

4th-5th Grade SCIENTISTS ON THE GO

Where Have Wolves Traveled?

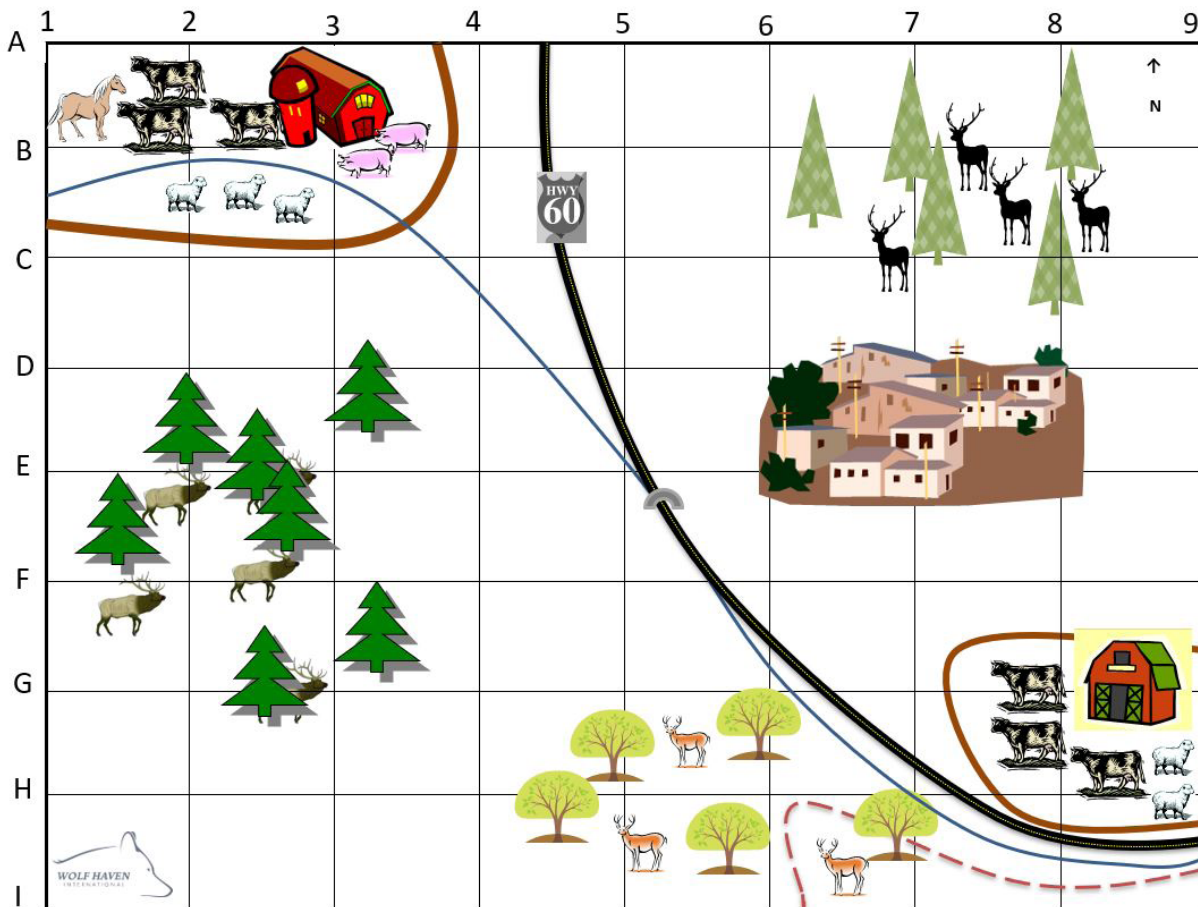
As wolves return to areas they were once hunted out of, scientists track them when they can, to better understand wolf behavior and avoid human-wolf conflict. Practice being a scientist by plotting on the map where wolves go.

Plotting Points Instructions:

Plot the points for Wolf 1 with stars. Draw a line between each point. Connect the last point with the first point. Repeat using triangles for Wolf 2 and circles for Wolf 3.

When all of the points on your map are connected, lightly shade in any areas where two or more wolves overlap. The shaded area is the wolf pack's territory, or space it lives. The spot where all three wolves go is most likely the den.




