

MOUNTAIN LION FACT SHEET

By T. R. Mader, Research Director

Mountain lions, also known as cougars, panthers, or pumas, are highly efficient predators. These cats have a wide range throughout the Western states, and populations are increasing. An individual cat's range depends on food availability. Thus, a range can vary from 10 to 370 square miles.

Male lions weigh up to 165 pounds and grow to more than eight feet in length. Females weigh about 100 pounds. Female lions generally first reproduce at about two and one half years of age. Generally they have two or three young (kittens). A mountain lion's life span is estimated at 12 years in the wild, although cats have lived up to 25 years in captivity.

Mountain lions are solitary animals. They tend to live in remote country and are seldom seen by humans. They hunt their prey by stealth and ambush. Their method of killing is usually with a powerful bite at the base of the skull, breaking the neck. (*"Living with Wildlife in Mountain Lion Country," Colorado Division of Wildlife, Denver, CO*) The mountain lion, like the domestic cat with a mouse, will kill for the sake of killing. A lion may kill many more animals in an attack than it can possibly consume. Lions have killed as many as twenty sheep at one time. (*U. S. Department of Agriculture, Wildlife Services [formerly Animal Damage Control], Reno, Nevada*)

A mountain lion requires 8 to 10 pounds of meat per day to survive. Its diet consists of deer, elk, porcupines, small mammals, livestock, and pets. Generally a lion prefers deer. Experts tell us a lion kills one deer every 9 to 14 days. (*Information compiled from U.S. Department of Agriculture, Wildlife Services, San Antonio, Texas, and Montana Fish, Wildlife and Parks, Helena, Montana*) And in some areas, it has been found that a lion kills as many as two deer per week, especially in hot weather. Why? First, a lion tends to leave a carcass once it has begun to spoil. Second, scavengers (vultures, crows, ravens, magpies, coyotes, skunks, etc.) find the carcass the lion has killed and hidden. They consume it before the lion returns to feed on the remains. Wildlife Services Specialists find that success in capturing problem lions is much greater within two days of the actual kill than thereafter. (*U. S. Department of Agriculture, Wildlife Services, Reno, Nevada*)

In Montana there has been an increase in lion kills due to the presence of wolves. Biologists have found that wolves will often chase a lion off its kill and consume it. Thus, the lion is forced to make more kills than usual. (*Montana Fish, Wildlife and Parks, Helena, Montana*) We call this "predation compounding." However, there have been few studies, if any, to document the actual increase in predation due to such competition among predators.

The mountain lion population is increasing over most of its current range. This is due to two factors:

1. Food availability.
2. Lack of predator control. This population increase has a short-term benefit, but could create long-term problems.

The short-term benefit is that with more lions around, perhaps more people will have the pleasure of seeing them. The long-term problems are:

1. Decline in wild game populations due to uncontrolled predation.
2. Economic hardship - loss of hunting revenue, increase of livestock and pet losses.
3. Spread of disease by predators.
4. Attacks on humans.

Decline of wild game populations: In Presidio County, Texas, near the Rio Grande River, deer were found everywhere

ten years ago. In those ten years, the lion population has increased dramatically. Today, there are areas where no deer can be found that were plentiful just a few years ago. Lion predation is a major factor in the deer decline.

Jeff Davis County, Texas, is prime mountain lion country. One rancher there usually took 80 paid deer hunters on his property every year. With the significant increase in lions, that same rancher today takes no hunters due primarily to lion predation on the deer.

Another problem in this same area of Texas is the decline of the porcupine. Although the porcupine is considered a nuisance animal, its populations have been decimated and, in many areas, have ceased to exist due to the increase of lions. (*Darrell York, Davis Mountain Trans-Pecos Heritage Association, Alpine, Texas*) Just another example of problems due to lack of predator control.

Economic hardship: Mountain lions can cause severe economic hardship on those whose livelihoods depend on harvest of game animals (hunting) and agriculture (livestock production). Additionally, there's an emotional hardship, particularly for children, as lions kill pets regularly.

