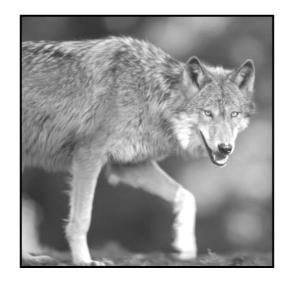
# WOLF AWARENESS

# At the ABQ BioPark Zoo

Teacher Resource Guide







## **Background information on the Mexican Gray Wolf**

Few animals are as misunderstood as the wolf. Few animals ignite such controversy. Yet, it is a story unfolding right here in our state, and its conservation connection has roots here at the ABQ BioPark Zoo.

Mexican gray wolves were once found in montane forests, grasslands, and shrub lands of central and northern Mexico, southwest Texas, southern New Mexico and southeastern Arizona. In the late 1800's, as human populations in the southwest began to increase, a campaign was begun to eradicate wild Mexican gray wolves due to perceived threats to human safety, competition for game, and destruction of livestock. By 1970, the last known Mexican gray wolf in the U.S. was killed.

Shortly thereafter, the remaining wild wolves in Mexico were captured; meaning the entire wild population of wolves had been eradicated. The remaining wild wolves were combined with Mexican gray wolves already existing in captivity, and the captive breeding program began.

The ABQ BioPark Zoo has been involved with the Mexican gray wolf breeding program since the mid-1990s in collaboration with other zoos and sanctuaries that house Mexican gray wolves as part of AZA's Species Survival Plan: <a href="http://www.aza.org/species-survival-plan-program/">http://www.aza.org/species-survival-plan-program/</a>. The goal of the SSP is to develop a healthy, self-sustaining captive population with the highest possible amount of genetic and demographic diversity. The Species Survival Plan also creates a network for these facilities to share information regarding general husbandry techniques, veterinary care and research. At each facility, care is taken to make sure that captive wolves have limited contact with humans. Whenever possible, exhibits and holding areas are designed to replicate natural conditions.

Not all captive wolves will be released in the wild. Those wolves that remain in zoos are important ambassadors for their species. Many zoo visitors are compelled to protect and care for wolves after having the chance to see one up close. Zoos also provide an opportunity for people to learn more about wolves and wolf conservation.

The first wolves were released in March of 1998. There is currently an active reintroduction program in the United States in the Blue Range Wolf Recovery Area (BRWRA) of Arizona and New Mexico, and a proposed program in Mexico. The end of 2011 census of the reintroduced free-ranging population in the BRWRA recorded was estimated to total at least 58 wolves which included at least 18 pups surviving into 2012. The reintroduced population is establishing itself as a naturally functioning wolf population. There is natural reproduction and survival, and packs are forming on their own. The majority of the population in the reintroduction area was born there. Eleven of fourteen packs in the recovery area were observed denning in the spring of the 2012. Many pups have been observed.

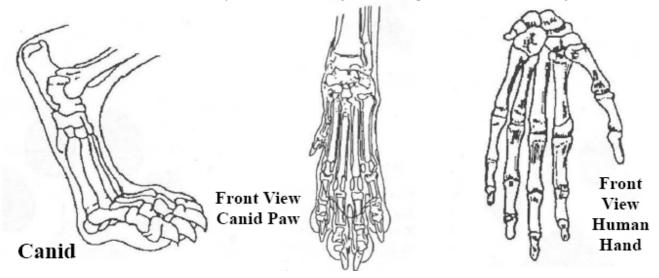
Monthly status reports on the reintroduced population can be found by visiting the Arizona Game and Fish Department website at <a href="http://www.azgfd.gov/w\_c/es/wolf\_reintroduction.shtml">http://www.azgfd.gov/w\_c/es/wolf\_reintroduction.shtml</a> or by visiting the U.S. Fish and Wildlife Service website at <a href="http://www.fws.gov/southwest/es/mexicanwolf">http://www.fws.gov/southwest/es/mexicanwolf</a>.