Plot Points			
	Wolf 1	Wolf 2	Wolf 3
Point 1	G2	G3	G4
Point 2	E2	F2	F4
Point 3	D4	E1	F3
Point 4	E5	D2	G1
Point 5	D6	C2	No signal
Point 6	D5	D3	No signal
Point 7	F5	E4	No signal
Point 8	H5	G5	No signal
Point 9	G4	H4	No signal
Point 10	H3	G4	No signal



What does the tracking data tell you?

Review on your map where the wolves traveled and answer the following questions. You may need to review the map legend to know what the wolves were near.

1. Where did you think the wolves would travel?
2. Were any of the wolves near humans? If so, which wolves?
3. Which forest could the wolf packet's territory be in?
4. Where could the den be?
5. Based on where the wolves traveled, what might the wolves have eaten?

	Farmer Jones		Deer Park Forest
	Farmer Thomas		Elk Hills Forest
	Thomaston		Thomaston Forest
	Thomaston Forest Elk Herd		Deer River
	Elk Hills Elk Herd		Highway 60
	Deer Park Deer Herd		Bridge
	Deer Park Trail		Territory



We'd love to see your finished activity!

Email a photo to info@wetsciencecenter.org to receive a prize.



(c)Wolf Haven International 2020

Wolf Words Scramble

Unscramble the letters to form words about wolves. At the bottom, fill in the boxes with the letter from the matching numbered box to find out what wolves need.

LAIMYF	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
SEMLL	<input type="text"/>	<input type="text"/>	8	<input type="text"/>	<input type="text"/>			
CASPE	<input type="text"/>	<input type="text"/>	2	3	<input type="text"/>			
DATPORRE	<input type="text"/>	<input type="text"/>	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
TuHn	<input type="text"/>	7	<input type="text"/>	<input type="text"/>	<input type="text"/>			
WHLO	<input type="text"/>	4	<input type="text"/>	<input type="text"/>	<input type="text"/>			
SPuP	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
MMLMAA	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
NED	<input type="text"/>	<input type="text"/>	<input type="text"/>					
DOOF	<input type="text"/>	<input type="text"/>	<input type="text"/>	5	<input type="text"/>			
WAETR	<input type="text"/>	<input type="text"/>	<input type="text"/>	6	<input type="text"/>	<input type="text"/>	9	

Wolves need

<input type="text"/>	1	<input type="text"/>	2	<input type="text"/>	3	<input type="text"/>	4
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<input type="text"/>	5	<input type="text"/>	6	<input type="text"/>	7	<input type="text"/>	8	<input type="text"/>	9
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Answers: family, smell, space, predator, hunt, howl, pups, mammal, den, food, water – EACH OTHER

Compare and Contrast Wolves and Humans

Read the vocabulary, and then complete the activity on the next page.

Binocular - using both eyes together so that depth/distance can be determined

Ecosystem - a system made up of living things interacting with their environment especially under natural conditions

