

Cougars (Mountain Lions)

Sleek and graceful, cougars (*Puma concolor*, Fig. 1) are solitary and secretive animals rarely seen in the wild. Also known as mountain lions or pumas, cougars are known for their strength, agility, and awesome ability to jump. Their exceptionally powerful legs enable them to leap 30 feet from a standstill, or to jump 15 feet straight up a cliff wall. A cougar's overall strength and powerful jaws allow it to take down and drag prey larger than itself (Fig. 2).

Cougars are the largest members of the cat family in North America. Adult males average approximately 140 pounds but in a perfect situation may weigh 180 pounds and measure 7-8 feet long from nose to tip of tail. Adult males stand about 30 inches tall at the shoulder. Adult female cougars average about 25 percent smaller than males. Cougars vary in color from reddish-brown to tawny (deerlike) to gray, with a black tip on their long tail.

Cougars occur throughout Washington where suitable cover and prey are found. The cougar population for the year 2002 was estimated to be 2,400 to 3,500 animals. Statewide, the cougar population is likely declining. The Department of Fish and Wildlife has nine management zones around the state designated for "maintain" or "decline," and adjusts harvest levels accordingly. Wildlife offices throughout the state receive hundreds of calls a year regarding sightings, attacks on livestock and pets, and cougar/human confrontations. Our increasing human populations and decreasing cougar habitat may create more opportunities for such encounters.

Facts about Cougars

Habitat and Home Range

- Cougars use steep canyons, rock outcroppings and boulders, or vegetation, such as dense brush and forests, to remain hidden while hunting.
- Adult male cougars roam widely, covering a home range of 50 to 150 square miles, depending on the age of the cougar, the time of year, type of terrain, and availability of prey.
- Adult male cougars' home ranges will often overlap those of three or four females.
- Female home ranges are about half that of males and there is considerable overlap in female home ranges.
- Often female progeny will establish a territory adjacent to mother, while virtually all males disperse considerable distances from the natal area.

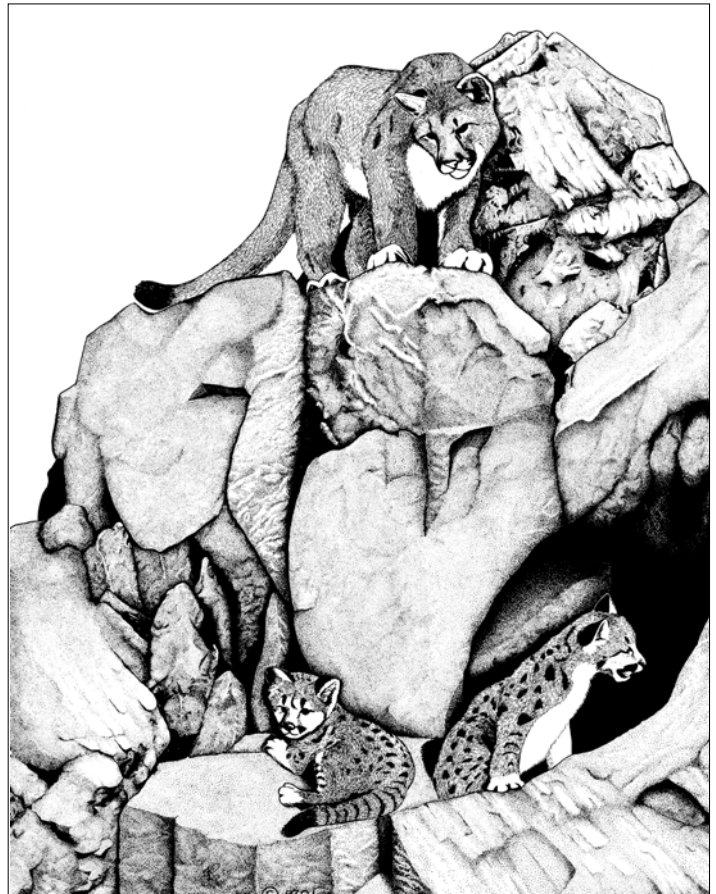


Figure 1. In rough terrain, cougar daybeds are usually in a cave or a shallow nook on a cliff face or rock outcrop. An average of two kittens are born every other year. (From Christensen, *Mammals of the Pacific Northwest: A Pictorial Introduction.*)