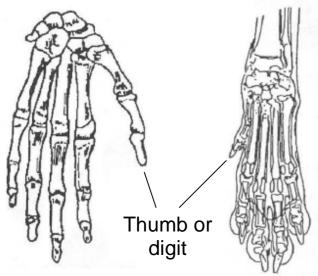
# What Part of the Foot Do You Use?

Every animal has feet that are adapted for different uses and benefits, whether it be for walking, running, jumping, climbing, attacking, or defending.



Bears and humans walk on the soles of their feet. This is called plantigrade. Members of the dog and cat families, however, walk on their toes or digits, called digitigrade. Wolves are members of the dog family (Canidae) and walk on their toes. Notice how far the heel is off the ground in the canid below compared to the animals above. This lengthens the stride and allows dogs and cats to run faster. Compare the front paw of the canid to the hand of the human. What major differences can you spot in the digits (fingers or toes)? The answer is on the next page along with some tracks made by members of the dog, cat, and bear families.





ANSWER: Humans have an opposable thumb on each hand. This allows humans to hold and manipulate objects. With the exception of a few species, most animals do not have this dexterity with their digits.

# Whose Track is That?

Tracks not to scale.



**Black Bear** 

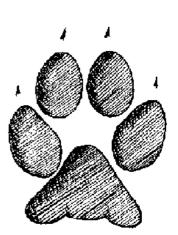


Coyote

What is the biggest difference between the tracks of members of the cat family and members of the dog family? What about the members of the bear family?



**ANSWER:** Most cats have claws that retract. Notice the cat tracks do not show claw marks. Bears have five toes, but cats and dogs only have four.



**Gray Wolf** 



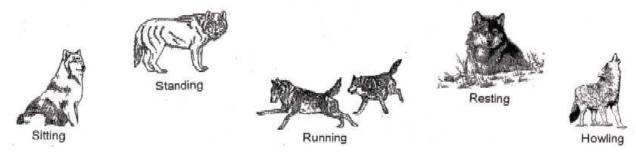
**Bobcat** 



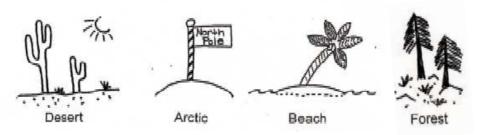
# Wolf Awareness Activities

### **Grade K-1**

- 1. How many wolves do you see? \_\_\_\_\_
- 2. What do you see the wolves doing? Circle the picture.



3. Where do Mexican gray wolves live? Circle the picture.



4. What do wolves eat? Circle the picture.









- 5. What does wolf fur feel like?
- 6. What do wolf teeth feel like?

#### **ANSWER KEY:**

1. Answers will vary. 2. Answers will vary. 3. Forest. 4. Deer.



# **Wolf Awareness Activities**

Grade 2-5

Visit the Mexican Gray Wolf exhibit at the ABQ BioPark Zoo to find the answers to these questions.

## **Home of the Lobos**

Draw a line ----- around the area where Mexican Wolves used to live. Shade in the area where Mexican Wolves live now.



## **Adaptation Match**

An adaptation is something that helps an animal to survive. For example, wolf ears are shaped for good hearing. Wolves can hear sounds from six miles away! Draw a line from each body part to the way it helps the wolf survive.

Long Tail Catching Food

Sharp Teeth Finding Food

Thick Fur Communication

Strong Claws Warmth

Nose Running and Digging

## Fill in the blanks

1. The Spanish word for wolf is:	
2. The Mexican gray wolf is an	species.
3 Wolves eat	rodents and small animals

#### **ANSWER KEY:**

**Adaptation match:** Long tail-communication, sharp teeth-catching food, thick fur-warmth, strong claws-running and digging, nose-finding food

Fill in the blanks: 1. lobo, 2. endangered, 3. deer, elk,



## To Wolf Awareness Activities

**Grade 6-12** 

Visit the Mexican Gray Wolf exhibit at the ABQ BioPark Zoo to find the answers to these questions.

