

ANIMAL GROUPS AND COMMUNITIES

Grades K–3



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ACKNOWLEDGEMENTS

Writers

Rebecca Ness
Pam O'Brien
Beth Conant
Sandra Corbin
Pamela Koester
Melanie Sorensen

Layout

Minnesota Zoo
Graphics Department

Editors

Jane Bonenfant
Steve Hage
Pam O'Brien
Beth Conant
Grant Spickelmier

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Table of Contents

PACKET INTRODUCTION	1
CONCEPTS AND OBJECTIVES	1
PRE-VISIT ACTIVITIES	
A. Looking at My Family	2
B. What is a Community?	3–5
C. Animal Groups	6–7
D. Animal Addresses	8–9
E. Who Lives in a Tropics Community?	10–12
F. Putting the Pieces Together	13
G. Tree Poker	14–15
ZOO ACTIVITIES	
A. Can You Find Me?	16
B. Northern Trail Self-Guided Tour	17–19
POST-VISIT ACTIVITY SHEETS	
A. The Global Community	20–21
B. Community Members Depend on Each Other	22–23
VOCABULARY	24
BIBLIOGRAPHY	25

Packet Introduction

INTRODUCTION:

When studying this unit it is important to recognize that there are a variety of social units within the animal kingdom. Each animal has a role or job within its community. A major job for an animal is to have their basic needs met with food, water, shelter and air. Animals obtain these needs in a variety of different ways. Animals that live in groups have different strategies than animals that live solitary lives most of the year.

A community is made up of individuals living in a common area, all with particular roles or jobs that they do which ultimately benefit all of the individuals, and which they all depend on. A community of animals can be found in many different habitats (animals' homes) such as the forest, ocean or desert.

Humans have jobs or roles in life that benefit the community as well. This curriculum will take a look at the similarities and differences between human communities and animal communities. Humans and animals both survive by having their basic needs met. Have fun exploring these comparisons with your students.

CONCEPTS:

- Family structures and their functions vary.
- Habitats meet basic needs.
- Local and global communities play an important role in survival.

OBJECTIVES:

As a result of active involvement, the student will:

- Comprehend the diversity of group structures in their own families.
- Be able to define community and identify roles people have within the community.
- Be able to recognize specific animal roles within a community.
- Define habitat and identify basic survival needs of people and animals.
- Understand how many members form one community.
- Understand the concept of competition and limiting factors as it relates to plant and animal communities.
- Be able to place a variety of animals at the zoo into specific animal roles.
- Identify various adaptations within solitary and community groups of animals found on the Northern Trail at the Minnesota Zoo.
- Develop an understanding that people and animals live together in communities throughout the world and that basic needs are met for both.
- Develop a better understanding of the local community and the roles of plants, animals and people.

Pre-Visit Activities

LOOKING AT MY FAMILY

LEARNER OUTCOME: As a result of active involvement, the students will comprehend the diversity of group structures in their own families.

DURATION: 20 minutes

SETTING: Classroom

MATERIALS:

- One sheet of paper per student
- Crayons, colored pencils or markers

DIRECTIONS:

1. Let students know that this unit will deal with animal groups. We will begin by looking at groupings in our own family units.
2. Have each student draw his or her family on a sheet of paper. At this point do not give a definition of family or group. Share pictures with classmates.
3. Discuss: How are your families alike? How are they different? Why did you include these people in your family illustration? Did you include pets in your picture? What makes a family? (List the answers on the board. Save the list.)

EXTENSION:

Have students bring in past and current pictures of their families. Put the pictures side by side on a bulletin board titled "Changing Families!"



Pre-Visit Activities

WHAT IS A COMMUNITY?

LEARNER OUTCOME: As a result of active involvement, the student will be able to define a community and identify the different roles members have within the community.

DURATION: 30 minutes

SETTING: Classroom

MATERIALS:

- Chalkboard, white board or poster board
- "Get to Work!" worksheet (page 5)

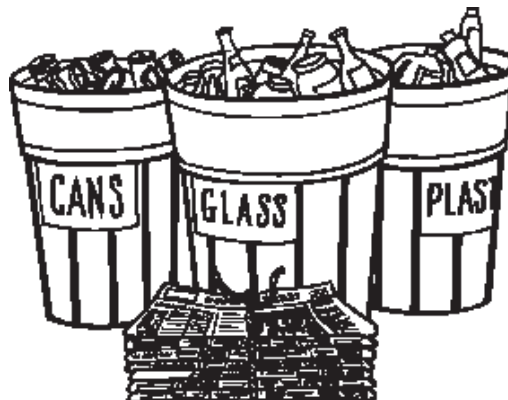


BACKGROUND:

A community is made up of individuals living in a common area, all with particular roles or jobs that they do which ultimately benefit all of the individuals, and which they all depend on. Human communities are made up of doctors, farmers, teachers, librarians, garbage collectors, police person, firefighters, grocery store owners, etc. These jobs make the community run smoothly. Animals, just like humans, live in groups and have roles to make their communities run smoothly. These roles may include hunting for food, protecting young, finding shelter, and building a home.

