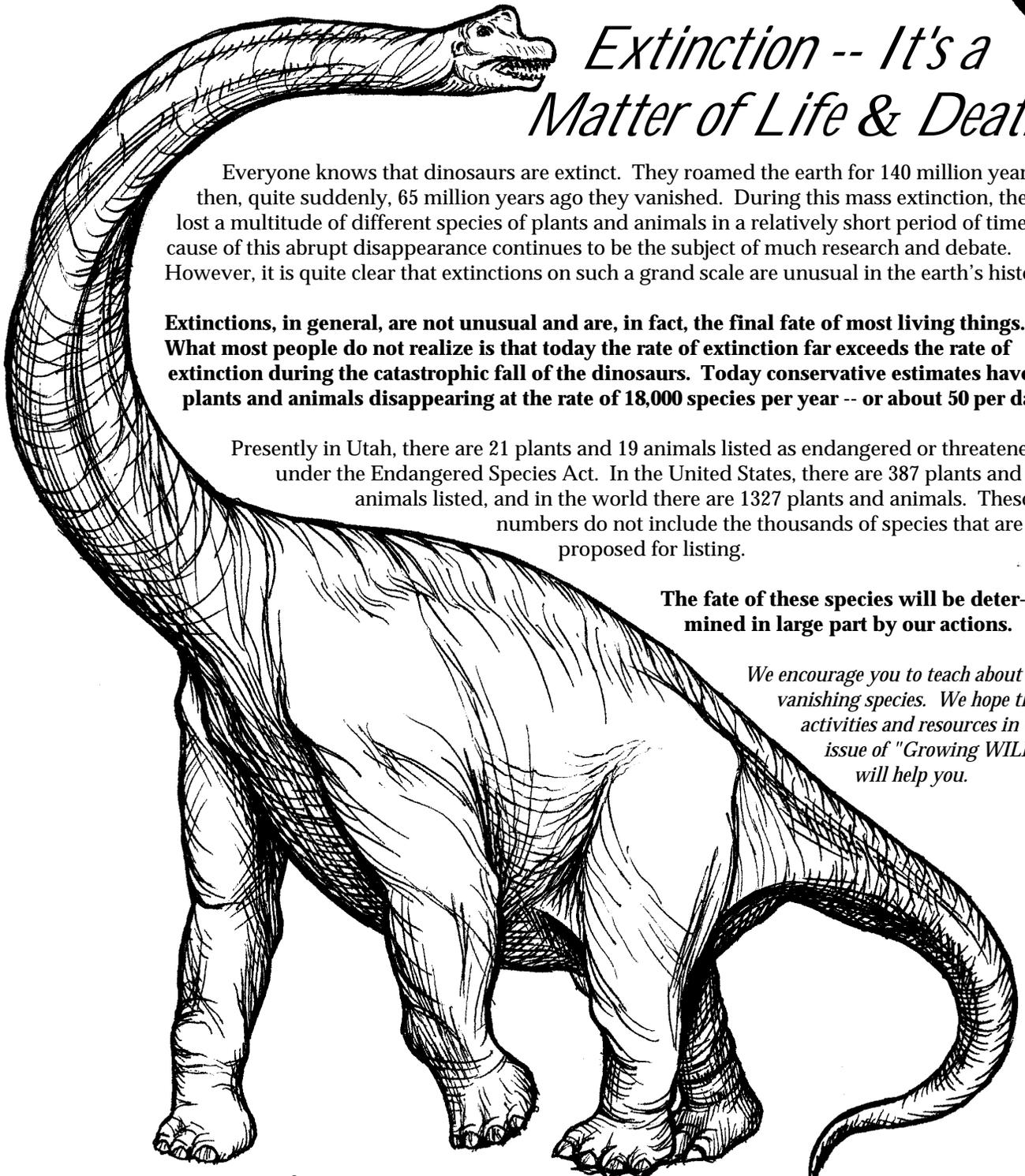

Growing WILD

Winter 1994

Utah's Project WILD Newsletter



Extinction -- It's a Matter of Life & Death!

Everyone knows that dinosaurs are extinct. They roamed the earth for 140 million years; then, quite suddenly, 65 million years ago they vanished. During this mass extinction, the earth lost a multitude of different species of plants and animals in a relatively short period of time. The cause of this abrupt disappearance continues to be the subject of much research and debate. However, it is quite clear that extinctions on such a grand scale are unusual in the earth's history.

Extinctions, in general, are not unusual and are, in fact, the final fate of most living things. What most people do not realize is that today the rate of extinction far exceeds the rate of extinction during the catastrophic fall of the dinosaurs. Today conservative estimates have plants and animals disappearing at the rate of 18,000 species per year -- or about 50 per day!

Presently in Utah, there are 21 plants and 19 animals listed as endangered or threatened under the Endangered Species Act. In the United States, there are 387 plants and 409 animals listed, and in the world there are 1327 plants and animals. These numbers do not include the thousands of species that are proposed for listing.

The fate of these species will be determined in large part by our actions.

We encourage you to teach about vanishing species. We hope the activities and resources in this issue of "Growing WILD" will help you.

Brachiosaurus

Endangered Means There's Still Time!

Extinction means that organisms are lost forever. Sometimes you might hear that a species is **extirpated**. That means that the plant or animal is no longer found in a particular part of its historic range. For example, the grizzly bear has been extirpated from Utah since 1923. **Endangered** means that an organism will become extinct if it is not protected. **Threatened** means that a species is at risk for becoming endangered. Before we can take action to save organisms, we need to understand the major threats to plants and animals. These include:

- **Habitat loss due to human activities.**
- **Introduction of exotic species.**
- **Illegal and excessive wildlife trade.**
- **Pollution of air, water and soil.**

For more information on these threats, check out the "Endangered Species Resource File" described on page 13.



Spotted owl

What's in Danger in Utah?