## **Wolves in the Wild**

Use < or > symbol to compare the number of wild Mexican gray wolves in New Mexico during each year.

1875	1600
1879	1892
1924	2005

## **Are You Wolf-Aware?**

- 1. What makes up a wolf pack?
- 2. How do wolves communicate?
- 3. Why were wolves hunted in the late 1870s?
- 4. How is the Zoo involved with the reintroduction of the Mexican gray wolf?

#### **ANSWER KEY:**

Wolves in the Wild 1875 < 1600, 1879 > 1892, 1924 < 2005

**Are You Wolf Aware?** 1. Breeding pair, pups, yearlings. 2. Body postures, facial expressions, scent-marking, howling. 3. Considered to be a threat to human safety, competition for game animals, threat to livestock. 4. The Zoo has been breeding wolves since 1983, some of which have been released into the wild. The Zoo is now a holding facility with 5 male wolves on exhibit.



# **Molf Awareness Activities**

### **Grade 6-12**

## **Wolf Observation**

5 min.

Wolf's location in exhibit:

Choose *one* wolf to observe for 5 minutes. Every thirty seconds, record that wolf's (and only that wolf's) behavior. If the wolf goes to a place where you cannot see it, just record it as "out of view." Don't switch wolves midway through your observation period.

Date:		
Time of first observati	on:	
Time	Behavior Observed	
Example 30 sec.	Running along the edge of the exhibit	
Example 1 min.	Stopped running to sniff a log	
30 sec.		
1 min.		
1 min. 30 sec.		
2 min.		
2 min. 30 sec.		
3 min.		
3 min. 30 sec.		
4 min.		
4 min. 30 sec.		

# **North American Predators**



An animal's habitat provides the food, water, shelter and space it needs to survive. Observe these North American predators at the ABQ BioPark Zoo, and read the signs at the exhibit. Use that information and your observations to complete this chart. Do wolves compete with any of these animals for food or habitat type?

	Habitat Type	Range	Food	Source of Water	Source of Shelter
Mexican Gray Wolf					
Bobcat					
Ocelot					
Jaguar					
Mountain Lion					

# **Answers - North American Predators**

An animal's habitat provides the food, water, shelter and space it needs to survive. Observe these North American predators at the ABQ BioPark Zoo, and read the signs at the exhibit. Use that information and your observations to complete this chart. Do wolves compete with any of these animals for food or habitat type?

	Habitat Type	Range	Food	Source of Water	Source of Shelter
Mexican Gray Wolf	Woodland, Forests	Northern Mexico and SE Arizona	Small game, deer, elk	Streams, creeks, any other water source in habitat	Burrows, under shrubs
Bobcat	Forests, mountains, semi- deserts, brushlands	Southern Canada to Baja California and Central Mexico	Rodents, rabbits, and birds. Occasionally deer.	Rivers	Trees and rock crevices
Arctic Fox	Open tundra, ice floes	N. Eurasia, Northern Canada and Alaska, Greenland, Iceland	Lemmings, sea birds, fish, seals, invertebrates, berries	Ice melt, streams, other watercourses	Burrows
Ocelot	Dense vegetation in forests, woodlands and scrublands	Extreme SW United States to Argentina	Rodents, rabbits, young deer, peccaries, birds, snakes, fish	Streams, small water courses	Trees
Jaguar	Scrubland, desert, savanna and forests. Always by water	Mexico to Brazil and Argentina. Rare in S. Arizona and New Mexico	Reccaries, deer, tapirs, capybara, caimen	Rivers, streams, lakes and marshes	Trees, under brush
Mountain Lion	Mountains, woodlands, and swamps	Western Canada and US to South America	Deer, elk, beavers, porcupines, hares, and wild hogs	Rivers, streams, lakes, swamps	Use caves, fallen trees, under shrubs, in trees