DIRECTIONS:

1. Using the student activity sheet "Get to Work!" ask the students to list members of their families. Then have the students identify roles different members have within the family. Have younger students (not ready to write) act out the roles within their family.
2. Have the students make a list of animal families on their "Get to Work!" worksheet. Answers may include: Mother, Father and Baby. Then have the students identify roles each of the animals may have within the family group. Answers may include: hunting, feeding the baby, making a home, grooming, etc.



Pre-Visit Activities

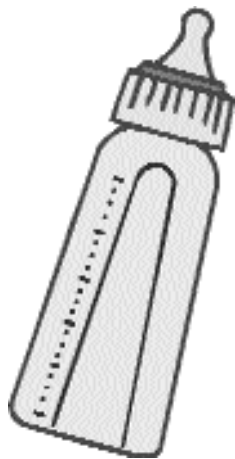
WHAT IS A COMMUNITY? (continued)

DIRECTIONS: (continued)

3. Ask the students: "What is a community?" Write on the board the words students use to describe community. Then create a list of roles or jobs within their community. Answers may include: teacher, doctor, garbage collector, store owner, police person, firefighter, construction worker, librarian, cooks, artists, mail person, etc. Then have the students write this list under "My Community" on their "Get to Work!" worksheet.
4. Ask the students: "What do animals have in their communities?" Answers may include: hunting for food, protecting young, making a nest, finding shelter, feeding babies, grooming each other or themselves. Then have the students write this list under "Animal Community."
5. Look at the human and animal lists on their worksheet. Circle roles that are found in both animal communities and human communities.

EXTENSION:

1. Read the book *Animal Families* by Keith Porter. Have the students share what they have learned as you show the pictures and captions.
2. Have students read *All About Baby Animals* by Michael Chinery. Give a report to the class.



GET TO WORK!

MY FAMILY

MY COMMUNITY

Members

Roles

ANIMAL FAMILY

ANIMAL COMMUNITY

Members

Roles

Pre-Visit Activities

ANIMAL GROUPS

LEARNER OUTCOME: As a result of active involvement, the student will be able to recognize specific animal roles within a community.

DURATION: 30 minutes

SETTING: Classroom

MATERIALS:

- Pictures of various animals and humans

BACKGROUND:

Animals have a job or a role within their community. Producers, such as plants, create food energy and oxygen. Consumers eat others, either producers or consumers. Decomposers eat dead plants and animals. The group of consumers can be further broken down. Herbivores eat plants. Carnivores eat animals. Omnivores eat plants and animals. When you place all of these animals together in a community you can form a food chain; which is the order in which energy is passed through a natural system. Example: Sun – green plant – herbivore – carnivore – decomposer.

Humans also contribute to the food chain. Many humans decide to be vegetarians eating just vegetables, fruit and dairy products. If you decide to eat both meat and vegetables you could be placed in the omnivore group of animals.

DIRECTIONS:

1. Have the students come up with a list of animals that only eat plants. These animals are called **HERBIVORES**. Answers may include: deer, giraffe, horse, cow, rabbit, zebra, etc.
2. Have the students come up with a list of animals that only eat meat. These animals are called **CARNIVORES**. Answers may include: lion, tiger, cheetah, snake, owl, shark, and dolphin.
3. Have the students come up with a list of animals that eat both plants and animals. These animals are called **OMNIVORES**. Answers may include: raccoon, opossum, bear, turtle, and people.



Pre-Visit Activities

ANIMAL GROUPS (continued)

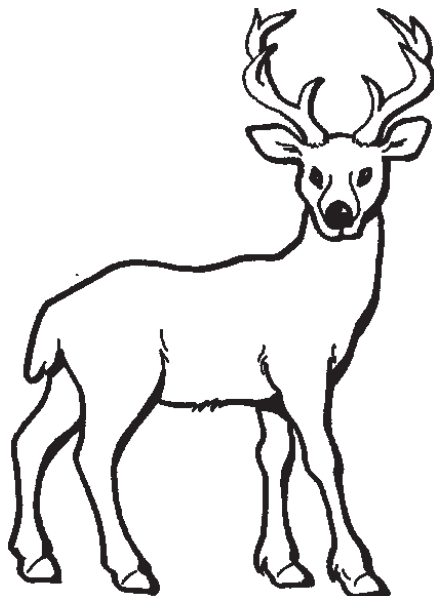
DIRECTIONS: (continued)

4. Have the students come up with a list of organisms that eat dead animals and plants. These organisms are called DECOMPOSERS. Answers may include: worms, cockroaches, vultures, etc.
5. Gather pictures of various animals and humans. Have the students, as a class or in small groups, classify the animals into these categories: herbivores, carnivores, omnivores, and decomposers.