Plants	Autumn buttercup	E
	Barneby reed-mustard	E
	Barneby ridge-cress	E
	Clay reed-mustard	T
	Clay phacelia	E
	Dwarf bear poppy	E
	Heliotrope milk-vetch	T
	Jones cycladenia	T
	Kodachrome bladderpod	E
	Last Chance townsendia	T
	Maguire daisy	E
	Maguire primrose	T
	Navajo sedge	T
	San Rafael cactus	E
	Shrubby reed-mustard	E
	Siler cactus	E
	Uinta Basin hookless cactus	T
	Ute Ladies'-tresses	T
Welsh's milkweed	T	
Winkler cactus (proposed)	E	
Wright fishhook cactus	E	
Mammals	Black-footed ferret	E
	Utah prairie dog	T
Birds	American peregrine falcon	E
	Arctic peregrine falcon	T
	Bald eagle	E
	Southwestern willow flycatcher (proposed)	E
	Whooping crane	E
	Mexican spotted owl	T
Fish	Bonytail chub	E
	Colorado squawfish	E
	Humpback chub	E
	Lahontan cutthroat trout	T
	June sucker	E
	Virgin River chub	E
	Woundfin	E
Razorback sucker	E	
Reptiles	Desert tortoise	T
Snails	Kanab ambersnail	E
	Utah valvata snail	E

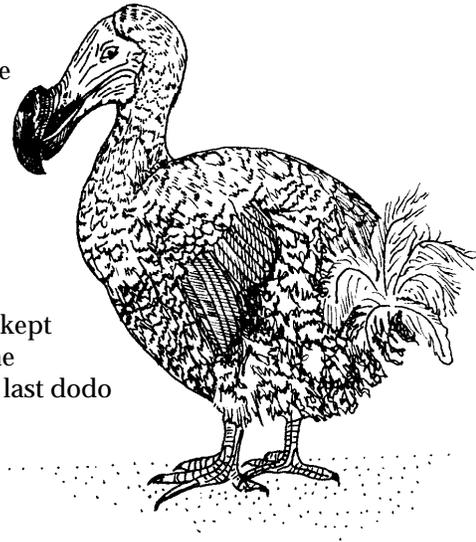
October 1993 (E) Endangered; (T) Threatened

The four case histories below are presented as a body of evidence. Each paragraph tells the story of an animal that has become extinct within the last 300 years. Read each paragraph, then answer the questions that follow.

Animals You'll Never See

Dodo

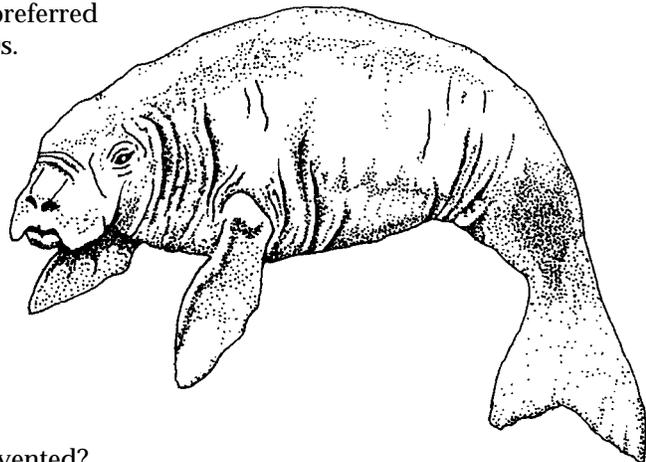
Seventeenth century journals of sailors describe this strange bird that lived on the island of Mauritius in the Indian Ocean. It was bigger than a turkey and had short yellow legs. It could not swim or fly and dragged its plump belly on the ground when it jogged. Irresistibly easy prey, most of the world's dodos were eaten by sailors and settlers and the animals they introduced to the island, including pigs, monkeys, dogs and rats. A few were brought back alive to Europe and presented to royalty. Some of them were even kept as pets. But no one thought of trying to breed them, and the captive birds died off without hatching a single chick. The last dodo died in 1681 -- driven to extinction in just 174 years.



1. What was the main cause of extinction?
2. How do you think it could have been prevented?

Steller's Sea Cow

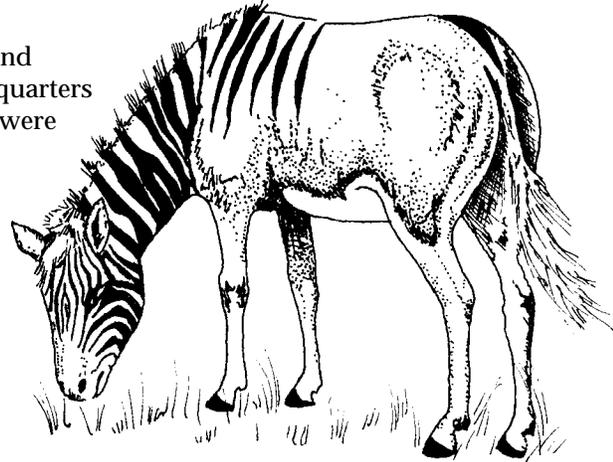
This was the only manatee ever found in northern waters. Thirty feet long, the front half resembled a seal, while the back looked like a whale. They grazed in the shallows along Siberia's Kamchatka Peninsula and the islands of the Bering Sea. Weighing 4 tons and being easy to catch, they were the preferred meat of sailors hunting sea otters in the 1700s. These enormous creatures made themselves even more vulnerable by their loyalty to one another. When one of them was hooked, the others tried to save it by forming a closed circle around its body or attempting to upset the boat. Sometimes they succeeded, but more often they only became victims themselves. Already rare, their birth rate was too low to make up for severe losses. By 1768, they were extinct.



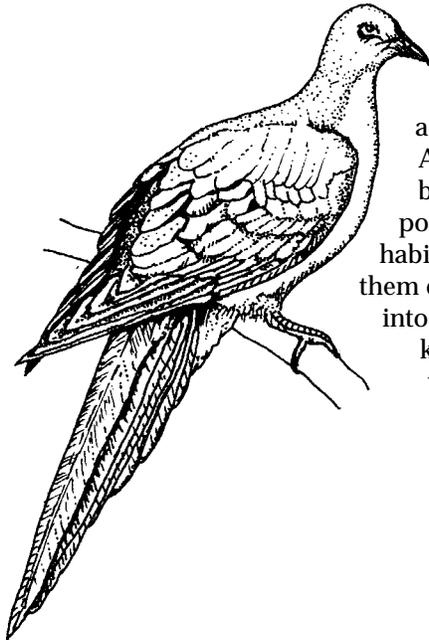
1. What was the main cause of extinction?
2. How do you think it could have been prevented?