Food and Feeding Habits

- Cougars are most active from dusk to dawn, although they sometimes travel and hunt during the day.
- Adult cougars typically prey on deer, elk, moose, mountain goats, and wild sheep, with deer being the preferred and most common prey.
- Other prey species, especially for younger cougars, include raccoons, coyotes, rabbits, hares, small rodents, and occasionally pets and livestock.
- A large male cougar living in the Cascade Mountains kills a deer or elk every 9 to 12 days, eating up to 20 pounds at a time and burying the rest for later.
- Except for females with young, cougars are lone hunters that wander between places frequented by their prey, covering as much as 15 miles in a single night.
- Cougars rely on short bursts of speed to ambush their prey. A cougar may stalk an animal for an hour or more (Fig. 3).

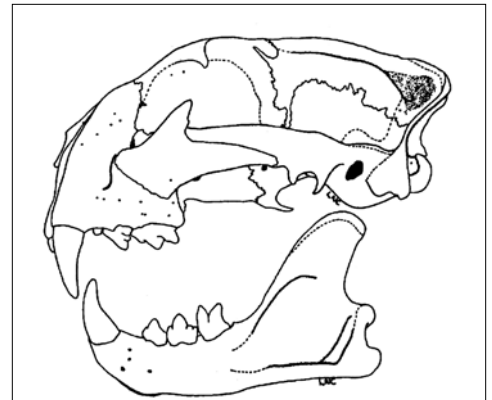


Figure 2. A cougar's strength and powerful jaws allow it to take down and drag prey larger than itself.

(From Verts and Carraway, *Land Mammals of Oregon.*)

Daybed Sites

- Cougars don't use dens like bears. They may settle down for up to six weeks while the kittens are immobile, but afterward are almost always on the move, making daybeds as they go.
- A cougar's daybed is used for rest, protection from the weather, and to raise young.
- In rough terrain, daybeds are usually in a cave or a shallow nook on a cliff face or rock outcrop (Fig. 1). In less mountainous areas, day beds are located in forested areas, thickets, or under large roots or fallen trees.
- Daybeds are frequently near kill sites. No day bed preparation takes place.

Reproduction and Family Structure

- Cougars can breed year-round, but breeding is more common in winter and early spring. Several females may breed with a resident male whose home range overlaps theirs.
- After 91 to 97 days of pregnancy, one to four (but usually two) kittens are born.
- The bond between male and female is short-lived (about ten days), and the male cougar plays no role in raising the kittens.
- Kittens stay with their mothers for 12 to 19 months following their birth.
- Female cougars usually breed every other year.

Mortality and Longevity

- The two most common natural causes of death among cougars are being killed by other cougars, or by the prey during an attack.
- Humans, through hunting, depredation, and vehicle collisions, are probably the main source of mortality among cougars.
- Male cougars can live 10 to 12 years in the wild; females normally live longer.

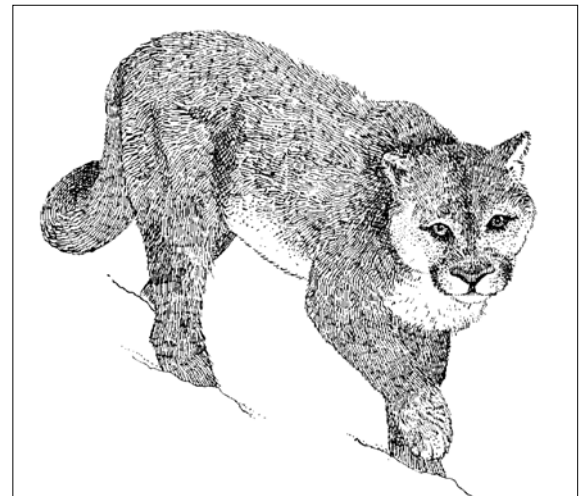


Figure 3. Cougars are a stalk and wait predators and the majority of prey is killed by a sudden explosive burst of speed with the attack focused from the front shoulder forward, where the cougar can grasp the neck to break the neck or suffocate and kill.