EXTENSION:

Food Chain Leap Frog: Animals do not make their own food; they are dependent on plants or other animals. A "food chain" is how energy passes through an ecosystem. Have four students crouch in a line on the ground, say that student #1 is a green plant, student #2 is a herbivore, student #3 is a carnivore, and student #4 is a decomposer. Have a student #5 "leapfrog" over everyone slowly as you narrate – "Student #5 is energy, which goes into the plant, making it grow. Then the plant is eaten by a rabbit, then the rabbit is eaten by a fox, when the fox dies, it is eaten by a slug. The fox breaks down and becomes part of the soil, helping new plants to grow and beginning the cycle all over again. Have the rest of the students "leapfrog" using their own food chain plants and animals. These food chains can happen in any habitat the student chooses. Other examples may include:

- banana – monkey – leopard
- grass – deer – human
- seaweed – sea turtle – shark



Pre-Visit Activities

ANIMAL ADDRESSES

LEARNER OUTCOME: As a result of active involvement, the student will define habitat and identify basic survival needs of people and animals.

DURATION: 45 minutes

SETTING: Classroom

MATERIALS:

- Pictures of various animals and habitats

BACKGROUND:

A community of animals can be found in many different habitats (animals homes) such as the forest, ocean or desert. A habitat can be as small as a tree, cave, or hole in the ground. A good habitat for plants and animals meets four basic needs: air, food, water and shelter. Humans also have these basic needs. Animals meet these needs in a variety of different ways. While plants get their energy from the sun, animals depend on plants or other animals for their food and energy.

DIRECTIONS:

1. Put three words on the board: PEOPLE – WILD ANIMALS – PETS. Leave room to make a column under each word. Ask students, “What do we need in order to live?” List the needs on the chalkboard. Ask the same thing about wildlife and pets. List these needs as well.
2. Ask students to examine each list carefully. Can some of these needs be combined? Try to get a very basic list.
3. Ask students to find similar needs in all three groups. Examples of needs might be: food, water, shelter, space, and air.
4. Introduce the term “Habitat”. A good animal habitat would include all the basic needs for survival. Have the students make a list of habitats. Put this list on the board under the basic needs list. Answers may include: desert, ocean, cave, tree, forest, lake, apartment, house, etc.

Pre-Visit Activities

ANIMAL ADDRESSES (continued)

DIRECTIONS: (continued)

5. Give each student one habitat from list on the board. Have the students make a list of basic needs that their specific habitat meets for humans or animals. Give the students an example: a forest habitat provides water through rain, food can be found in the leaves, fruit and other animals that live in the forest, shelter is found in the trees, rotten logs and holes in the ground and oxygen is created by the trees in the forest.
6. Tell the students they will be looking at many habitats as they tour the Minnesota Zoo.

EXTENSION:

Assign each student an animal. Have them come up with the specifics on how this animal finds all of their basic needs in their habitat.

Example: The deer lives in the forest habitat and finds shelter laying down in the forest, food in the shrubs and grasses of the forest and water in the near by lakes and ponds.

Give each student a picture of an animal and have him or her place the picture next to the correct habitat word on the board. This activity can easily be adapted for non-reading students by using pictures of various habitats.

Read the book *A Panther Dream* by Bob and Wendy Weir (1991, Hyperion Press). The book is about a young boy who encounters a panther (black leopard) while hunting for food for his starving village. The panther teaches the boy how to conserve life in the rain forest.



Pre-Visit Activities

WHO LIVES IN A TROPICS COMMUNITY?

LEARNER OUTCOME: As a result of active involvement, the student will realize that many people and animals live together in communities throughout the world.

DURATION: Two 15-minute lessons on consecutive days

SETTING: Classroom

MATERIALS:

- Pratt, Kristin Joy, *A Walk in the Rainforest* 1992, Dawn Publishing

BACKGROUND:

Every living thing is interdependent with the other living things in its community. In human communities, people have different jobs that help their community as a whole survive. In biotic communities organisms have different roles, or niches, that enable each species and the community as a whole to survive. For example, lichens and fungi act as soil producers by breaking down rock and organic material to form soil. Earthworms act as recyclers or decomposers by breaking down organic material (dead plants and animals) and returning it to the soil for reuse. Some animals act as transporters by carrying seeds and other objects from place to place in their fur or in their bellies, such as bats.

Plants, animals and people live in different parts of the community. Some animals, like earthworms, live and work in the soil. Animals like lizards live and work at ground level. Squirrels and birds live and work above the ground (in bushes, trees, or in the air). The purpose of this activity is to define a community in terms of all the organisms that live there: plants, animals and people.