Quagga

This animal used to live in South Africa. Its head and shoulders were striped like a zebra, while its hind quarters were reddish brown, and its legs white. They first were shot by the Dutch settlers and their African born descendants, the Boers. For almost 200 years, the Boers fed their African slaves Quagga meat and used the hides for shoes and for sacks in which to store grain. Hunts were not limited, and quaggas were rounded up by the thousands and killed. In 1870, the last one to be seen in the wild was shot. The only known attempt at captive breeding came too late.



1. What was the main cause of extinction?
2. How do you think it could have been prevented?



Passenger Pigeon

In the 1800s, this was the most abundant bird on earth. They accounted for nearly 40% of the entire bird population of North America. Skies were darkened by mammoth flocks estimated between 1 and 2 billion migrating passenger pigeons. As human populations increased, forests were cut down, and their breeding habitats were disrupted. But it was relentless slaughter that wiped them out in only 50 years. People killed pigeons in flight by shooting into the dense flocks as they passed overhead. Sometimes they even knocked them out of the air with oars, poles, shingles and other weapons. They were killed for sport and for food -- for both people and livestock. In 1914, the last passenger pigeon died in the Cincinnati Zoo. She had outlived her wild relatives by almost a decade.

1. What was the main cause of extinction?
2. How do you think it could have been prevented?

How do the stories make you feel?
Where must the principle blame for today's mass extinction fall?
What can you do to help protect animals and plants that are in danger of extinction today?

Once an animal or plant is extinct, there's nothing we can do about it. But "endangered" means there's still time. Today some people are trying to help animals recover from the brink of extinction. Here are just a few species that people are concerned about losing -- **and working hard to save!**

Draw a **helping hand** from each animal name to its corresponding picture.

African elephant

Whooping crane

Black-footed ferret

Birdwing butterfly

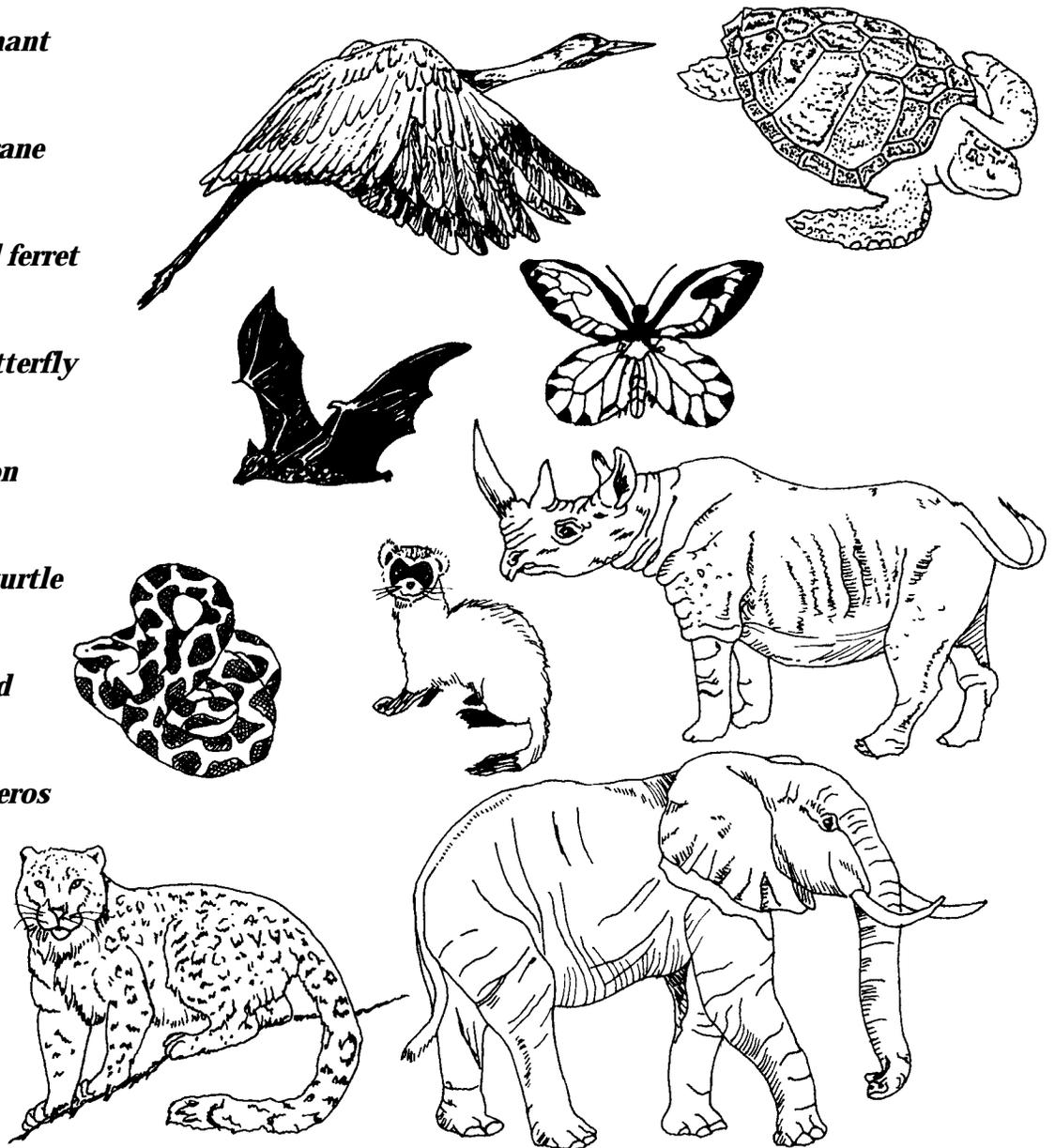
Indian python

Loggerhead turtle

Snow leopard

Black rhinoceros

Flying fox



Ask your students to listen carefully as you read this story to them:

Imagine you are traveling back in time -- further back than you have ever imagined going before. You are traveling back to a time long before there were people on earth, before the great dinosaurs, before there were birds or flowers. You are traveling back 300 million years.

It is early morning of a hot summer day. You are sitting at the edge of a large shallow pond. Your bare feet are swinging in the water. It smells damp and green. Strange-looking plants are growing all around you. As you study them, you realize they look a lot like the snake grass and ferns you've seen back home, only they are huge -- as big as trees! The air seems completely still, without the noise of humans and their machines, or even bird song for that matter. As you look down into the pond, you are startled by a ferocious-looking, six-legged creature crawling out of the water. It is about a foot long. You are very quiet as you watch it climb up a plant stem. For half an hour, it clings there, not moving. Then a bulge appears behind the creature's head. The bulge grows bigger and bigger, until at last, the hard skin of the creature's back splits open. Slowly a new creature struggles out. Soft and pale, with damp, crumpled-up wings and bulging eyes, it rests quietly next to its old empty skin. Soon the wings open, spread out and begin to dry -- and, with a start, you realize you've seen it before. It's a **dragonfly!** Only, like the plants, it's much bigger than you'd ever imagined possible. Its wings are almost three feet across.

