For more information on cougar safety:

- WesternWildlife.org
- www.wdfw.wa.gov/living/cougars
- ▶ If a particular cougar poses an immediate threat:

Call 911

► To file a non-emergency dangerous wildlife report, call: **Washington Department of** Fish and Wildlife 877-933-9847 or Call 911

Washington Laws Prohibit Feeding Wildlife

Two Washington laws make it illegal to intentionally or otherwise leave food waste in places where it will attract large wild carnivores. The laws were designed to keep both people and wildlife safe. Violations are subject to monetary fines. (RCW 77.15.790; RCW 77.15.792)

For more copies of this cougar education guide, please contact Western Wildlife Outreach at Western Wildlife.org. PO Box 147, Port Townsend, WA 98368



Western Wildlife Outreach promotes an accurate understanding of large carnivores and carnivore awareness through education and community outreach throughout the Pacific Northwest.







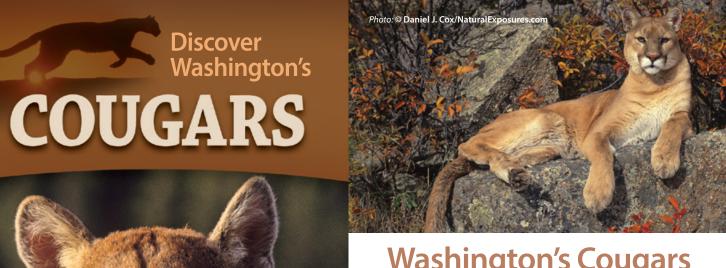


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Washington's Cougars

ougars, also called mountain lions, panthers, or pumas, are the second largest members of the cat family in the western hemisphere (after the jaguar), and the fourth largest in the world. Long before humans arrived, this carnivore lived on the North American continent as well as right here in Washington State.

Cougars are shy, elusive, and rarely observed. But as Washington's human population grows, and more and more people are recreating outdoors, the chance of observing or encountering cougars may increase. To help you understand Washington's cougars, while living, working, and recreating in cougar country, this brochure explains the ecology and behavior of these animals, their signs, their role in the ecosystem, and how to avoid a negative interaction, keeping people, pets, and livestock safe.

History and Legal Status

In the 1800s and early 1900s, many people viewed cougars, wolves, and grizzly bears as threats to people, domestic livestock, and game species, and they targeted these large carnivores for extermination. Due to their adaptable nature, cougars were able to survive in the rugged and remote mountainous areas of the West.



Since 1968, the cougar has been a protected game species managed by Washington Department of Fish and Wildlife (WDFW). Hunting seasons are regulated with established season dates. Hunting of

cougars requires a hunting license. Cougar now occupy suitable habitat across the state. While cougar populations are currently stable, loss of habitat, loss of prey, disease, poaching and vehicle collisions can affect cougars as Washington's human population continues to rise.

Role in the Ecosystem

Cougars are apex predators whose presence helps to maintain an ecosystem's health and diversity. Scientific studies show



that when large carnivores are missing from places where they were once present, ecosystems can be altered; for example, ungulates (i.e. deer and elk) can over-browse the landscape, which may

alter habitats, and affect populations of other species such as birds and amphibians.

Photos: Maurice Hornocker

Ecological Benefits of Cougar Presence



healthy ecosystems: 1 Carnivores such as bears, coyotes,

Cougars provide food and habitat for

a diversity of species, contributing to

- foxes, and skunks eat once the cougar
- 2 Eagles, ravens, crows, jays, vultures, and other foraging birds are drawn to carcasses to feed.
- 3 Beetles and other insects forage on the remains and even reproduce there, breaking down the carcass into soil
- **4** Soils are enriched which encourages vigorous growth of plants.
- 5 Cougars keep their prey naturally wary and help keep populations healthy.

Most Frequently Asked Questions About Cougars

1. How many cougars live in Washington?

Cougars are solitary, and are difficult to track and study. However, WDFW has funded and partnered with local universities on 7 study areas over 15 years in Washington. Based on this research WDFW estimates the independent-aged (>18 months) cougar population size is 1,900 to 2,100 animals.

2. Do cougars travel alone or in groups?

Cougars are generally solitary in nature. Anytime more than 1 cougar is seen it is likely a family group or when males and females come together to breed for a short time. The average litter size is 2 and a female cares for her kittens until they are 15 to 24 months old, at which time they may be as large as or larger than their mother, giving the impression that they are not solitary.