Take, for example, the rancher in Jeff Davis County. If those 80 hunters were non-resident hunters, they would generate \$16,000 in license fees alone to the state of Texas. (Texas non-resident deer hunting fee figured at \$200) However, that's the tip of the iceberg in regards to the benefits. What about the food, gas, lodging, equipment, guide fees, etc.? If all those factors are figured in, the lost economic benefit is \$112,000. (*Information collected in interviews with Texas Guides and Outfitters. The average guide fee or hunt for deer is \$1,000. Most non-resident hunters travel an average of two days to reach their hunting destination. Thus \$200 is conservatively estimated for travel expenses - gas, meals and lodging. \$200(license fee) + \$1000 (all expense paid hunt fee) + \$200 (travel expense) = \$1,400. \$1,400 x 80 (hunters) = \$112,000.*)

A conservative estimate of what a deer is worth (in Texas) as a production commodity (i.e. non-resident hunting) is \$1,400. Let's be even more conservative and say a harvestable deer is worth \$1,000. That would mean, taking the estimate of one deer per lion every two weeks, one lion could consume up to \$26,000 dollars of deer (if those deer were harvested by non-resident hunters) every year!

But lions don't just consume deer. They consume livestock as well. It's estimated by Wildlife Services Specialists that the percentage of domestic animals confirmed killed by predators is often as low as 10% or less. (*Interviews with Wildlife Services Specialists in Wyoming, Montana, Idaho, Washington, New Mexico, Texas, Utah and Nevada*)

Confirming a lion kill is accomplished by examining the carcass and noting areas attacked, bite marks, possible tracks, etc. This is difficult due to three natural processes:

1. Carcass not found (totally consumed). Lions are opportunists, meaning they kill whatever is easiest. Lions are well known to kill the young, both of wild animals and domestic livestock. If a young calf or lamb is killed by a lion, most, if not all, of the animal is eaten. Consequently, no carcass is found.
2. Decay rapidly eliminates evidence concerning death, especially in hot weather. A couple of hot days can eliminate most of the evidence detailing the cause of death. Further, scavengers accelerate the decay process.
3. Terrain - heavy vegetation, such as timber and undergrowth hide the carcass. There are thousands of acres of timber in the West. A carcass can be easily overlooked. And, lions almost always bury their kills.

According to the 1990 figures in the state of Texas, confirmed mountain lion kills of domestic livestock were as follows: 86 calves (estimated value = \$40,850); 253 Mohair goats (estimated value = \$12,771); 302 Mohair kids (estimated value = \$13,690); 445 sheep (estimated value = \$31,132); 562 lambs (estimated value = \$33,909). (*1991 Figures from U. S. Department of Agriculture, Wildlife Services, San Antonio, Texas*)

The 1992 reports for Nevada list lion depredations as follows: 9 calves (estimated value = \$2,600), 1 horse (estimated value = \$1,000), 4 colts (estimated value = \$2,200), 5 goats (estimated value = \$500), 318 sheep (estimated value =

\$32,896), 400 lambs (estimated value = \$26,359). (*U. S. Department of Agriculture, Wildlife Services, Reno, Nevada*)

These figures reflect only the reported problems and confirmed lion kills. To get a reasonable estimate of the real cost of lion predation on domestic livestock, multiply the above figures by 90 (the percentage of animals killed by predators and not found soon enough to confirm the cause of death). Mountain lion predation is a serious economic factor.

Disease curtailed with predator control: Mountain lions carry trichinella, a parasitic worm. (54% of 899 Montana cougars tested positive for Trichinella. Data from Montana Fish, Wildlife and Parks, Helena, Montana.) This parasite can be passed on to other animals and to humans. In humans it causes trichinosis, a disease characterized by headache, chills, fever and soreness of muscles. Humans contract this disease by eating infected meat that has not been cooked sufficiently to kill the larva. (*World Book Dictionary, Volume Two; World Book, Inc. 1986, page 2231.12*)

Public safety: An increase in lions often leads to attacks on humans. We have a photo in our photo files of the stomach contents of a lion that killed a small boy. One can see clearly parts of clothing the lion consumed as it fed on the youngster.

Lion attacks on humans increase when:

1. Prey animals are few in number.
2. Lions become accustomed to man. Mountain lions are solitary animals. They generally hunt at night and, for the most part, are not seen by humans. However, recently lions have been sighted in and near Western towns. This indicates an increase in lions and/or a limited prey base forcing the cats to come closer to man in search for food. And this carries the potential for attacks on humans.