Pre-Visit Activities

WHO LIVES IN A TROPICS COMMUNITY? (continued)

DIRECTIONS:

1. Ask if any student knows what a community is. If not, explain that a community is a group of many different living things sharing a region, area or environment.
2. Have students list the many types of people that make up or live in their community (i.e., carpenters, plumbers, doctors, farmers, homemakers, etc.). Explain to students that a community provides all of the things that people need, including living places, health and safety services, food, beauty and art.
3. Tell students that in nature some organisms live and work underneath the ground, some live and work at ground level, and others live and work above the ground, in shrubs, trees, or in the air. Read from *Wonders of the Jungle*.
4. Tell students that they will be imaginary census takers in the tropics. Their job will be to decide what jobs the members of the community might have. Students should understand that it is okay if they do not know some of the members' jobs. Within their group, students can try to figure out one way that the animal or plant in question affects other members of this community and can make up a name for the "job".
5. Divide the class into teams of four students. Assign each team four organisms from the following list: earthworm, ant, orchid, parrot, leopard, snake, lizard, bat, civet, frog, hawk, mole, cockroach, termite, worm, beetle, vine, tree, monkey, hornbill bird, butterfly, sloth, tapir, macaw (others can be added from your readings).
6. Answer key – examples of jobs include:
 - Soil Looseners: Animals that turn and loosen the soil so that plants can grow more easily. Examples: earthworm, moles.
 - Garbage Collectors: Animals that eat dead plants and animals. Examples: ant, cockroach, termite, worm, beetle.
 - Food Makers: Plants that use the sun's energy to make food. Examples: all green plants.
 - Movers: Animals that move things (like seeds) from one part of the community to another part. Examples: bird, civet, leopard, bat.
 - Population Controllers: Animals that eat other animals and keep the community from getting too crowded. Examples: leopard, snake, spider, lizard, frog, hawk.
 - Fertilizers: Animals and plants that fertilize the soil by adding wastes, fallen leaves, or dead plant parts. Examples: all animals and plants.

Pre-Visit Activities

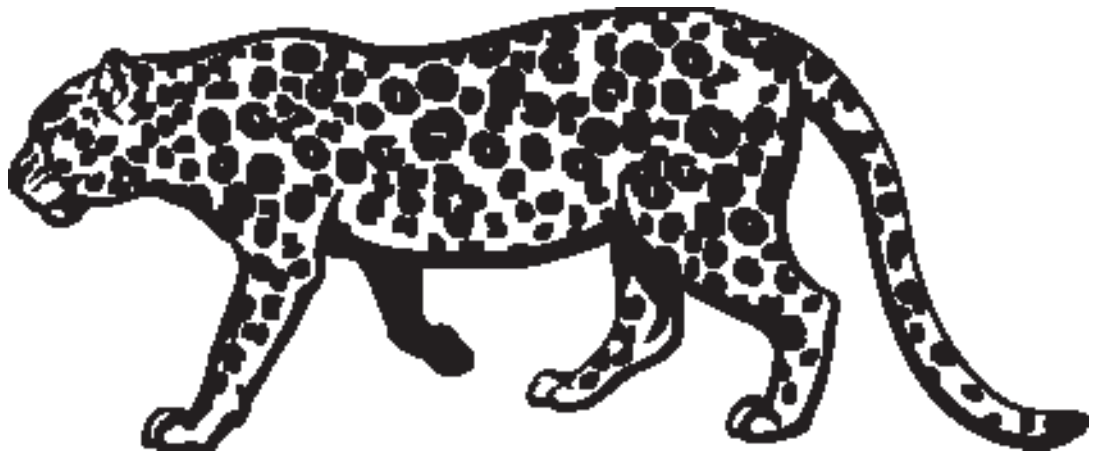
WHO LIVES IN A TROPICS COMMUNITY? (continued)

DIRECTIONS: (continued)

7. Discuss the following questions:
 - What are some of the community members and their jobs?
 - Do any community members live or work in other places?
 - Are there any organisms that have more than one job?
 - Are there any organisms that seem to have no jobs?
 - What did you discover that surprised you the most?
 - How does this community compare with your own community?
 - What would happen to this community if all the population controllers were removed?
 - What would happen to this community if all the fertilizers were removed?

EXTENSION:

1. Research the animals that live in your community. What do the animals eat? Where do they live?
2. Find fictional stories about the wildlife in your neighborhood. Read your story to your classmates or have your teacher read it to the class.
3. Develop a survey on improving your community. Ask people how they feel about their community. Create a poster or write a report to show what you learned.



Pre-Visit Activities

PUTTING THE PIECES TOGETHER

LEARNER OUTCOME: As a result of active involvement, the student will understand that many members form one community.

DURATION: 30 minutes

SETTING: Classroom

MATERIALS:

- *The Great Kapok Tree* by Lynne Chery
- Construction Paper
- Bulletin Board
- Pre-made green-colored background for the bulletin board



BACKGROUND:

Many different plants and animals live in the tropics community. Using the knowledge from the “Who lives in a Tropics Community” and *The Great Kapok Tree*, students will have a better understanding of various animals roles within the tropical rainforest.