3. Do cougars overpopulate?

No. Cougars self-regulate their populations, they are density-dependent meaning that the number of resident cougars on the landscape is



limited by the amount of available space and prey. Male cougars are highly territorial, establishing and defending a home range free of other males so that they have exclusive access to reproductive females. A cougar's social structure translates into low population numbers of resident cougars, approximately 4 cougars per 100 square miles.

One of the highest mortality factors for cougars, other than humancaused mortality, is the killing of each other, especially males killing other males for territory, food, or a reproductive female. This is the primary reason they maintain a low population density.

4. Does a cougar sighting mean there are more in the area?

No. A cougar sighting does not necessarily mean that there are more cougars in an area. It might just be an animal passing through an area in search of an open territory. However, to avoid attracting cougars to human areas, do not feed deer and elk or allow them to bed nearby, as ungulates are the cougar's primary prey.

5. What do cougars eat?

Cougars' principal prey includes deer and elk, but they also catch prey as small as deer mice. Other prey includes coyotes, rabbits, rodents, raccoons, beaver, and infrequently, pets and livestock. Usually a cougar kills only one large animal at a time and kills one deer-sized prey every 7 to 12 days.



6. Do cougars reduce their prey populations?

Learn about

cougar behavior,

ecology, signs,

and important

safety tips.



Cougars can affect the behavior of prey populations and help to maintain elk and deer populations at healthy levels. As a species, they co-evolved with their prey over millennia. Cougars rarely cause substantial declines in prey populations. However, there are rare situations where cougars impact a

prey population's growth rate, such as when prey numbers have already fallen to critically low levels. Other factors are more significant in deer and elk population declines, including habitat loss, changes in habitat quality, disease, weather, hunter harvest, road kills, and poaching.

7. Do cougars prey on livestock?

Cougars rarely attack domestic livestock. When they do, individual producers can suffer losses. Weather, disease, and birthing problems have a much greater effect on livestock than cougars. In Washington, domestic goats, sheep and fowl are the most vulnerable to predation. Changing animal husbandry practices may reduce livestock loss. Find out more about husbandry practices at: wdfw.wa.gov and westernwildlife.org.

8. Will more hunting or removal of cougars increase safety?

Not necessarily. The death of a single cougar creates a territorial vacancy that several other cougars will attempt to occupy and hold. Research data shows that younger cougars will move into an area to occupy the vacancies. This can temporarily result in more cougars in that territory until the population re-establishes its social structure to limit the numbers as described in Question #3.

9. Do cougars pose a significant threat to public safety?

No. Cougar attacks on people are extremely rare. A person is one thousand times more likely to be struck by lightning than attacked by a cougar. Cougars, like any wildlife, can be dangerous; therefore people who live, work, or recreate in cougar habitat should take precautions



to reduce their risk of an encounter. In Washington, there have been 2 human fatalities between 1924 and 2018. While it may seem that cougar encounters are increasing, we must realize that the human population in Washington has grown from 4.1 million in 1980 to 7.6 million in 2018. That, coupled with the growing popularity of outdoor recreation, especially high-speed sports like mountain biking and trail running, means more people are passing through cougar habitat, yet cougars are almost never seen.

Cougar Signs

Cougars avoid people. You may never see a cougar in the wild, but cougar signs you might see include cache sites, tracks, scrapes, scratches, and scats.

Scats

Cougars generally cover their scats, or droppings, with loose soil. Cougar scats (roughly the size of those of a large dog) are dense and segmented, blunt at both ends, and roughly one to one and



one-half inches in diameter and four to six inches long. Scats may include hair, bones, and teeth from prey, and possibly grass, but usually no other vegetation. Cougars leave scats near scrapes, along trails, under overhangs, in caves, and near kills. Smaller cougars may deposit scats similar in size to those left by bobcats.

Scrapes

Cougars make scrapes and scratches to attract a mate, or to avoid each other by marking territory. Male and female cougars make scrapes by using



their hind feet to push up a mound of pine needles, leaves, dirt or other debris. Cougars place scrapes in conspicuous places along trails, at junctions in canyons, in caves, and along ridgelines. Occasionally cougars urinate or defecate on the scrape. Bobcats make similar, but smaller, scrapes.

Scratches

Cougars make scratches on logs, trees, and on occasion, fence posts. On trees, long, deep, parallel scratches run vertically four to eight



feet above the ground, rarely taking off much of the bark. All cats may scratch on occasion, but visible evidence is rare. Marks on trees are more likely made by bears.

