows to capture the prairie dog as prey. Hawks and eagles search and soar around prairie dog colonies in search for mice, rabbits and prairie dogs. Birds, such as the meadow lark and small rodents such as the kangaroo rat, are attracted to the towns because of higher seed or insect availability.