Hierarchy - persons or things arranged in ranks or classes

Peripheral - side of vision range extending behind as far as can be seen

Predator - an animal that hunts, catches, or eats other animals

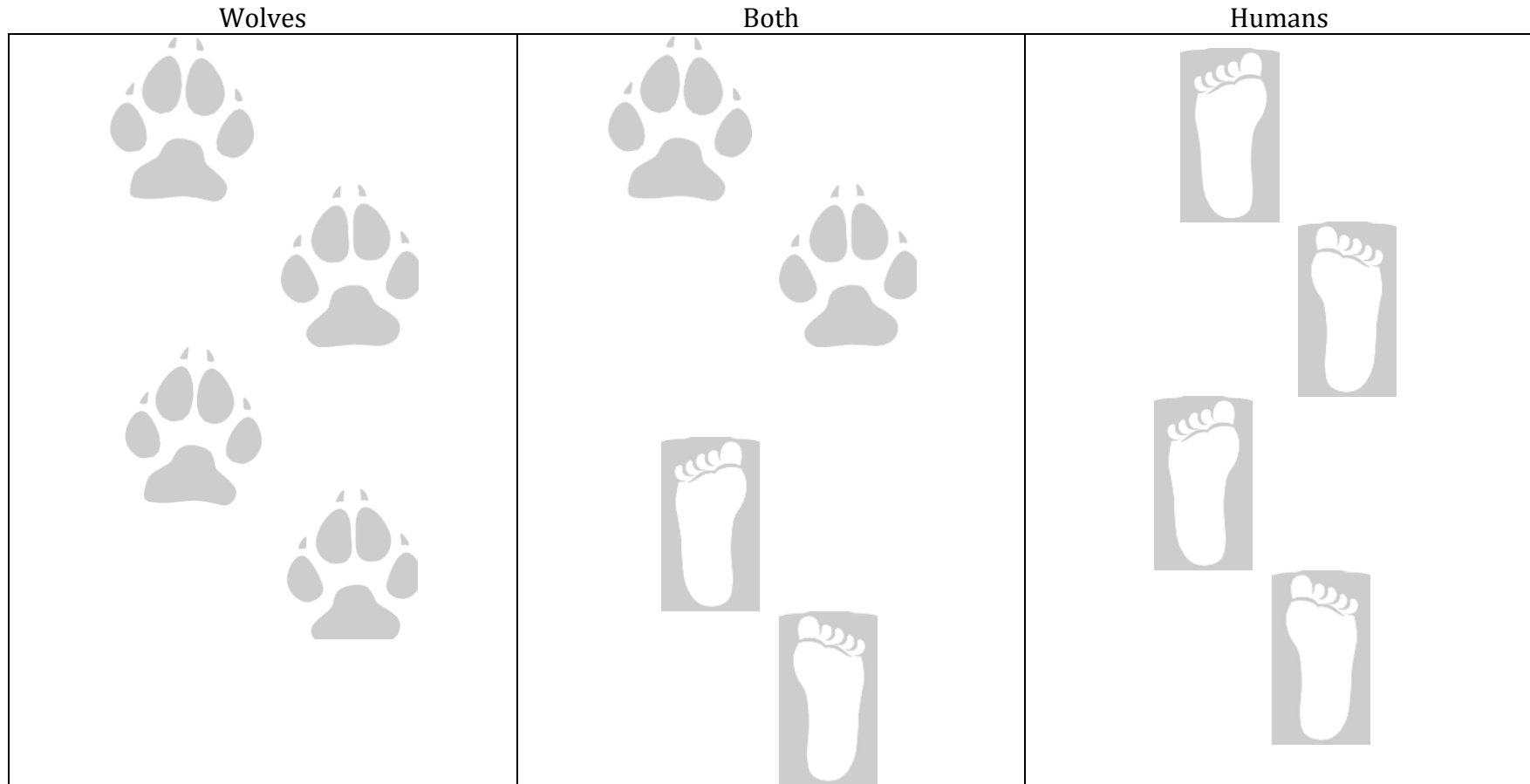
Multi-generational - more than 2 generations



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Compare and Contrast Wolves and Humans

Both work with others to raise their young. Wolves use their teeth to take down their meal, humans use tools.



- | | | | |
|---|--|--|---|
| <p>A. Use Teeth to hunt</p> <p>B. Travel between multiple homes</p> <p>C. <u>Hierarchy</u></p> <p>D. Better <u>binocular</u> vision</p> <p>E. Better <u>peripheral</u> vision</p> <p>F. Use tools to hunt</p> | <p>G. Usually 1 home at a time</p> <p>H. Care for sick and weak</p> <p>I. Multiple young at one time</p> <p>J. Older siblings help care for younger siblings</p> <p>K. Hunt for food</p> <p>L. Jaw strength 1500 psi</p> | <p>M. Work with others to raise young</p> <p>N. Teach traditions to young</p> <p>O. No natural <u>predator</u></p> <p>P. Family focused</p> <p>Q. Have an effect on their <u>ecosystem</u></p> | <p>R. Live in <u>multigenerational</u> family groups</p> <p>S. Keep territories</p> <p>T. Hair color changes with age</p> <p>U. Mark their boundaries</p> <p>V. Parents lead the family</p> |
|---|--|--|---|