Learn more about cougars and cougar

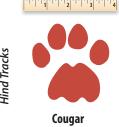
Tracks

Cougar tracks show four toes on both the front and hind paws, and an M-shaped heel pad with two lobes at the top or leading edge, and three lobes at the base. Their retractable claws do not show in their prints except on slippery or difficult terrain where they need more traction. A cougar carries its heavy tail in a wide U-shape at a normal walk, and in snow, the lower portion of its tail can leave drag marks between each print.

	Adult Males	Adult Females
Track Width	4–5 in. (9–13 cm)	< 3.5 in. (5–8 cm)
Heel Pad	>2 in. (9-13 cm)	<2 in. (4–6.5 cm)
Stride Length	>40 in. (9–11.5 cm)	<40 in. (4.5–7.5 cm)

Note: When observing tracks, recognize that additional factors may be needed to make conclusions about the gender and species of the animal making the track, i.e., an adult male cougar typically leaves an impression of 4 in. or greater.





show in tracks

After a cougar catches large prey,

continue to feed over several days.

it drags the body to a cache site,

You might see a drag mark near

fresh kill sites. Cougars cover the

remainder of their prey with leaves,

or secluded area, where it will

Cache Sites



Domestic Dog Dog tracks are highly variable but



usually less than 3.5 in. (9 cm) in length and narrower than wide



pine needles, branches, or other debris to hide it from scavengers, and to prevent the carcass from spoiling. The cougar may stay close to the cache site and spend three to five days feeding. Never approach or linger near a dead or partially covered deer or elk.

Washington Department of Fish

and Wildlife map: Cougar habitat is

1 2

Physical Characteristics

Cougars are graceful and majestic animals known for their strength and agility. The images and chart to the right show color and physical attributes of adults and kittens, and size differences between adult male and female cougars.

Reproduction & Life Span

Cougars may breed at any time of year although most births occur in July and August, after about three months' gestation. Females can have their first litter at two and one-half to three years of age, and breed roughly every two years. Breeding pairs spend only a short time together, and males play no role in the rearing of young.

A mother cougar leaves kittens for brief periods when she hunts for food, but as the kittens grow, she takes them with her as she ventures out further across her home range.

In the wild, adult male cougars typically live for 10 to 12 years while females live somewhat longer. Hunting of cougars is the main cause of death for adult cougars. Other causes of death include males fighting other males for territory, collisions with motor vehicles, poaching, injuries sustained while hunting, disease, and old age.

Thick, long, black-tipped tail.

The tail measures about one-third of the cougar's body length and serves to counter-balance the cougar's movements as it pursues prey and travels across the landscape.

The coats of kittens have blackish-brown spots.

Spots begin to fade to dapples at about 12 to 14 weeks, and disappear completely in about 18 months.

The *pelage*, or coat of adult cougars, is uniformly colored tawny, grey-brown, or red-brown.

Distribution & Range

Washington State has about 35,000 square miles of cougar habitat. Cougars are highly adaptable, living in terrain ranging from forested lowlands to rugged and remote mountainous areas. Cougar habitat includes steep canyons, rock outcroppings and boulders, dense brush,

> A male cougar's home range averages 100 to 200 square miles and typically encompasses

shown in areen with major roads and all or part of 2 to 4 females' home ranges.

In Washington, female cougar ranges are usually 30 to 70 square miles in size. There can be some overlap between male ranges, and also among female ranges, but usually there are fewer than 4 cougars per 100 square miles of suitable habitat.

Communication

Cougars communicate through visual, olfactory (scent), postural signals, and vocalizations such as low guttural growls, spitting, snarls, and hissing. Cougar mothers growl or hiss when their kittens are threatened. Nursing cubs emit high-pitched, birdlike chirps and mews. Cougars also purr when together. Older cubs and adults emit whistles. Other sounds include an "ouch" call, and a yowl.

The most spectacular sound is that of a cougar caterwaul, which is an eerie sound that can resemble the cry of a human. Caterwaul sounds are made by females during mating season, especially when males are competing for the same receptive female.





Gestation to Birth

Gestation is 92 days with 1 to 4 kittens possible, but the average is 2. The are spotted and weigh just over a pound.

Home, Pet, and Livestock Safety



2 weeks old

Eyes and ears open. Mother leaves for short periods of time to hunt.



6 to 8 weeks old

As kittens grow, they accompany their mother on hunts.



4 to 12 months

Characteristic black

whiskers.

Shoulder Height: 30 in. (76 cm.)
Length, nose to tip of tail: 7 to 8 ft. (2.1-2.4 m.)