It is the biggest insect the world has ever seen. Suddenly, you duck your head, as the dragonfly sails off on rigid wings. The wind from its wings ruffles your hair. You have witnessed the maiden flight of one of earth's first dragonflies -- the ancestor of all dragonflies on earth today.



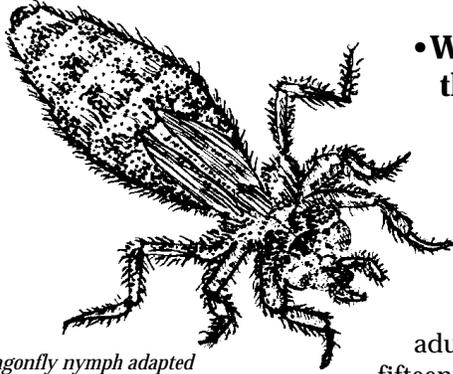
Suddenly you feel yourself being drawn forward through time. You haven't moved, but time is speeding up all around you. Things are changing faster and faster. You get so dizzy you feel you must close your eyes. Then, all is still. Slowly you open your eyes.

It is now 180 million years ago. What you see nearly makes your heart stop, and you hold your breath. There, drinking on the far side of the pond is a dinosaur! It stands up and seems to look right at you. It has a long tail. It stands on large hind legs and has tiny hand-like front legs. It has a strange-looking crest arching back from the top of its head. It seems not to notice you. Slowly you let out your breath as it moves back into the vegetation surrounding the pond. As it

moves away, you can hear it chewing on plants. As you gradually relax in the warmth of the sun, you begin to notice the familiar clacking and humming of insects. It is then that you see the dragonflies. They are everywhere -- hovering over the water and the bank of the pond. The sunlight off the water catches their bright colors and they flash like jewels. They look almost like the dragonflies you've seen around the pond near home, and suddenly you wish you were back. *No sooner do you wish it, than you can sense time speeding up once more.*

You close your eyes tightly against the onslaught of change. Soon you sense you are back, even before you open your eyes. Yes, this is the pond near your home as you have always known it. You recognize all the trees this time, and notice that flowers are blooming. You smile when you see a little patch of snake grass at your feet. You hear once again the familiar buzz and hum of insects -- now mingled with the sound of cars and lawnmowers. Human noises. You hear the buzz of a dragonfly before you see it. It hovers, then lands on a blade of grass right in front of you. Dragonflies have never looked so beautiful to you as this one does. It has a metallic blue body and large black eyes. It seems to stare at you. Suddenly, you think how strange and new you must look to this creature whose kind has seen so much. As you slowly walk home, you wonder what future changes dragonflies might witness.

Discussion Questions



dragonfly nymph adapted for muddy and still water

- What was the “ferocious-looking, six-legged creature” that crawled out of the water? What happened to it?

Background Information: Dragonfly young are fully aquatic and are called nymphs. They breathe through gills and look very different from the adults. The flying adults live only a few weeks or months (depending on the species). Before they die, they mate and lay eggs. From these eggs hatch tiny nymphs. It takes about two years for most dragonfly nymphs to turn into adults. During this time, they molt (shed their too-tight skin) ten to fifteen times.

- Why have some animals, like dragonflies, turtles and crocodiles survived through time, while others, like dinosaurs and the saber-toothed cat, have not?

Background Information: Usually it is because they have general, rather than specific, habitat requirements. The dragonfly is a good example of this. To live, dragonflies require:

Food

As predators that eat many kinds of insects, they are not likely to run out of food. They eat midges, gnats, flies, bees, butterflies, moths and even other dragonflies. If one kind of insect dies out or disappears, they can always find plenty of others to eat.

Water

Fresh water is essential, since they spend most of their lives in the aquatic form. However, ponds, streams, deep puddles and even fountains can suffice. The eggs can even survive drought, until there’s enough water for them to hatch. The nymphs have gills for breathing; but if there’s not enough oxygen in the water, they can climb up a stem and breathe in the air.

Shelter

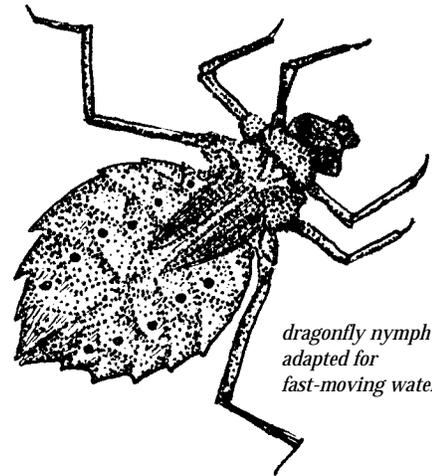
Adults seek shelter in bushes at night. They need warmth to be able to move. However, their eggs and nymphs can withstand near freezing temperatures. Nymphs find shelter in all kinds of watery environments. In waterfalls or fast-flowing water, nymphs are shaped for holding on tight so they won’t be swept away, and nymphs living in still or slow-moving water have hairy bodies that keep them from sinking too deep in the mud.