This problem has such significance that the state of Colorado held a symposium in 1991 specifically addressing the rise in mountain lion attacks on humans. The Wildlife Society Bulletin featured an article documenting lion attacks on humans by Professor Paul Beier of the Department of Forestry and Resource Management at the University of California at Berkeley. Beier's conclusion stated that mountain lion attacks on humans have "increased markedly" in the last two decades. (*Beier, Paul; "Cougar Attacks on Humans in the United States and Canada"; WILDLIFE SOCIETY BULLETIN, 19:403-412, 1991.*)

Here are a few documented mountain lion attacks on humans:

1. Spring, 1986 - Orange County, California - Laura Small, age 5, was attacked by a mountain lion in the Ronald W. Caspary Wilderness Park. The female lion attacked her head and dragged her off. Laura suffered paralysis of her right side and was confined to a wheelchair for a period of time. She has had 11 operations. Now Laura has a steel plate in her skull. Her right leg is weak, her right arm is partially paralyzed and she is blind in her left eye.

A lawsuit of \$100 million and \$750,000 in personal damage was filed against Orange County. Small was awarded \$2 million dollars. Orange County appealed the ruling.

2. August 1986 - Justin Mellon, age 6, was hiking in Ronald W. Caspary Wilderness Park. He was attacked and mauled by a female lion. Mellon suffered bites to the head, leg and stomach. His injuries were not as severe as that of Laura Small. Note: Due to the lawsuit over the Laura Small attack, the Board of Supervisors for Orange County decided not to allow minors into Caspary Wilderness Park at all. (*Information compiled from Ronald W. Caspary Wilderness Park, U. S. Department of Agriculture, Wildlife Services, Sacramento, California and various news reports.*)
3. 1989 - Evaro, Montana - Jake Gardipe, age 5, was killed by two or three mountain lions (possibly a female with two kittens) while riding his tricycle in his front yard. The boy was dragged from the yard and the body was found nearby several hours later. The boy's home was 100 yards from U.S. Highway 93 just outside of Evaro. (*Associated Press, September 13, 1989*)

4. 1989 - Apache Junction, Arizona - Joshua Walsh, age 5, was mauled by a mountain lion near Canyon Lake, some 30 miles northeast of Phoenix. Without warning, and near a parking lot and boat dock filled with people, the mountain lion attacked Joshua, bit him on the head and began to shake him with its jaws and drag him away. Tim Walsh, Joshua's father, leaped down a 20-foot embankment, grabbed a rock, threw it and hit the lion on the head, scaring it. The lion dropped the boy. Joshua was air-lifted to Phoenix Children's Hospital where it took 100 stitches to close Joshua's head wounds, including re-attachment of his right ear which was nearly severed in the attack. (*Phoenix Gazette, May 1, 1989, page A-1*)
5. 1991 - Nevada Test Site, north of Las Vegas, Nevada - Mary Saether, was attacked by a 120-pound female mountain lion. She suffered minor cuts and received 21 stitches on her head, right arm, and back. The cougar crept up on Saether and two male companions and attacked before they were aware of its presence. The two men beat the lion with their cameras forcing it to release Saether. A Wildlife Services Specialist arrived the next day. As he was doing a preliminary check, he heard noise in a tree and turned to find the lion charging. The man had only enough time to draw his handgun and shoot the lion at point blank range. The lion was found to be in good health. (*U. S. Department of Agriculture, Wildlife Services, Reno, Nevada and various news reports*)
6. 1991 - Idaho Springs, Colorado - Scott Dale Lancaster, age 18, was killed by a lion while jogging near his high school. Lancaster was attacked by a 90 - 100 pound female cougar and dragged some 60 feet away. When asked how severely the boy was mauled by the lion, Undersheriff Dave Graham replied, "Bad!" It took authorities two days to find Lancaster's body. (*Clear Creek Courant, January 16, 1991, page 1*)
7. 1991 - Riverside, California - Searchers found evidence that Travis Zwiag, age 3, of La Quinta, California, was possibly attacked by a mountain lion. Shoe prints thought to be Zwiag's were found a half mile from where the toddler disappeared. The prints stopped at a rocky overhang where mountain lion prints were found. "Where the shoes stopped, there was a slide area and what they believed to be drag marks," said Sgt. Craig Kilday. (*Associated Press, February 26, 1991 - Note: We found no record of the boy being found.*)
8. 1992 - Gaviota State Park, near Santa Barbara, California - Darron Arroyo, age 9, was attacked by a mountain lion as he walked along a park trail. Darron was hiking with his two brothers when a lion rushed from the bushes and attacked, attempting to drag him off in the brush. Steven Arroyo, Darron's father, was walking about a hundred yards behind the boys. He heard the screams and saw the lion dragging Darron. Steven rushed toward the cat, picked up a rock, threw it and struck the lion between the eyes. The lion dropped the boy and left the area. Darron sustained bites to the face and head and scratches to the chest. (*Information compiled from Santa Barbara News Press, Gaviota State Park and California Department of Fish and Game, Sacramento, California.*)
9. 1992 - Wenatchee, Washington - Jessica Vanney, age 5, suffered cuts and puncture wounds when a 60-pound mountain lion attacked her as she walked along a path through trees at a 100-site campground in Lake Wenatchee State Park. Her father, Michael Vanney, witnessed the attack. "Jessica was 4 or 5 feet in front of me. She walked between two trees and I saw some movement out of the corner of my eye. Then I saw the cougar run around a tree and jump on her. Its front paws just wrapped right around her head and shoulders." Vanney grabbed his hunting knife and attacked the animal. This is the third known lion attack in the state. (*Associated Press, June 18, 1992 - Note: What if this was a full grown lion weighing 150 pounds? What if Jessica was walking that path by herself?*)
10. 1992 - Vancouver Island, British Columbia - An 8-year-old Kyuquot Indian boy, Jeremy Williams, was fatally mauled by a mountain lion in the village of Kyuquot. The boy's father and a dozen youngsters witnessed the attack. Jeremy was attacked as he sat on the grass in the elementary school playground. The cougar rushed and attacked the freckled, red-haired youngster as other children ran for help. Kevin Williams, Jeremy's father and a teacher at the school, hurried to the scene and watched helplessly while children screamed in panic. The school's janitor shot and killed the 60-pound lion. Richard Leo, a Kyuquot Indian chief, said angry parents