Shoulder Height: 24 in. *(61 cm.)* Length, nose to tip of tail: 5.5–6 ft. *(1.6–1.8 m.)*

Weight: 120 –160+ lbs. (54 –72+ kg.)

ght: 85–115 lbs. *(38 – 52 kg.)*

"mustache" and long

Spots on fur turn to dapples, which continue to fade. Juveniles disperse at 16 months to establish their own territories.



Adult female front track (approximately actual size: 3.5" wide

Cougar Safety Tips Take these precautions while living or recreating in cougar country. Carry hear spray whenever you recreate outdoors, know how to use it, and keep it re

Carry bear spray whenever you recreate outdoors, know how to use it, and keep it readily available. Never store bear spray in a backpack.

The sighting of a cougar does not mean that the cougar will become a threat to human safety. Cougar attacks on humans are extremely rare. Cougars are secretive and shy, and usually avoid contact with people, although they may hunt and cache deer in areas inhabited by humans.

Be a good steward at home and in the wild to help keep humans as well as cougars safe.

For more information, visit: WesternWildlife.org



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Home Safety

- ► Landscape around your home for safety.
- Avoid landscaping with plants that are palatable to deer. Deer can attract cougars to your yard.
- Prune shrubs and trees around the base to keep cougars from using them as hiding spots. • Install lighting to illuminate walkways at night.
- ▶ Seal off open spaces under buildings and porches to prevent use as shelter.
- Do not make food, water, or shelter available at ANY time.
- Cougars use natural areas to move through populated areas into more remote habitat. If food, water, and shelter are not available cougars generally move on more quickly.
- ► Keep garbage cans tightly sealed and compost secured.
- ▶ Don't feed deer or other wildlife which can attract cougars.
- ▶ Supervise small children outdoors especially during the hours around dawn and dusk when cougars are most active.

Pet Safety

- ▶ Keep dogs and cats indoors, especially after dusk and before dawn, to prevent them from becoming prey for cougars and other
- ► **Keep pet food indoors.** If you feed animals outside, gather up the food and water bowls and clean up spilled food so as not to attract
- ▶ If you must keep pets outside, consider installing a cougar-resistant fence or covered

Livestock Safety

- ► Whenever possible, confine livestock and other domestic animals in secured and covered enclosures or barns, especially goats, llamas, sheep, chickens and other fowl
- ► Consider using a **livestock guard animal** to protect animals out to pasture. Many ranchers and livestock owners use special breeds of dogs that are well suited for protecting livestock.
- Install an electric fence around areas where livestock or domestic animals are kept.

Safety When Recreating

▶ The best defense is to be aware of your surroundings and look and sound human! The human voice is a great deterrent.

Hiking & Camping

- ► Hike in **small groups** and keep children close to the group.
- Make enough noise to avoid surprising wildlife, especially at bends in the trail. Whistles work well.
- Avoid approaching dead animals, especially deer or elk; they could be cougar prey left for a later meal.
- Keep your camp clean and store food and garbage in double plastic bags away from sleeping areas.

Mountain Biking

- ► Riding with a with a partner or in a small group is always recommended as a safety measure against getting injured, getting lost, or avoiding conflicts with wildlife, including cougars.
- ▶ Use a bell or make noise as you go along the trail.
- ► Have bear spray handy in a holster or bike holder made for the product.
- ▶ Avoid being in low-light conditions

Running

- ► Avoid running in cougar country alone, particularly at dawn, dusk, or after dark.
- Avoid running with headphones or ear **buds** that can block out sounds around
- ▶ Make noise as you go along trails.
- ▶ Always stay aware of your surroundings.
- ▶ Have bear spray handy in a holster or

If You Encounter a Cougar

- ► Cougar kittens can look similar to domestic cats. Always give a cougar or cougar kittens a very wide berth.
- Never approach the cougar or offer it food.
- Stay together in one group.
- ▶ Face the cougar. Talk to it firmly and hold your ground. Always leave the animal an escape route.
- Move slowly. Running or rapid movements may trigger an
- Try to appear larger than the cougar. If wearing a jacket, hold it open to further increase your apparent size. If you are in a group, stand shoulder-to-shoulder to appear intimidating.
- If the cougar does not leave the area, be more assertive. If it shows signs of aggression (crouches with ears back, teeth bared, hissing, tail twitching, and hind feet pumping in preparation to jump), shout, wave your arms and throw anything you have available (water bottle, book, backpack) at the animal. Use bear spray at this point!
- ▶ If the cougar attacks, fight back. Be aggressive and stay on your feet. Spraying bear spray (EPA approved) in the cougar's face is also effective, even if the spray ends up on you and the cougar. Remember: keep bear spray accessible and review directions on its use.

When in cougar country, always carry bear spray, and keep it accessible.