DIRECTIONS:

1. Read *The Great Kapok Tree*.
2. Cut out enough green background paper to cover a bulletin board. Put a blue river flowing through the center of this. Draw lines to divide your board into puzzle-shaped pieces. Each piece should have a part of the tropical river. Cut out the pieces.
3. Give groups of students a background puzzle piece and assign them a tropics organism (White-cheeked gibbon, boa constrictor, tapir, small-clawed otter, kapok tree, sloth, macaw). Have them place a tropical animal’s name and list the specific needs on the puzzle piece. (Younger students can draw the animal and basic needs on the puzzle piece.) Answers may include gibbon – eats leaves and fruit, water from the river or rain, shelter in the trees, air from the trees.
4. Have each group reassemble the bulletin board puzzle.
5. Discuss: What resources are shared by all animals? What resources are used by several animals? One animal? What resources are most important to the community?

Pre-Visit Activities

TREE POKER

LEARNER OUTCOME: As a result of active involvement, the students will be able to understand the concept of competition and limiting factors as it relates to plant and animal communities.

DURATION: 20 minutes.

SETTING: Classroom or large open space.

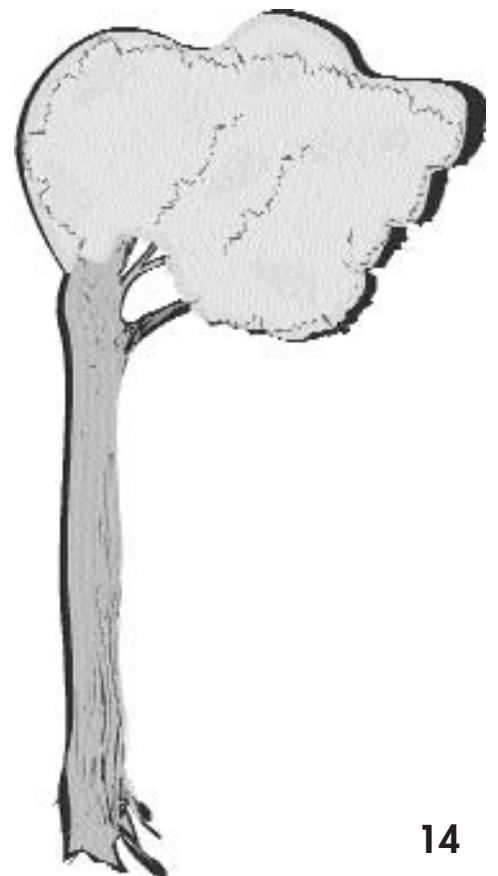
MATERIALS: Poker chips

BACKGROUND:

Basic needs such as food, water, shelter and air need to be met in order for plants and animals to survive. Competition happens when organisms struggle to obtain the same set of resources. For example; if there are ten white-tailed deer in the forest and they all need food, water and shelter in the same forest, there will be competition between the deer. These resources or basic needs in the area are limiting factors. Limiting factors are anything that places limits upon the number of organism that can exist in an area.

DIRECTIONS:

1. Have the students spread out so that they are at least arm's length away from each other.
2. Tell them that they are now trees and are rooted to the ground, unable to move their feet (roots).
3. Scatter poker chips on the ground; instruct the students that when you say "go" they may bend down and begin scooping up any poker chips that they can reach without moving their feet.
4. When you say "stop" student should cease picking up chips and stand upright again.



Animal Cover-Up Tour

TREE POKER (continued)

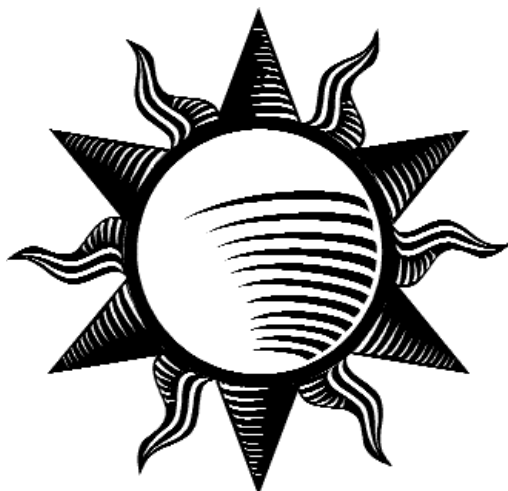
DIRECTIONS (continued):

5. Have everyone count their chips and tell them that everyone who gathered more than 10 chips survived and everyone else died.
6. This game can be played several times. During the second round students may come up with their own strategies for obtaining chips. Watch the game closely and relate those strategies to how animals and plants compete for their basic needs for survival.
7. Collect the poker chips and have the kids sit down and discuss the game.
8. Some questions to ask the students may include: How many of trees survived in the first game? How many of you died in the first round but lived in the second round? What strategies did you use to survive the second round? What do the poker chips represent to the trees? Answer may include: water, sunlight, and soil.

