Endangered Species Activity

Discussion: Using the H.I.P.P.O. acronym learn why some animals have become endangered/extinct as well as test your skill at predicting which animals need to be protected before it is too late!

What happens to these animals?
> **H** - Habitat
> **I** - Introduced Species
> **P** - Pollution
> **P** - Population Growth
> **O** - Over-consumption

Habitat
Habitat is an animal's home - it must provide food, shelter, water and space. If even ONE of these things is missing, the habitat is not sufficient to support the animal(s). **Picky eaters** are related to habitat problems - the habitat may no longer supply that particular food. **Migration** makes the animal higher risk as there needs to be two complete/protected habitats. Unique or very specific habitats (**picky shelter/space**) can also be a problem.
Examples:
> Rainforest animals – tropical rainforests are one of the fastest disappearing habitats! Thousands of species that call these forests home are impacted by habitat loss.
> Blue-spotted Salamander – This Iowa salamander requires two very specific habitats to survive. One for breeding and one for residing in. Both are becoming less and less available.

Introduced Species
Species not native to an area that are introduced can cause a lot of damage and out compete natives.
Examples:
> Dodo extinction- rats were introduced to the dodo's habitat and helped in the extinction of the species.
> Zebra Mussels - carried by ships and introduced into the Great Lakes – zebra mussels are out competing many native clam species.
> Pheasant – this bird is originally from Asia. When introduced to the U.S. it competed profoundly with Iowa's native prairie chickens. This habitat competition is the main reason the prairie chicken is so rare in Iowa today.

Pollution
Indicator species (animals that showcase the overall health of their environment – their healthy presence "indicates" a healthy environment) **often live in water**, or are animals like **amphibians** which have very sensitive skin. Pesticides and herbicides run off of the land into the water and are absorbed by water dwelling species. We have all heard of oil spills, garbage in the oceans etc.
Examples:
> Bald Eagles – these raptors almost became extinct because of the presence of a pesticide called DDT. Today, they are finding that once again pollution is having an impact on our national symbol. Led is being found in the bodies of dead eagles.
> Ocean animals – our oceans are plagued by pollution. Thousands of species of ocean life are struggling in areas of polluted water.

Population Growth

Some species have **low reproductive rates** - don't lay very many eggs per year, may only have young every several years.

Example:

> California Condor – these birds don't reach reproductive maturity until they are between 5 and 8 years old. Pairs mate once every two years, and produce only one egg.
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> Giant Panda – there are only 2-3 days in an entire year that females can get pregnant. Cubs will stay with their mothers for 3 years or so. This means that on average a panda can only have 5-8 babies in their lifetime.

Over Harvesting

Many animals are over consumed, poached, or over harvested. They might have been taken for their **food** value (In the 1800's people could go shoot 500 ducks in one day. Today a hunter's limit is 6 ducks with gender and species regulations). They might have been taken for their **fashion** importance. Other reasons for consumption: **medicinal properties, superstition, exotic pets, or trophies.**

Examples:

> Whooping Cranes – these birds were harvested for their feathers to decorate high fashion hats.
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> Spotted Cats – Many of the large cats are sought after for their beautiful fur.
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> Passenger Pigeon - These birds once numbered in the billions. They nested in large groups. The pigeons were over consumed for food, they were knocked out of the trees as the roosted at night and shot from the air - hundreds were harvested at a time. Back then pigeon was more common in restaurants than chicken!
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> Elephants and Rhinos – Over harvested for their ivory tusks.

Now test your skills! HIPPO Activity sheet.

Read the different species descriptions on either the imaginary animals, the Iowa animals, or both.
Draw a table and place X's on it to mark areas of concern. Use the bold words above as clues. The animal with the most X's is the one that is of most concern! There is one animal on each sheet that is very much IN DANGER!!!

Imaginary Animal Answer Key

	Rough-Bellied Bean Bean	Zorgan	Crested Crabbit	Green Goor
H			X (picky eater) X (picky nesting) X (migrates)	X (cluster hibernation)
I				X
P				X (pollution sensitive eggs)
P		X (mates for life) X (1 baby a year)	X (2 eggs/2 yr)	
O	X (social groups)	X (beautiful fur)	X (feather crest) X (huge flocks)	

Iowa Animal Answer Key

Indiana Bat=Federally Endangered ~ Piping Plover=State Endangered ~ Mudpuppy=State Threatened ~ Mink=Least Concern

	Mudpuppy	Piping Plover	Indiana Bat	American Mink
H	X (disturbance)	X (picky habitat) X (migrates) X (picky feeding)	X (picky habitat) X (migrates) X (hibernates in groups	
I			X (invasive fungus)	X
P	X (pollution sensitive)			
P			X (1 per yr.)	
O				X (soft fur)

H				
I				
P				
P				
O				