accused the school board of ignoring the danger of wild animals. (*Associated Press, 1992*)

11. 1994 - Auburn Lake Trails, California (near Sacramento) - a 40-year-old vocational rehabilitation counselor, Barbara Schoener, was attacked and killed by a mountain lion. Schoener was jogging in the popular Auburn Trails area when a cougar attacked her from behind. The force of attack caused Schoener off the trail. Schoener made two strides before falling 30 feet. Schoener then stood up and moved another 25 feet down the slope where the final attack occurred. Wounds on Schoener's forearms and hands showed attempts to defend herself, but the 5-foot-8-inch, 120-pound woman was no match for the lion. The lion dragged Schoener 300 feet downhill and, after feeding on her, buried her with leaves and debris. Schoener received two fatal wounds - a crushed skull and bites to the head and neck. (*Sacramento Bee Final, April 27, 1994, page B1 and B4*)

These are but a few of the documented mountain lion attacks on humans, most of which were small children. All lions involved in these attacks that were located and destroyed, were found to be healthy. Some showed signs of hunger.

One major reason for the significant rise of attacks in recent years is the lack of predator control. Since many people now live in urban or metropolitan areas, they are unfamiliar with predation, its impacts, and the many benefits of predator control. In fact, few even know what those benefits are. Further, there has been a constant barrage of misinformation calling for the return of the "natural" or "living in harmony with nature."

Dr. Lester McCann, Ph.D. has studied predation his entire life. His findings reveal:

1. Predators are the main carriers of deadly diseases of wildlife and to humans. Predators are well known to carry rabies. Raccoons carry a deadly fowl cholera which has devastated ducks in many areas.
2. Predation is non-specific - meaning the predator takes what it finds. Fox, skunk, and raccoon are extremely hard on ducks, pheasants, and other birds due to their nest destruction. Many studies have shown no young reproduced from nests, due to predation.
3. There have been NO significant increases in wildlife populations without some kind of predator control. (*McCann, Lester, Ph.D.; A New Day For Wildlife; (St. Paul: Ramaley Printing Company) 1978.*)

The enormous benefits of predator control are largely ignored these days. To understand those benefits, one must ask, "What are the problems caused by predators?"