Space

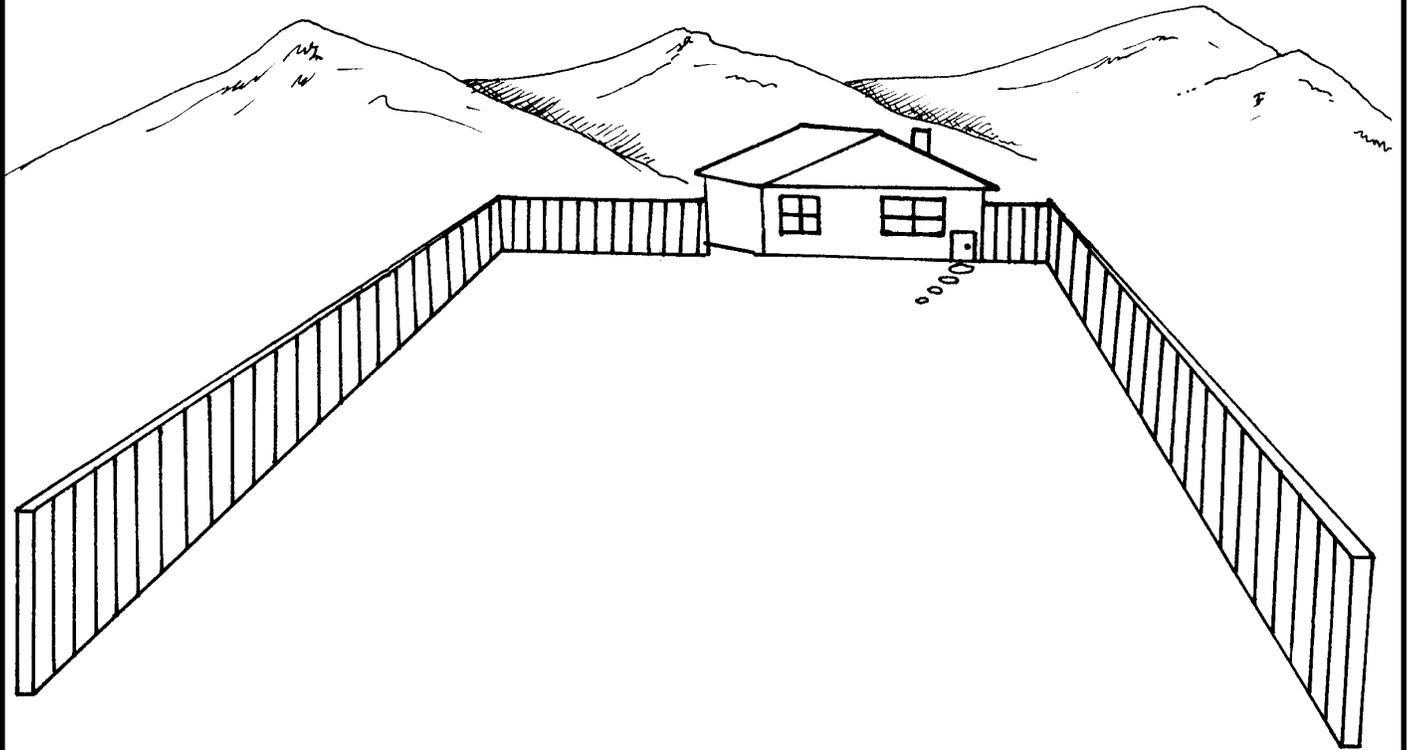
Being small animals, they require relatively little space. Despite encroaching human activities that have crowded out larger animals, dragonflies have prevailed.

- Will there always be places for dragonflies?

Background Information: Dragonflies have become scarce and have even disappeared from some areas where the water has been polluted or where marshes and swamps have been filled in. Like all animals, dragonflies can only survive if they have suitable places to live.



dragonfly nymph adapted for fast-moving water



How could you attract dragonflies into this yard? Remember, they need clean, fresh water and a variety of insects (which are best attracted by a variety of plants). Draw in the habitat requirements, then add the dragonflies. Try to include nymphs and eggs as well as adults.

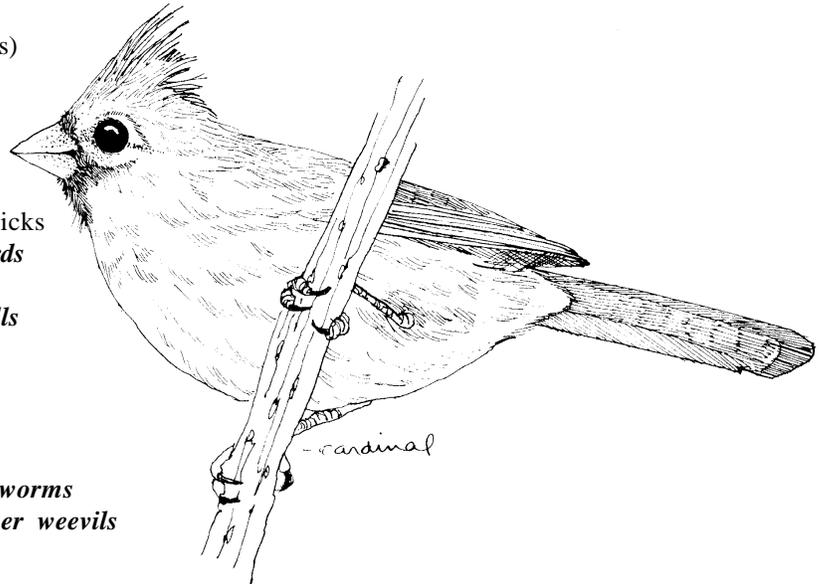
Objectives: Students discover natural selection by examining the relationship between bird beaks and preferred food types.

Method: In this simulation, students imitate birds, gather different kinds of food items, and record and analyze data. (*Skills developed in this activity include: recording, organization and analysis of data; basic computation including addition and averaging; observation; and inference.*)

Materials: (for a group of 20 students)
•paper cups (1 for each student)

For Bird Beaks:

- spoons (4) for *spoonbills*
- tongue depressors or popsicle sticks (4 pairs) for *chopstick birds*
- scissors (4 pairs) for *scissorbills*
- tweezers (4 pairs) for *tweezerbills*
- clothespins -- spring type (4) for *clothespin birds*



For Food Items:

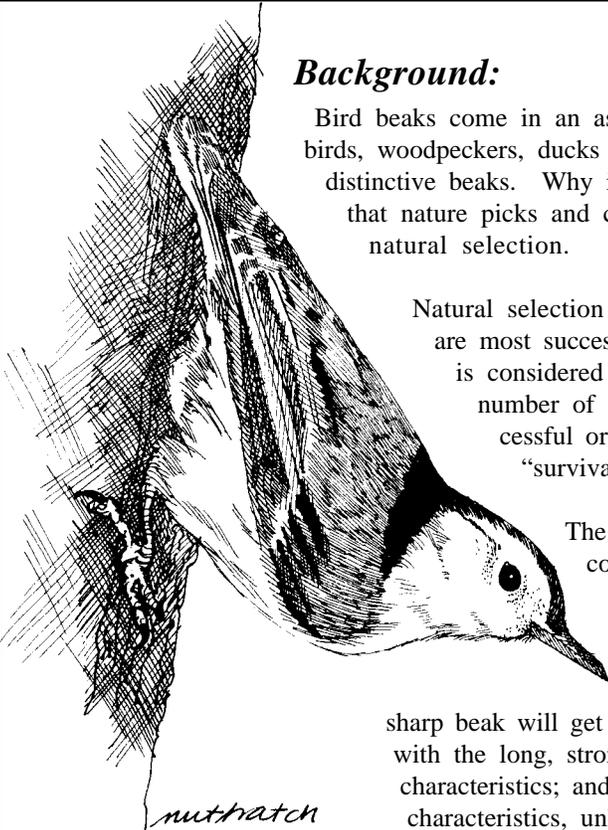
- round toothpicks (400) for *stickworms*
- 1/4 inch washers (300) for *washer weevils*
- marbles (300) for *marble beetles*