(Washington Department of Fish and Wildlife.)

Viewing Cougars

Cougars make their living by not being seen. In areas disturbed by humans, these cats are most active during twilight and early morning hours. (In dim light, cougars see up to six times better than humans.) However, cougars can be active at dawn or dusk if prey is active at that time.

Tracks

Cougar tend to leave “soft” tracks, meaning the animals make very little impact on the ground, and their tracks may be virtually invisible on packed earth or crusted snow (Fig. 4). In addition, to preserve their sharpness for gripping prey, these animals keep their claws retracted most of the time, and so claw marks are rarely visible in their tracks.

Because cougars carry their heavy tail in a wide U shape at a normal walk, in snow, the lowermost portion may leave drag marks between each print.

Droppings

Cougars generally cover their droppings with loose soil. When visible, their droppings typically resemble those of most species in the dog and cat families. However, cougars have well developed premolars that can slice through bone and hide. Therefore, their droppings often show chunks and fragments of chewed bone and considerable hair from the hide. Members of the dog family gnaw on bones but usually don't chew them up into cut fragments.

Cougar droppings are generally cylindrical in shape, segmented, and blunt at one or both ends. An average dropping measures 4 to 6 inches long by 1 to 1½ inches in diameter. The size of the dropping is a good indication of the size of the cougar.

Feeding Areas (caches)

Cougars usually carry or drag their kills to a secluded area under cover to feed, and drag marks are frequently found at fresh kill sites. After killing a large animal and having eaten its fill, a cougar often will cover the remains with debris such as snow, grass, leaves, sticks, or soil. Even where little debris is available, bits of soil, rock, grass or sticks may be used to cover the carcass. The cougar may remain in the immediate vicinity of its kill, guarding it against scavengers and eating it over a period of six to eight days. (Meat becomes rotten quickly in the summer and male cougars have to patrol their territory. Often these males will make a kill, feed until full, leave to patrol the area, and return to feed on the carcass days later.)

Do not approach or linger around a recently killed or partially covered deer or elk.

Scratching Posts

Like house cats scratching furniture, cougars mark their territory boundaries by leaving claw marks on trees, stumps, and occasionally fence posts. Claw marks left by an adult cougar will be 4 to 8 feet above the ground and consist of long, deep, parallel scratches running almost vertically down the trunk. These gashes rarely take off much bark; tree-clawing that removes much bark is probably the work of a bear. (Bobcat claw marks are normally 2 to 3 feet above the ground; domestic cat scratching occurs at a height of about 1½ to 2 feet).

Calls

Cougars hiss, purr, mew, growl, yowl, chirp, and cry. The most sensational sounds they make are the eerie wailings and moans heard at night during mating season, especially when competing males have intentions toward the same receptive female. Such wails have been likened to a child crying, a woman's scream, and the screeching of someone in terrible pain.

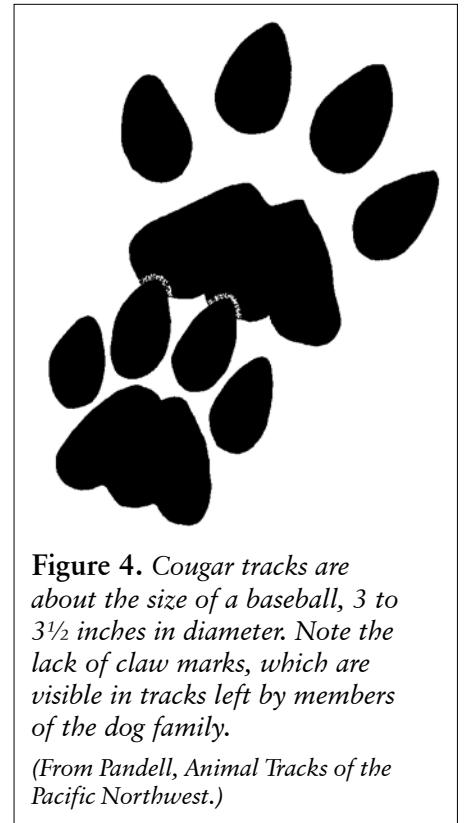


Figure 4. *Cougar tracks are about the size of a baseball, 3 to 3½ inches in diameter. Note the lack of claw marks, which are visible in tracks left by members of the dog family.*

(From Pandell, Animal Tracks of the Pacific Northwest.)

