There are two distinct and fairly isolated populations within the United States, one is in the Florida Everglades, i.e., the Florida Panther (puma concolor coryi) and the other is located throughout the mountain west.

In the 48 contiguous states, 27 states have had physical evidence of mountain lions in the past 18 years and 16 states now have established populations. While mountain lions are usually absent from areas heavily impacted by human development, urban sprawl and shrinking habitat are increasing the number of conflicts between humans and mountain lions. Although there is little physical evidence of mountain lions in states east of the Missouri river other than Florida, it is believed that mountain lions are increasing in population and are once again returning to their historic territories.

Mountain lions are well adapted to a wide range of environments, mostly rugged, and among those are coniferous or deciduous forests, deserts, mountains, badlands, rain forest, and swamp areas. To survive cougars have three main requirements: cover: enough large prey (most commonly deer), and space. If these are not available, mountain lions generally move on to other areas quickly. Lions will use washes, draws, and river/creek drainages to move through populated areas to more remote areas and occasionally may even venture onto the plains. Such movements are necessary to prevent problems with inbreeding and local extinction associated with habitat fragmentation. An example of an isolated population would be the Florida Panther.

As very specialized top predators, these animals consequently do not normally exist in high concentrations and are usually solitary, unless it is a female with young. Territorially they maintain spatial separation between each other, thereby assuring each individual has the resources necessary to survive. If these separations are not maintained, mountain lions will kill each other, the natural method of population regulation for undisturbed populations.

The cryptic system of boundary marking employed by resident mountain lions serves to provide for mutual avoidance and survival. The cryptic system utilizes one, some, or all of the following actions usually done repeatedly over time within a territory: scrapes, urination, defecation, or rubbing (which is done with the face and/or flank) on an object.

Essentially solitary animals, as juveniles, males tend to disperse longer distances searching for new territory as compared to the relatively short

dispersals for juvenile females. Adult male territories will rarely overlap another male's territory but may overlap several female territories. Adult female territories may overlap to some extent and adult females may be accompanied by kittens but normally female lions do not associate with other adult animals except for mating purposes.

The mountain lion does not require a cave to raise a litter. The average litter size is two kittens, but, litter sizes of three, four and as large as six have been found. Kittens are born yellowish brown with irregular rows of black spots. Mountain lions may breed at any time of the year and consequently litters may be born in any month although summer is considered the peak period of kitten births. Young remain with the mother for 15 to 22 months learning the skills necessary for survival.

Mountain lions are often just passing through, but may visit an area to get food, water, or shelter and may return repeatedly if these items are available. If food, water, and shelter are not available, mountain lions generally move on to other areas more quickly.

The mountain lion diet consists primarily of deer (both whitetail deer and/or mule deer), but their natural diet will also include a wide variety of other animals, including elk and bighorn sheep, and smaller wildlife species such as rabbit, turkey, raccoon and porcupine.

Lion Kill Characteristics

Mountain lions kill large prey species with regularity, usually one deer-sized animal is killed every six to 12 days. Considerable skill to stalk and kill prey is required to avoid debilitating injury to the lion.

A lion kill will often have puncture wounds on the back of the neck or head, where the lion frequently bites the animal. There may also be other puncture injuries to the neck and jugular areas. Lions do not chew ears off a carcass and will begin eating in the stomach area directly behind the ribs. Lions will try to pluck or trim the hair from around the area where they first start to feed.

Mountain lions often attempt to cover the uneaten portion of a kill with leaves, sticks, dirt, snow or other debris. An entire deer can be consumed in two nights. A lion with a large territory to defend may make several kills as it travels from one area to the next while patrolling and defending his territory. A conscientious observer is usually able to detect the presence of mountain lion in an area through the presence of tracks, scrapes, scat, kills, or other sign.

Some signs of mountain lion presence include large tracks (3-5 inches wide) without claw marks; food caches, where a kill has been partially eaten and then covered with brush and dirt; scrapes in soft dirt or leaf litter, and claw marked trees & logs.



Mountain Lion track graphic courtesy of Nebraska Game and Parks Commission website: http://outdoornebraska.ne.gov/wildlife/mountainlion

Note: The 3-lobed heel pad print is visible in the track below



Young Lion print Cell photo courtesy Matthew Lucas



Older Lion print Cell photo courtesy Matthew Lucas

Lion Prints from the Nebraska Pine Ridge 2008 (Hand width @ base of fingers: 3.5 inches)

Physical Characteristics

- COLOR: Tan or reddish brown to dusky or slate gray coat
- **TAIL LENGTH:** 24- to 36-inch tail, or about 2/3 of body length, white underneath with a dark brown or black tip
- **WEIGHT**: 60-180 pounds (males usually up to 40% larger than females)
- HEIGHT: 25-32 inches tall at the shoulder (similar to a German shepherd dog)
- **LENGTH:** 5 1/2 to more than 8 feet long
- **LIFE SPAN:** Live up to 13 years in the wild, and up to 20 years in captivity
- Can jump 20 feet vertically and 40 feet horizontally in a single bound. Walking speed 10 mph, running speed 50 mph
- Rarely make vocal noises, unless during breeding season or when threatened
- Territory sizes range from 25 to 700 square miles; males range more widely than females
- In general, the distribution of mountain lions corresponds with the distribution of its major prey species, deer (both whitetail deer and/or mule deer). This is not true for the eastern half of the US where mountain lions have been eliminated. Lion natural diets will also include a wide variety of other animals, such as elk, bighorn sheep, rabbit, turkey, raccoon and porcupine.