EXTENSION:

For older students: Use three different colored poker chips blue=water, red=sunlight and white=soil. The students gathering the poker chips must obtain at least one of each color in order to survive. During the second round place a limiting factor in the game such as a drought, only spreading out a few blue chips.

Read the book; Burningham, John, *Hey! Get Off Our Train*, Econo-Clad Books, New York, 1999.



On-Site Activities

CAN YOU FIND ME?

LEARNER OUTCOME: As a result of active involvement, students will be able to place a variety of animals at the zoo into specific animal roles.

DURATION: Your time at the zoo

SETTING: Minnesota Zoo

MATERIALS:

- None

BACKGROUND:

Information the students have learned through the pre-activities.

DIRECTIONS:

1. As the students walk the various trails at the Zoo, have the students place zoo animals into groups: herbivore, carnivore, omnivore and decomposer.
 - Herbivores: beaver, porcupine, bison, camel, takin, caribou, moose, prairie dog, pronghorn, chevrotain, muntjac, tapir, and tortoise.
 - Carnivores: snakes, owl, fisher, ermine, lynx, puma, wolverine, otter, tiger, leopard, fishing cat, wolf and sharks.
 - Omnivores: sun bear, slow loris, opossum, gibbons, fox, and skunk
 - Decomposers: cockroaches in Zoolab.

EXTENSION:

Have the students come up with food chains for each trail.

Answer may include:

Minnesota Trail – grass – rabbit – lynx – decomposer

Tropics Trail – shrubs – chevrotain – leopard – decomposer

Northern Trail – grass – moose – wolf – decomposer



On-Site Activities

NORTHERN TRAIL SELF-GUIDED TOUR

LEARNER OUTCOME: The students will be able to identify various adaptations within solitary and community groups of animals found on the Northern Trail at the Minnesota Zoo.

DURATION: 45 minutes

SETTING: Northern Trail at the Minnesota Zoo

MATERIALS:

- None

BACKGROUND:

A biome is a major regional area or global community characterized chiefly by the dominant plant life and prevailing climate. The Northern Trail at the Minnesota Zoo includes four major northern climate biomes: North American prairies (bison, prairie dog and pronghorn), Asiatic steppe (Asian wild horse, and Bactrian camel), Taiga (moose, caribou, wolf) and Tundra (musk ox, trumpeter swan and caribou).

Tundra means “marshy plain.” These areas have an absence of trees due to the presence of a permanently frozen layer of soil. The vegetation in this area consists of low-flowering herbs and lichen. The warmest month averages below 10 degrees below Fahrenheit and the wettest months receive about an inch of precipitation.

Taiga is a moist, cool coniferous forest. The vegetation consists of needle-leaf evergreens. Precipitation is greater than that of the tundra and occurs mostly in summer. The grasslands in North America are called the prairie; in Asia the grasslands are referred to as the steppe. The vegetation in these areas is mainly tall and short grass.

DIRECTIONS:

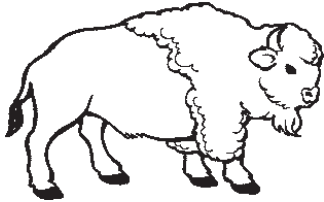
Use this information (see next page) as a guide to walking the Northern Trail with the students. This information will focus on the themes covered in the pre-activities in this curriculum packet. All animals may not be exhibited every day. Animals are listed in alphabetical order.

EXTENSION:

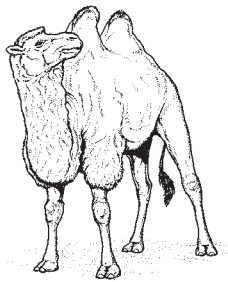
Have each student research and make a poster for one of the animals seen on the Northern Trail.

Northern Trail Self-Guided Tour

A herd of **Asian wild horses** includes females, young and one male or stallion and can range from 6-16 animals. The stallion is the protector of the group. These horses use their teeth to groom eat other. Can you see this behavior in the horses at the zoo? When water holes dry up in the summer months, these horses dig waterholes with their hooves.



Bison are usually found in herds, which may be quite large. Bison most often travel at a walk, but they are quick to respond and can travel very fast over rough terrain for extremely long distances. Their strong hooves are adapted for this rough terrain. They wallow or roll in the dust or mud; this protects them from biting insects found in their habitat. They usually eat prairie grasses until late morning and then will lie and chew cud during the hot afternoon hours.



Bactrian camels usually congregate in small herds of females and calves, and one male. Long eyelashes and closeable nostrils are great adaptations for the cold windy climate of the Asian steppe. The humps contain fat, not water. These fat stores are useful in times when food is scarce.

Caribou live in small herds. Caribou hooves are well adapted for moving across snow-packed surfaces during the winter. Caribou have a tendon in their legs that clicks when they walk. During blizzard conditions or high winds this clicking sounds helps keep the herd together.