Preventing Conflicts

The cougar's ability to travel long distances occasionally brings these cats into seemingly inappropriate areas, even places densely settled by humans. Such appearances are almost always brief, with the animal moving along quickly in its search of a suitable permanent home. However, where humans are encroaching on wildlife habitat, the number of cougar sightings and attacks on livestock and pets is on the rise.

Cougar attacks on humans are extremely rare. In North America, roughly 25 fatalities and 95 nonfatal attacks have been reported during the past 100 years. However, more cougar attacks have been reported in the western United States and Canada over the past 20 years than in the previous 80. In Washington, of the one fatal and fifteen nonfatal attacks reported here in the past 100 years, seven attacks occurred during the 1990s.

A high percentage of cougars attacking domestic animals or people are one- to two-year-old cougars that have become independent of their mothers. When these young animals, particularly males, leave home to search for territory of their own, and encounter territory already occupied by an older male cougar, the older one will drive off the younger one, killing it if it resists. Some young cougars are driven across miles of countryside in search of an unoccupied territory.

If you are living in cougar country, prevent a conflict with them by using the following management strategies around your property, and, if possible, encourage your neighbors to do the same.

Don't leave small children unattended. When children are playing outdoors, closely supervise them and be sure they are indoors by dusk. (See "Cougars and Kids.")

Modify the habitat around your home. Light all walkways after dark and avoid landscaping with plants that deer prefer to eat. Where a deer goes, a cougar may follow. Shrubs and trees around kids' play areas should be pruned up several feet to prevent cougars from hiding behind them.

Although costly and not 100 percent effective, a chain-link or heavy woven wire fence that is 10 feet high with 3-foot extensions installed at a 65-degree angle on each post may keep cougars out of an enclosed area. To increase effectiveness, string barbed wire or four electric wires between the extensions, alternating positive and negative wires.

Don't feed wildlife and feral cats (domestic cats gone wild). This includes deer, raccoons, and other small mammals. Remember predators follow prey.

Close off open spaces under structures. Areas beneath porches and decks can provide shelter for prey animals.

Feed dogs and cats indoors. If you must feed outside, do so in the morning or midday, and pick up food and water bowls, as well as leftovers and spilled food, well before dark. Pet food and water attract small mammals that, in turn, attract cougars.

Keep dogs and cats indoors, especially from dusk to dawn. Left outside at night, small dogs and cats may become prey for cougars.

Use garbage cans with tight-fitting lids. Garbage attracts small mammals that, in turn, attract cougars. See the handout on Raccoons for information on garbage management.

Keep outdoor livestock and small animals confined in secure pens. For a large property with livestock, consider using a guard animal. There are specialty breeds of dogs that can defend livestock. Donkeys and llamas have also successfully been used as guard animals. As with any guard animal, pros and cons exist. Purchase a guard animal from a reputable breeder who knows the animal he or she sells. Some breeders offer various guarantees on their guard animals, including a replacement if an animal fails to perform as expected.

See the handout on Coyotes for additional information on livestock management.

Encountering a Cougar

Relatively few people will ever catch a glimpse of a cougar much less confront one. If you come face to face with a cougar, your actions can either help or hinder a quick retreat by the animal.

Here are some things to remember:

- Stop, pick up small children immediately, and don't run. Running and rapid movements may trigger an attack. Remember, at close range, a cougar's instinct is to chase.
- Face the cougar. Talk to it firmly while slowly backing away. Always leave the animal an escape route.
- Try to appear larger than the cougar. Get above it (e.g., step up onto a rock or stump). 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.
- Do not take your eyes off the cougar or turn your back. Do not crouch down or try to hide.
- Never approach the cougar, especially if it is near a kill or with kittens, and never offer it food.
- If the cougar does not flee, 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). The idea is to convince the cougar that you are not prey, but a potential danger.
- If the cougar attacks, fight back. Be aggressive and try to stay on your feet. Cougars have been driven away by people who have fought back using anything within reach, including sticks, rocks, shovels, backpacks, and clothing—even bare hands. If you are aggressive enough, a cougar will flee, realizing it has made a mistake. Pepper spray in the cougar's face is also effective in the extreme unlikelihood of a close encounter with a cougar.