Although considered predators capable of seriously injuring or killing humans, mountain lion attacks on

humans are extremely rare but do occasionally occur. Normally shy and elusive, people don't often see them, **but**, conflicts can happen when a mountain lion has become accustomed to people, such as when a lion hunts near where people live or recreate, and when lions kill livestock or other domestic animals.

In North America, roughly 25 fatalities and 95 nonfatal attacks have been reported during the past 100 years. However, more attacks have been reported in the western United States and Canada over the past 20 years than in the previous 80. The risk of a mountain lion attack is small, but real; children are most at risk.

If you live or recreate in lion country, remain aware of your surroundings and take steps to minimize risks to yourself, your family, and pets.

If you should have an encounter with a mountain lion:

- Do not approach the animal. Most mountain lions will try to avoid a confrontation.
- · Give them a way to escape.
- Do not run from a mountain lion. Stand and face the animal. Running may stimulate the mountain lion's instinct to chase.
- Make and maintain eye contact and slowly back away toward a building, vehicle, or busy area.
- Stay calm and speak loudly and firmly.
- Remain standing and face the animal. A
 mountain lion usually tries to bite the head or
 neck. Do not bend over in the presence of a
 mountain lion. A bent over position makes you
 look more like natural prey.
- Try to appear larger. Raise your arms. Open your jacket if you are wearing one. Wave your arms slowly.
- Fight back if attacked. Many potential victims have fought back successfully with rocks, sticks, caps, jackets, garden tools, their bare hands, and even mountain bikes. Throw stones, branches, or whatever you can reach without crouching or turning your back. The idea is to convince the lion that you are not easy prey and that you may be a danger to it.
- Hike or walk in groups. Always hike with pets on a leash.
- When hiking always keep children in front of you on the trail.
- Pick small children and pets up (so they don't panic and run) without bending over or turning away from the mountain lion.

 Report all mountain lion attacks to 911. Report all mountain lion encounters, attacks, plus sightings in urban areas, to both local authorities and game management. Also call game management authorities if severe property damage has occurred or if there is possession of a live mountain lion.

If you live in mountain lion country, around your home – DO:

- Make noise when you're outside.
- Avoid feeding wildlife lions might consider a prey species. By feeding deer, elk, turkey or other wildlife in your yard, you may inadvertently attract the mountain lions which prey upon them.
- Trim landscaping around your home. Remove dense and low-lying vegetation especially around children's play areas as this can provide good hiding places for mountain lions and other predators,
- Closely supervise children whenever they play outdoors, especially in rugged country between dusk and dawn and at night.
- Talk with children about mountain lions and teach them what to do if they encounter one.
- Keep dogs, cats, poultry, rabbits, rodents and other domestic animals indoors in a secure building or in a secure enclosure with a sturdy roof. Always walk pets on a leash. Roaming pets are easy prey for hungry mountain lions and other predators.
- Do not feed pets outside and keep their food inside; feeding pets outside can attract raccoons, rabbits, porcupine, and other mountain lion prey.
- Install outdoor lighting and keep the house perimeter well lit at night, especially along walkways, to keep any approaching lions visible.
- Use of bright lights, flashing white lights, blaring music, barking dogs, and changes in the placement of motion sensor operated scarecrow objects can repel mountain lions. Motion sensor activated sprinklers, lighting, and inflatable scarecrows startle the animals when activated.
- For shelter, mountain lions might make use of cave-like areas beneath sheds, unused buildings, and storm drains. Close or patch-up any potential mountain lion shelter.
- Always work with your neighbors for a consistent solution.

Remember, It is important to keep wildlife wild:

- Remove whatever will attract mountain lions.
- If people regularly see a mountain lion in a particular area, it may mean the animal represents a public safety risk.
- In some cases, the local wildlife authorities may remove a mountain lion that presents an imminent threat to human safety.



For on-line information on mountain lions in this area you can visit any of the websites listed below:

http://outdoornebraska.ne.gov/wildlife/mountainlion

http://wildlife.state.co.us/WildlifeSpecies

 $\frac{\text{http://qfp.sd.qov/wildlife/critters/mammals/mountai}}{\text{n-lion}}$

http://gf.state.wy.us/mountainlion

http://www.cougarnet.org

http://www.mountainlion.org

Mountain Lions live in the Nebraska Panhandle



PHOTO: Dean Studnicka, Wildlife Division, Nebraska Game and Parks Commission

The mountain lion (felis puma concolor), is also called cougar, puma, painter, catamount, screamer, panther, ghost cat, and in addition has many North, Central, and South American native language names. It is the second largest cat native to all the American continents (the Jaguar is the largest). The mountain lion occurs only in the western hemisphere and historically had one of the most extensive ranges of any land mammal, from the Straights of Magellan in South America to the Canadian Yukon.

The major reduction in mountain lion distribution has come as a result of elimination from areas of their historic range in the eastern United States and Canada.