The **moose** is the largest of the deer family. Moose are usually solitary, while young calves may live with their mom for 1-2 years before they go out on their own. Have the students point out the four basic needs (food, water, air and shelter) in this exhibit.

Meerkats work as a tight-knit team for maximum protection against predators, using a system of 'sentry-duty' or watch guard; this behavioral response to a life spent out in the open. They are found in semi-desert conditions giving them great camouflage against the pale colored sand. Meerkats live in group containing up to 30 members these groups are called a gang or a mob. Can the students find the meerkat on sentry duty?

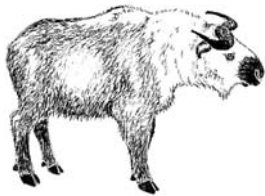
Northern Trail Self-Guided Tour



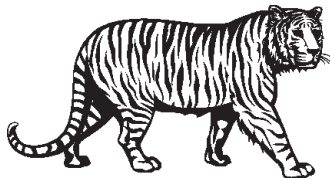
Musk oxen live in herds. The herd forms a defensive circle with calves inside as protection against wolves. Musk oxen have a warm coat of hair called quiviut. This hair is one of the world's best natural fibers; it is light, strong and warm. An adult musk ox sheds 4-6 pounds of quiviut per year.



Prairie dogs live in family groups called coteries. The "kissing" behavior is used to recognize family members. When two prairie dogs meet, they touch mouths with their mouths open and teeth bared. Can you see this behavior in the Minnesota Zoo's prairie dog town? Traditionally bison would use prairie dog mounds for "dust bathing".



Pronghorn can live in groups of up to 100. This animal is the fastest land animal in North America reaching speeds of up to 60 mph. When alarmed, a pronghorn raises the long white hairs on its rump to form a highly reflective disc, which is visible for miles.



Takin females live in small groups of 10-15. These small female groups raise and protect the young. Adult male are solitary most of the year. Takin hooves are adapted for moving nimbly over the rocks. Have the students place the takin into herbivore, carnivore or omnivore. The answer is herbivore.

Tigers are generally solitary animals having territories of up to 50-100 square miles. Amur tigers are the largest of all cats. Each tiger has a unique set of stripes. Just like human fingerprints, no two tigers stripes are alike.

Wolves are a very social species living in packs. A **Mexican wolf** pack consists of 5-8 members lead by a male and female alpha pair. Body postures, vocalizations and scent marking are all ways in which these wolves communicate within the pack. Have the students act out the "play bow" body posture. Have the students point out wolf communications as they observe the wolves.

Post-Visit Activities

THE GLOBAL COMMUNITY

LEARNER OUTCOME: As a result of active involvement, the student will develop an understanding that people and animals live together in communities throughout the world and that basic needs are met for both.

DURATION: 30 minutes

SETTING: Classroom

MATERIALS:

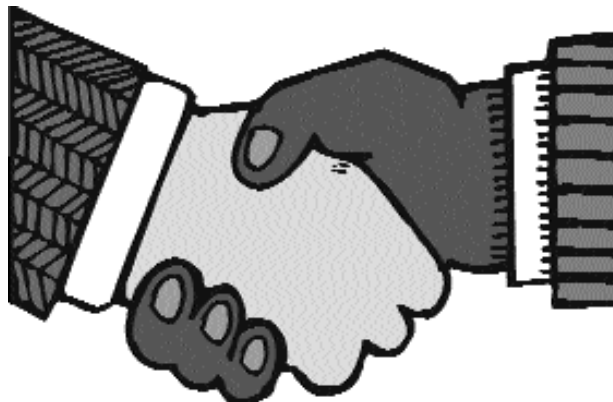
- Globe
- Arthur, Dorros (1990), *Rain Forest Secrets*, Scholastic Inc.

BACKGROUND:

Our earth contains a variety of major terrestrial biomes, such as deserts, grasslands, and forests, and aquatic biomes such as lakes, rivers, and oceans. These biomes are the life-support systems for us and other species. They provide the necessary air, water, food, space and protection. Each biome has a characteristic community of plants and animals adapted to certain environmental conditions. No matter where they are located and whether they are large or small communities, they have one thing in common; they provide the basic needs for their inhabitants.

DIRECTIONS:

1. Have a student come to the front of the room and point to a place on the globe. Name the place and describe what it may be like there.
2. Then ask the students, "If you lived in that area, what would you need to survive?" Repeat this process several times. Ask each student to select an animal from that area, "What would the animal need to survive in this area?"
3. Help students to see that no matter where you live, your basic needs must be met.