Cougars and Kids

Children seem to be more at risk than adults to cougar attacks, possibly because their high-pitched voices, small size, and erratic movements make it difficult for cougars to identify them as human and not prey. To prevent a problem from occurring:

- **Talk to children and teach them what to do if they encounter a cougar.**
- **Encourage children to play outdoors in groups, and supervise children playing outdoors.**
- **Consider getting a dog for your children as an early-warning system. A dog can see, smell, and hear a cougar sooner than we can. Although dogs offer little value as a deterrent to cougars, they may distract a cougar from attacking a human.**
- **Consider erecting a fence around play areas. (See "Modify the habitat around your home.")**
- **Keep a radio playing when children are outside, as noise usually deters cougars.**
- **Make sure children are home before dusk and stay inside until after dawn.**
- **If there have been cougar sightings, escort children to the bus stop in the early morning. Clear shrubs away around the bus stop, making an area with a 30-foot radius. Have a light installed as a general safety precaution.**

Professional Assistance

Wildlife offices throughout Washington respond to cougar sightings when there is a threat to public safety or property. Problem cougars may be live-trapped by trained fish and wildlife personnel and moved to more remote areas; however, such removals are expensive, time consuming, and seldom effective. Using tranquilizing drugs on cougars to facilitate removal is difficult and dangerous for cougars and humans. When other methods have failed, lethal removal of problem animals may be the only alternative.

Contact your local wildlife office for additional information, and in the case of an immediate emergency, call 911 or any local law enforcement office, such as the state patrol.

Precautions for Hikers and Campers

While recreating in a cougar's territory, you can avoid close encounters by taking the following precautions:

- Hike in groups and make enough noise to prevent surprising a cougar.
- Avoid hiking after dark.
- Keep small children close to the group, preferably in plain sight ahead of you.
- Do not approach dead animals, especially recently killed or partially covered deer and elk.
- Be aware of your surroundings, particularly when hiking in dense cover or when sitting, crouching, or lying down. Look for tracks, scratch posts, and partially covered droppings.
- Keep a clean camp. Reduce odors that might attract mammals such as raccoons, which in turn could attract cougars. Store meat, other foods, pet food, and garbage in double plastic bags.



Figure 5. To avoid a close and unpleasant encounter with a cougar, do not hike alone in cougar country. (Washington Department of Fish and Wildlife.)

Public Health Concerns

Cougars rarely carry any communicable diseases that are regarded as threats to humans in Washington.

Feline distemper (*Feline panleukopenia*) antibodies have been documented in Washington cougar populations, but the degree that the *Feline panleukopenia* virus causes cougar mortality, or is transferred to domestic cats, is unknown.

Legal Status

Because the legal status, hunting restrictions, and other information relating to cougars change, contact your local wildlife office for updates.

Cougars are classified as game animals and an open season and a hunting license are required to hunt them (WAC 232-12-007). A property owner or the owner's immediate family, employee, or tenant may kill a cougar on that property if it is damaging domestic animals (RCW 77.36.030). No permit is required.

The killing of a cougar in self-defense, or defense of another, should be reasonable and justified. A person taking such action must have reasonable belief that the cougar poses a threat of serious physical harm, that this harm is imminent, and the action is the only reasonable available means to prevent that harm.

The body of any cougar, whether taken under the direct authority of RCW 77.36.030, or for the protection of a person, remains the property of the state and must be turned over to the Department of Fish and Wildlife immediately.

Additional Information

Books

Maser, Chris. *Mammals of the Pacific Northwest: From the Coast to the High Cascades*. Corvallis: Oregon State University Press, 1998.

Verts, B. J., and Leslie N. Carraway. *Land Mammals of Oregon*. Los Angeles: University of California Press, 1998.

Internet Resources

Burke Museum's Mammals of Washington

<http://www.washington.edu/burkemuseum>

Adapted from "Living with Wildlife in the Pacific Northwest" (see <http://wdfw.wa.gov/wlm/living.htm>)

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