Procedure:

1. Each student is given a cup to be used as a stomach in which to store food items.
2. Each student is given one type of bird beak to be used to pick up food items.
3. When the teacher gives the signal, each bird must pick up food items using its beak and drop the food items into its stomach. (*Food items may not be scooped or thrown into the stomach. The stomach must be held upright.*)
4. The teacher distributes one type of food item onto the floor and gives the signal to start eating. At the signal to stop eating, all birds stand up at once.
5. Each bird counts the number of food items in its stomach and records it on a data sheet.
6. Birds with the same beak type now meet together, determine the average number of food items gathered and record it on their data sheets.
7. As a class, the students discuss and analyze the data collected. (Students report averages for each bird.)
8. The students repeat the activity, testing each remaining food item and recording the data.
9. The students discuss and analyze the additional data collected, using results of the previous tests for comparative purposes.
10. *Extensions:*
 - Distribute all three food items at once. Birds are free to select whichever food items they prefer. Students record and discuss data.
 - Use the activity "That's the Beaks!" on page 12 to reinforce the concepts taught in the simulation. (*Answers to the matching activity: 1. bald eagle, 2. pelican, 3. skimmer, 4. woodpecker, 5. evening grosbeak, 6. Wilson's snipe, 7. American avocet, 8. hummingbird, 9. crossbill, 10. mallard, 11. merganser, 12. poorwill, 13. great blue heron*)

"Competitive Interaction" materials for thirty students are available for check-out from the Salt Lake Project WILD office (801-538-4719).
Kit includes laminated photographs of birds with different types of beaks.

"Competitive Interaction" was developed by Charles Schneebeck (1982) and was presented at Audubon Camp of the West, Dubois, WY.



Background:

Bird beaks come in an astonishing assortment of shapes and sizes. Pelicans, hummingbirds, woodpeckers, ducks and cardinals are just a few of the many birds that have distinctive beaks. Why is there such diversity in beak “styles”? Most scientists believe that nature picks and chooses all these different beaks through a process called natural selection.

Natural selection means nature selects for survival the animals and plants that are most successful. How is success measured in the wild world? An animal is considered successful when it produces fertile offspring. The greater number of fertile offspring an animal or plant produces, the more successful or “fit” the organism. That is where we get the expression “survival of the fittest.”

The great diversity of bird beaks can be used to demonstrate the concept of natural selection. If a bird can secure a reliable food supply, it will be more likely to reproduce than a bird that can't find enough food. For example, if the only food available to birds is a colony of insects buried deep in the trunk of a tree, you can see that a bird with a long, strong, sharp beak will get more to eat than a bird with a short, blunt beak. The bird with the long, strong, sharp beak will live to reproduce, passing on its genetic characteristics; and the bird with the short, blunt beak will not live to pass on its characteristics, unless it can find some other food.

In this simulation, the students discover how nature selects bird beaks. After completing the activity, students can also discuss the ecological concepts of biodiversity, generalists, specialists, and introduction of exotic (non-native) species.

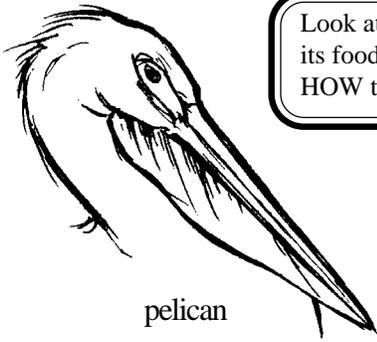
Discussion:

1. What did the spoonbills eat? What would happen to the spoonbills if there were no marble beetles?
2. In an ecosystem full of stickworms, what kind of birds would you expect to find?
3. If all the marble beetles died without reproducing, which birds would be likely not to reproduce?
4. An ecosystem is said to be “healthy” when it can support the greatest variety of species. This type of ecosystem is called diverse by ecologists. We often hear this concept described by the word biodiversity. Name some diverse ecosystems. Name some simple ecosystems.
5. What happens to an animal when it loses its food source? It will either change foods or it will die. Those animals that can live on a wide variety of foods under a wide variety of conditions are called generalists. Those animals that can live in only one place and eat only one or two foods are called specialists. In the simulation, which animals are generalists? Which are specialists? Which animal, a generalist or specialist, is more likely to be threatened by extinction? Name some animals that are generalists and specialists.
6. In diverse ecosystems, many animals can live successfully because no single animal is able to eat all of the different kinds of foods. What would happen to all the native animals if a foreign animal (“exotic”) were introduced that could eat most of the food? Can you give an example of this? What would happen if an exotic animal were introduced into a diverse ecosystem where there were no natural predators to control its numbers? Can you give an example of this?