Post-Visit Activities

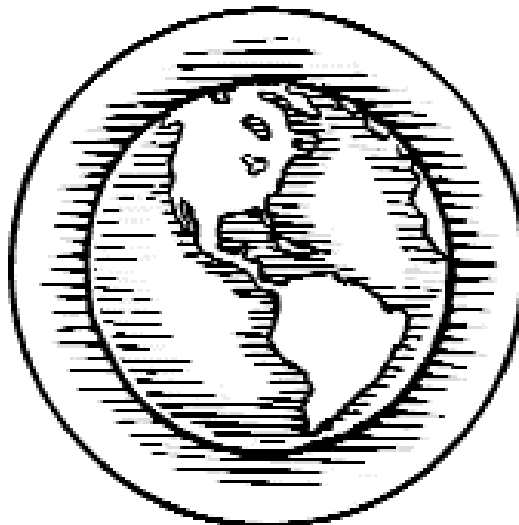
THE GLOBAL COMMUNITY (continued)

DIRECTIONS (continued):

4. Brainstorm a list of communities or biomes.
5. Have the students each design a poster showing humans and three or more animals in their community. Encourage students to think globally. You may want the students to use the globe to generate a community list on the board. Be sure to include how the animals' basic needs are met. Share your poster with classmates.
6. Discuss: What makes these communities alike? How are they different? Can some animals survive in more than one community? Can you think of any communities that exist within other communities? How do people affect communities throughout the world?

EXTENSION:

1. Have a child choose a community and then let the class know that they will act out an animal that lives in that community. The child who guesses correctly must be able to tell how at least two basic needs are met in this community.
2. **Community Run.** Play a game similar to "Duck, Duck, Grey Duck (Goose)". Have students sit in a circle on the floor. Choose one child to be "It". As they walk around the outside of the circle, have them gently tap a child's head and say the name of an animal that lives in a certain community. With each head tapped, say a new animal name. When a child can think of no other animal names, they should call out the community name as they tap the next child's head. The last child tapped tries to catch the child that is "It". If an incorrect community name is called, be sure to discuss this as a class.



Post-Visit Activities

COMMUNITY MEMBERS DEPEND ON EACH OTHER

LEARNER OUTCOME: As a result of active involvement, the student will develop a better understanding of the local community and the roles of plants, animals and people in it.

DURATION: 30 minutes

SETTING: Classroom

MATERIALS:

- Blackboard

BACKGROUND:

Many animal social groups that breed and rear young are much larger than immediate or nuclear human families; these animal groups may also have more roles than smaller human families. Based on background information and zoo studies, students should be able to identify the roles (jobs) of the humans, plants and animals in their community.

DIRECTIONS:

1. What are the jobs of animals at the zoo? What are the jobs of humans in a community?
 - a. Review zoo visit and develop a list of roles (feed, teaches, defends, hunt, etc.) of various humans and animals. Write this on the blackboard.
 - b. Study information available from your local community. What are the roles of people in local government, schools, stores, farms, etc.? Make a list on the chalkboard.
2. Have students complete Community Services worksheet
3. Discuss answers as a class.

EXTENSION:

1. Invite someone from local governments, schools, stores, or farms to talk to your class and tell about their job or role, how they selected it, and their training.
2. Hand out "Community Services" worksheet.
Answers: 1. H 2. B 3. D 4. A 5. F 6. C 7. G 8. E

Community Services Worksheet

DIRECTIONS: Can you match the services found in nature with services found in your community?

SERVICES IN NATURE

1. A wetland cleans toxins out of water runoff.
2. The sun gives plants energy that helps them grow.
3. A cat protects its territory.
4. The wind spreads seeds.
5. Monkeys groom each other.
6. Vultures eat dead animals.
7. Squirrels store nuts.
8. Termites make nests.

COMMUNITY SERVICES

- A. Farmer
- B. Power company
- C. Garbage collection
- D. Police protection
- E. Home building
- F. Beauty parlor
- G. Bank
- H. Sewage treatment plant



Vocabulary

This vocabulary list will help students and teachers understand the specific terms used within the unit's context.

- Biomelarge land (terrestrial) ecosystem such as a forest, grassland, or desert
- Carnivores.....organism that eats other animals
- Community.....populations of different plants and animals living and interacting in an area at a particular time
- Competition.....organisms struggle to obtain the same set of resources
- Consumers.....organisms that eat others, either producers or consumers
- Decomposersorganisms that eat dead plants and/or animals
- Endangered
- Species.....species with so few individual survivors that the species could soon become extinct in all or most of its natural range
- Familygroup of related persons; mother, father, and their children
- Food Chain.....order in which energy is passed through a natural system
Sunlight - green plant-herbivore-carnivore-decomposer
- Habitat.....place or type of place where an organism or community of organisms live and thrive
- Herbivores.....organisms that eat plants
- Limiting Factor.....anything that places limits upon the number of organisms that can exist in an area
- Omnivore.....organism that eats plants and animals
- Predator.....an organism that lives by preying on other organisms
- Prey.....organism that is captured and serves as a source of food for an organism of another species (the predator)
- Producers.....produce energy or food
- Tropical Forests.....forests with an average temperature of 70°F-90°F and over 60 inches of rain a year. They are located in a broad belt around the equator

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