1. The most obvious is their meat consumption. From the fox in the chicken house to the wolf in the barnyard, predation costs ranchers and farmers dearly. In the early years, the wolf, lion or bear could put a homesteader out of business in one night. Often all the homesteader had was an old milk cow and/or maybe some sheep or yearling cattle. It was common for a pack of wolves to come through and kill every animal the little farmer had. Many times cows or sheep had their udders torn off and eaten. It is interesting to note that government officials considered mountain lions as destructive as wolves in the early years.

The consumption rate of lions is estimated at eight to ten pounds of meat per day. To illustrate this, consider the lion population in California. Wildlife officials estimate they have 5,000 mountain lions in the state. (*California Department of Fish and Game, Sacramento, California*) Those lions would consume 50,000 pounds of meat per day to survive. It must be noted that predators hunt 365 days a year. There are no seasons or bag limits.

2. Predators were hard on wildlife, especially before man came. Many are the accounts of early explorers forced to eat their horses due to lack of wild game. Perhaps the most significant factor was water, or the lack of it. Few natural springs are found in the West. The scarcity of water allowed the predator ease in finding prey. Prey had to water, so the predator simply waited near the spring or river.

Man came along and built reservoirs and dug wells and irrigation ditches. Water became more accessible and wildlife flourished, especially when the predator numbers were reduced. The abundance of wildlife today is a

direct result of the improvement and management by man, including predator control.

3. Disease was curtailed with predator control. Predators are well- documented as carriers of diseases harmful to bird and game populations. They also carry diseases harmful to man. The best known and most feared is rabies.

In the first part of this century, a rabies epidemic spread from the Pacific Northwest down through the southwestern states of New Mexico and Arizona. The coyote was the main carrier. Incidence of rabies is on the rise with numerous reports coming into the Center for Disease Control in Atlanta, Georgia. Several Western counties have had rabies epidemics. In Wyoming, a man was bitten by a rabid coyote. A few years ago, a child was attacked and bitten by a rabid bobcat in California. The child spent several days in a coma and then died from rabies. Rabies shots were administered, but failed to stop the dreaded disease.

So what's it like to live with abundant predators? Dr. Robert M. Miller, D.V.M. visited the Ol Pejeta ranch in Kenya, Africa, which runs 10,000 head of cattle. There they live with predators - lions, leopards, hyenas, etc. The whole system of ranching is different due to the predation factor.

The cattle are divided up into small groups, from 10 to 30 head, and are assigned to native herders (natives of Masai or Samburu descent) who protect the cattle. These natives literally live with the animals. At night, the animals are moved into a "boma," a corral made of thornbush. In the morning, they are moved out again to graze and water, always under the watchful eyes of a native herder.

The main ranch corrals are 10-foot high, solid wood enclosures. These corrals protect the animals without someone having to sleep with the livestock as the natives do at the "bomas."

Consider the cost of this operation. They require a minimum of 335 herders for the cattle. Think of the number of corrals that would have to be built throughout the ranch. Think of the weight loss having to herd the livestock to a corral each night.

Even with all these precautions, predation on the livestock and wild game occurs. Hunting of predators is an on-going project. Simon Barkus, the ranch manager, states that they lose about 15 head a month to predators.

So how do you ranch with predators? "You just hire hundreds of natives who are willing to stand and watch a few cows each from dawn to dark, and who can handle their charges as if they were 4-H dairy calves," states Dr. Miller. (*The Western Horseman, June 1992*)

Think for a moment how costly meat would be at the grocery store if ranchers and farmers of the U. S. were forced to live with predators as they do in Kenya. It is safe to say that the cost of meat could escalate as much as 1000% without proper predator control.

It must be understood that predation must be addressed for wildlife to be abundant for viewing or hunting. The predator is to wildlife what weeds are to the farmer or gardener. You cannot have abundant wildlife with abundant predators any more than you can have a fruitful garden or crops with abundant weeds.

Copyright, 1995, T. R. Mader.

Permission granted to quote from or reprint if full credit is given to the source.

About the Author: T. R. Mader is Research Director of Abundant Wildlife Society of North America, an independent research organization. Mader has conducted research on wildlife and environmental issues for over 15 years.

For more information, contact:

ABUNDANT WILDLIFE SOCIETY OF NORTH AMERICA
P. O. Box 2

Beresford, SD 57004
(605) 751-0979

[click here to go back to main page](#)