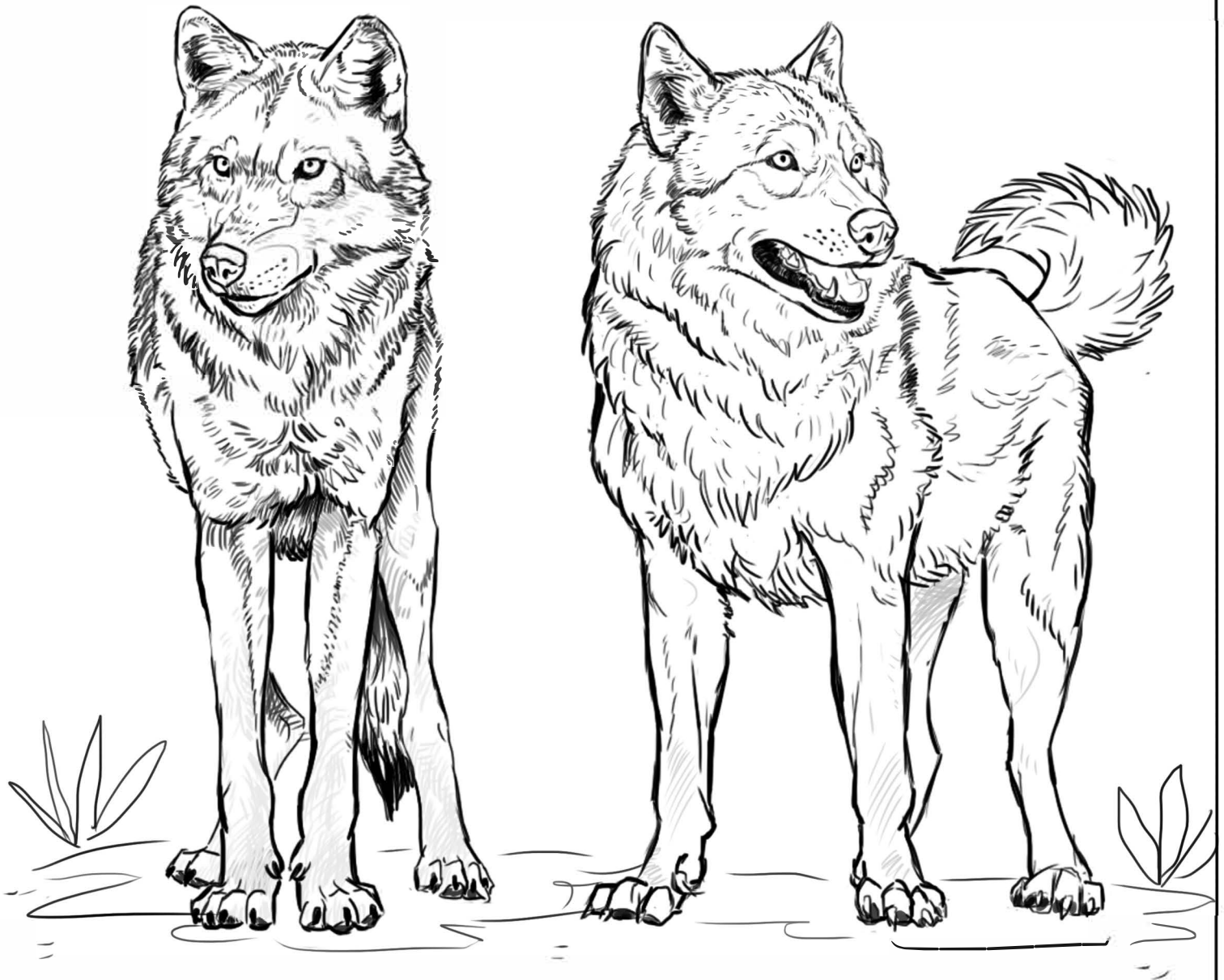


INTERESTING WOLF FACTS

Wolves are...	Part of the Canine (dog) family Carnivore (meat eater) Predators (hunt for their food/prey)
Average length	Male: 5-6.5 feet (nose to tip of tail) Female: 4.5 to 6 feet
Average height	26 to 32 inches
Average weight	Males: 80-110 lbs. Female: 60-80 lbs.
Average paw size	4 inches wide by 5 inches long
Life span	5-9 year average in the wild 14-15 years in captivity
Pelage (color)	Any shade of gray, brown, black, white, or tan
Number of teeth	42
Breeding season	Mid January to Mid April (depending on climate-the colder the climate, the later the breeding season)
Average Weight at birth	1 pound
Average Litter size	4-6 pups
Pack size	6-8 members on average
Pack territory/ size	10-1000 square miles per animal
Speed	6 miles on average but can reach speeds of 35 mph during a chase
Common prey	Caribou, elk, deer, bison, musk-oxen, sheep, goats. Also will prey on rodents, beavers, fish, and birds. Basically whatever is available when ungulate are scarce.
Main threats to survival	Loss of habitat due to destruction and development by humans, persecution by humans.



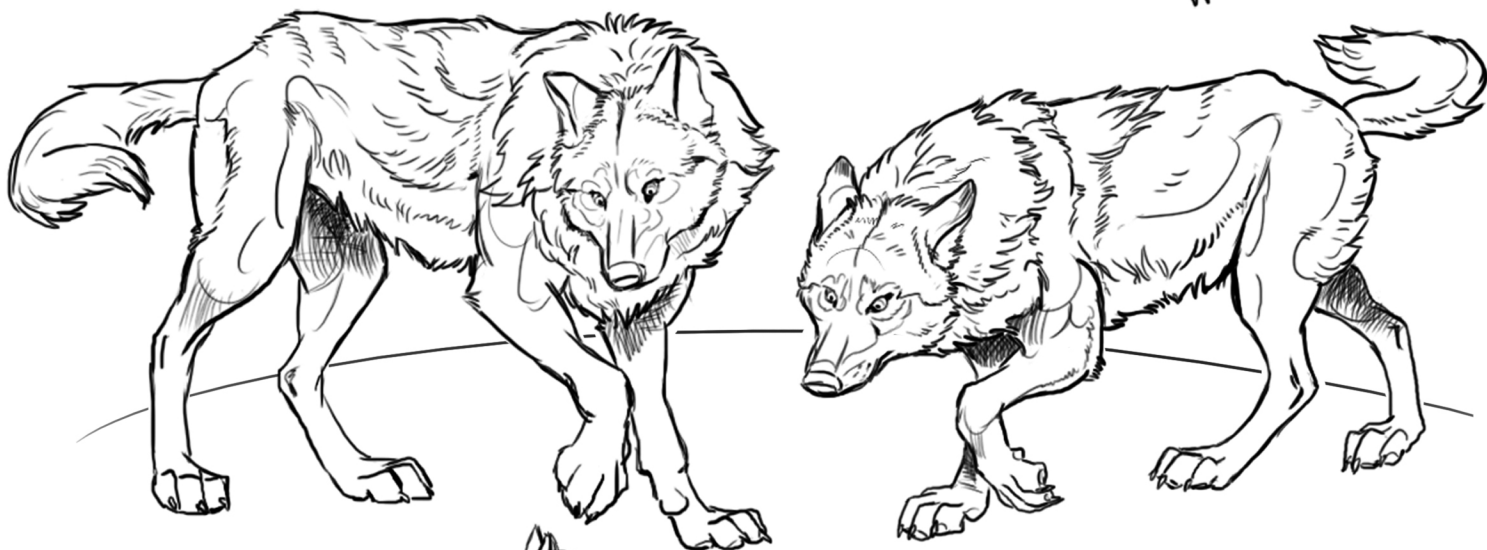
Differences between wolf and dog



- Adult's eyes are yellow or amber.
- Tail drops down.
- Very long legs, narrow chests and and big paws.
- Varied eye colors, including blue in adults.
- Tail on many dog kinds curve upwards.
- Barrel chest, shorter legs smaller paws.



WOLF HAVEN
INTERNATIONAL



A pack: Life as a family



Animal Sanctuary

Wolf Sanctuary Manager & Biologist

TYPICAL DAY: A typical day has very little to do with spending time around the wolves. Each day starts with a walk-through. Seeing each and every wolf, administrating am & pm medications, and getting a general evaluation of the sanctuary and its residents. Then comes rounds: feeding (or enrichment) and refreshing their water (buckets/splash tubs). When that's all done, there is food-prep: thawing, portioning, and assembling food and enrichment. Enclosure & grounds maintenance also needs to be kept up. This includes cleaning straw, feces, scrubbing buckets/tubs, fencing repair, grass-mowing/weeding, and building or repairing shelters/capture boxes. At the end of the day there are office tasks including camera monitoring, scheduling, writing, and record keeping.