Data Collection Sheet

Birds	Number of Individual Food Items Collected			Three Food Items Available at Same Time (Identify food and record number collected)
	Stickworms	Marble Beetles	Washer Weevils	
Spoonbills				
<i>group average:</i>				
Chopstick Birds				
<i>group average:</i>				
Scissorbills				
<i>group average:</i>				
Tweezerbills				
<i>group average:</i>				
Clothespin Birds				
<i>group average:</i>				

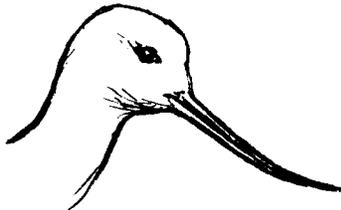
Look at the birds and beaks below and guess how each bird uses its beak to find or eat its food. Then draw a line from each bird to the description that you think best describes HOW the bird eats and WHAT the bird eats.



pelican



poorwil



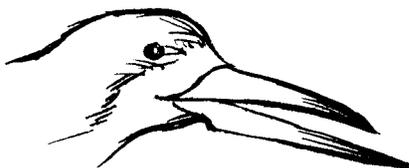
American avocet



great blue heron



hummingbird



skimmer



bald eagle



woodpecker



merganser



Wilson's snipe



mallard



crossbill



evening grosbeak

1. Tears meat from fish, waterfowl, rabbits and carrion.
2. Scoops fish.
3. Skims near surface of water for fish and crustaceans.
4. Drills wood for insects.
5. Cracks seeds and buds.
6. Probes in soft or muddy ground for insects.
7. Sweeps side to side in water for insects and small crustaceans.
8. Probes flowers for nectar.
9. Pries open scales of pine cones for seeds.
10. Strains plants and seeds from water.
11. Grasps and holds fish.
12. Catches small insects.
13. Catches small fish and spears large fish; also catches amphibians, reptiles, crustaceans, shrimp and insects.

Resource File *Endangered Species of the World*

Contact the Project WILD office (801-538-4719) to check out the following materials in the "Endangered Species Resource File."

- "Endangered Wildlife," Action Education Handbook, Jane Jennings, Ohio Natural Resources, 1991.
- Extremely Weird Endangered Species, Sarah Lovett, John Muir Publications, Santa Fe, 1992. (Clever, colorful presentation of twenty-one endangered species, including such unique animals as the markhor, babirusa, Vancouver Island marmot, Galapagos tortoise and the red-knee tarantula.)
- "Endangered Species: Wild & Rare," *NatureScope*, National Wildlife Federation, 1989.
- "Why Save Endangered Species?" by U.S. Fish & Wildlife Service.
- "Endangered Species," *Post Register*, Idaho Falls, Idaho.
- "Endangered Animals," *ZooBooks*, Wildlife Education, Ltd., 1987.
- "Discovering Endangered Species," an activity book for elementary grades, by Nancy Field and Sally Machlis, Dog-Eared Publications, Wisconsin, 1991.
- "Endangered Species -- We're All In This Together," National Wildlife Week Packet with educator's activity guide and two posters, National Wildlife Federation, 1992.
- "Manatees," an educator's activity guide, Save the Manatee Club, Florida, 1989.
- "Endangered & Threatened Fishes of the Upper Colorado River," technical bulletin, Colorado State, 1983.
- "Native Utah Wildlife Species of Special Concern," Utah Division of Wildlife Resources, 1990.
- "Rare and Endangered Species," activities guide and poster, the Nature Conservancy, with correlation to Project WILD activities, 1987.
- "The Silent Invaders," poster of invasive plant species, U.S. Forest Service.
- "Alien Invasion," article on exotic plants, Nature Conservancy, September/October 1992.
- "Endangered Species," activities designed for 4th - 7th grades to explore factors contributing to rapid increase of endangered species, U.S. Fish & Wildlife Service and Nat'l Institute for Urban Wildlife.
- "Peregrine Falcons: The Path to Recovery," teacher resource and activity packet about a species that has been successfully protected under the Endangered Species Act, Colorado Division of Wildlife.

•Learning about Endangered Species

Ellen Petrick-Underwood, teacher/naturalist at the Ogden Nature Center, has developed a teaching unit on endangered species for elementary level students. In addition to creating new activities focusing on endangered species, Ellen used items confiscated by the U.S. Fish & Wildlife Service for a "hands-on" look at commercialization of endangered species. These items are available for check-out from the Project WILD office and are described below. If you're interested in learning more about Ellen's teaching unit, please contact her at the Ogden Nature Center, 966 W. 12th Street, Ogden, UT 84404 (801-621-7595). She will be happy to share her information and activities with you.

•Project WILD's NEW Discovery Resource -- "Hands-off Endangered Species"

Working with the U.S. Fish & Wildlife Service, Project WILD has prepared a trunk containing confiscated items made from endangered species. These items, such as jewelry made from turtle shells and elephant ivory, boots made from cobra skin, and purses made from leopard and seal skins, have been illegally transported within the United States. While studying these items, students have the opportunity for a "hands-on" look at one of the major threats to endangered animal populations.

Because it is against the law for people to possess these items without legal permission of the U.S. Fish & Wildlife Service and the Utah Division of Wildlife Resources, it is important that we are careful in checking them out for educational purposes. Therefore, before we check them out to you, we would like to know how you plan on using them in your classroom. Please call us at 538-4719 and plan to pick up the items at the Project WILD office, 1596 West North Temple in Salt Lake.

Resources

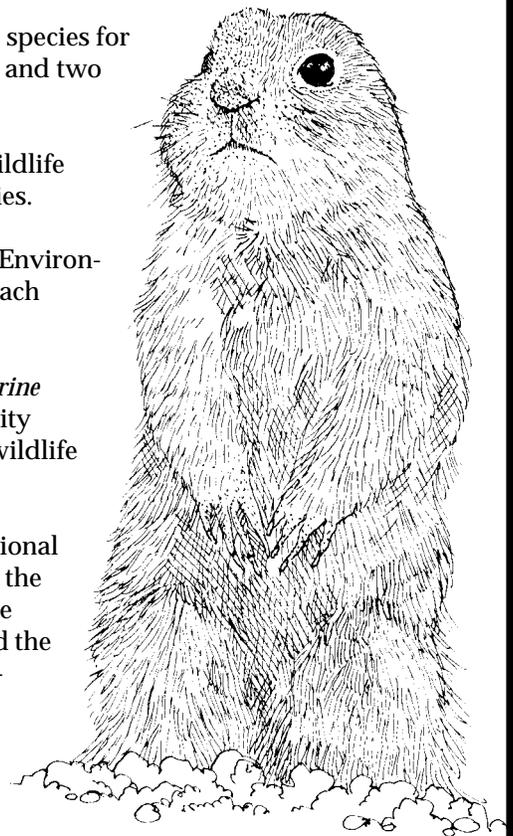
For **FREE** copies of the resources described on this page, contact the Project WILD office, 1594 West North Temple, Ste. .2110, Salt Lake City, UT 84116 (801-538-4719).

If you're teaching about invasive plant species:

- Color poster, "The Silent Invaders," from the U.S. Forest Service. Focuses on invasive plants.
- Activity entitled "Invasion" from *Endangered Wildlife*, an action education handbook from the Ohio Department of Natural Resources. "Invasion" is a physical group activity for elementary grades and demonstrates the impact of invading species on ecosystems. (*Endangered Wildlife*, edited by Jane Jennings, contains thirty activities for elementary through middle school grades and is available for \$10 from Jane Jennings, 12500 Sheldon Rd., Mantua, OH 44255, or may be checked out from Project WILD.)
- Article entitled "Alien Invasion" from the September/October 1992 issue of *Nature Conservancy* magazine. Focuses on foreign plants which spread quickly in natural areas, monopolize resources and push out native plants and animals, including endangered species.

If you're teaching about endangered species:

- National Wildlife Federation educational packet on endangered species for elementary and middle school levels. Includes educator's guide and two colorful teaching posters.
- "Why Save Endangered Species?" brochure from U.S. Fish & Wildlife Service. Includes direct, concise information on endangered species.
- "Save Our Species," endangered species coloring book from the Environmental Protection Agency. Background and range are given for each species.
- "Diving Into The Future: Race To Recovery," activity from *Peregrine Falcons, The Path to Recovery*, Colorado Division of Wildlife. Activity designed for 5th and 6th grades and explores human impact on wildlife populations.
- "Getting to Know the Wolf," a school outreach project of the National Park Service. Includes teacher's guide, *Wolf Zoobook*, "Looking at the Wolf" (natural history of the wolf from Teton Science School), "The Wonder of Wolves" (story and activities for elementary level), and the Wolf Recovery Plan for the Northern Rocky Mountains (upper elementary through high school).
- New colorful poster with twelve endangered species and information on each from National Wildlife Federation.
- List of Utah native wildlife species of special concern, including threatened, endangered, and sensitive.



Prairie dog

Resources

- "Investigating Your Environment," from the U.S. Forest Service, offers activities focusing on twenty topics, including wildlife, habitat areas, and school yard habitat. Thanks to Richard Pine, Environmental Education Specialist for the U.S. Forest Service, we have copies of these materials in our Salt Lake Office to distribute free of charge. Because of the weight of this guide, teachers wanting one would need to pick up their copy at the Salt Lake Project WILD office. The U.S. Forest Service in Ogden also has copies available, and you can contact Richard Pine, 324 25th Street, Ogden, UT 84401 (801-625-5350).
- "Peligros de Los Venenos! (para colorear)" or "The Pesticide Safety Coloring Book," from the Environmental Protection Agency. With captions in English and Spanish, there are a total of nine drawings to color. Contact Project WILD (801-538-4719) for a free copy.
- Collection of magazines, including past issues of *Audubon*, *Sierra Club*, *Natural History*, and *Nature Conservancy* magazines. Excellent source of articles for issue investigation. Call Project WILD (801-538-4719).

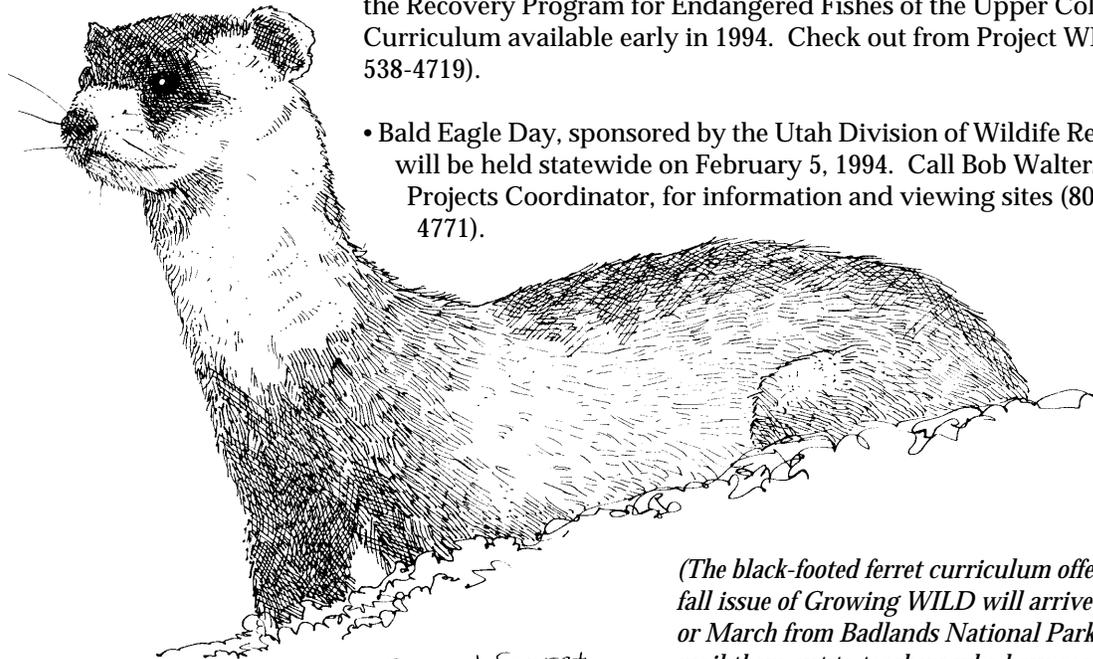
New Video Looks at Play of Young Animals

"Catch Me If You Can" (K-4) is educational, entertaining look at what animals are learning when they play. Contains two 20-minute programs: one focuses on grazing animals, like elk, bison and antelope; and one focuses on predators, including wolves, foxes, river otters and bears. Check out from the Project WILD office in Salt Lake (801-538-4719).

- Art opportunity for grades K-12! National poster competition, sponsored by United Nations Environment Programme, focuses on protection of fragile marine environments. Contact John Fine, 117 Beekman Street, Suite 2C, New York, NY 10038. Deadline: April 30, 1994.

- "Swimming Upstream," slide/tape or video program (14 min.) on endangered fish of the Colorado River, for middle and high school, from the Recovery Program for Endangered Fishes of the Upper Colorado. Curriculum available early in 1994. Check out from Project WILD (801-538-4719).

- Bald Eagle Day, sponsored by the Utah Division of Wildlife Resources, will be held statewide on February 5, 1994. Call Bob Walters, Special Projects Coordinator, for information and viewing sites (801-538-4771).



Black-footed ferret

(The black-footed ferret curriculum offered in the fall issue of Growing WILD will arrive in February or March from Badlands National Park. We will mail them out to teachers who have requested them as soon as possible. Thanks for your patience!)