CAREER PATHWAY: I began my path while still living in my native Mexico. I was studying to become a biologist. At first I was working with primates and was intending to be a primatologist. The director of Museo del Desierto (The Desert Museum) and my professor had decided to study a Mexican wolf and her five daughters who had transferred from Wolf Haven. When it came time in my studies to do my degree project, I had learned about and become involved with the wolves and decided to make them my research focus. Coming to Wolf Haven for their Wildlife Handling Class introduced me to the sanctuary, furthering my interest in wolves' well being and conservation. I began my career at Wolf Haven as an intern and became part of the Animal Care team.



Scrubbing food buckets

IMPORTANT SKILLS

Biology
Knowledge of animal behavior
Handling and care of wild carnivores
Record keeping
Science-based management

EDUCATION

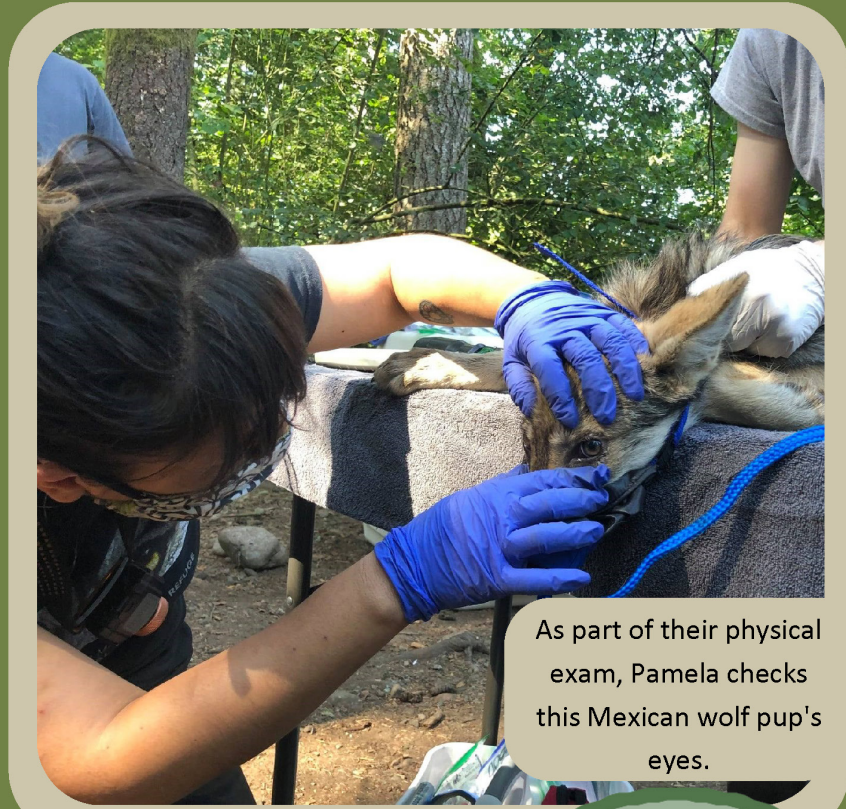
Bachelor's Degree

SALARY RANGE

\$25,000 - \$64,000

TOOLS OF THE TRADE

Food preparation tools.
Medication & first aid supplies. Cleaning & grounds maintenance supplies & equipment. Fence building and repair tools. Record keeping system.



As part of their physical exam, Pamela checks this Mexican wolf pup's eyes.

TYPE OF WORK

I manage the care of captive-born wolves, Species Survival Plan (SSP) endangered wolves, and their natural environment based enclosures.

Pamela Maciel Cabañas
Sanctuary Co-Manager & Mexican Wolf SSP Liaison
Wolf Haven International

"Humans have the option of seeking quiet elsewhere, but captive animals don't have that option. As a sanctuary manager, providing the wolves quiet time and space is one of the rewards of the job." - Pamela Maciel Cabañas

