U.S. Fish & Wildlife Service

Florida Panther

Puma [Felis] concolor coryi

There are only 30 to 50 adult Florida panthers left in the wild, making Florida's official state animal one of the most endangered mammals in the world. At one time perhaps 3,000 or more Florida panthers ranged throughout Florida, northward through Georgia, parts of South Carolina, and Tennessee, and westward through Alabama, Mississippi, Louisiana, Arkansas, and possibly eastern Texas. Today, the Florida panther's range is limited to parts of southern Florida, including the Big Cypress Swamp and the Everglades.

Initially, the Florida panther's decline was due to excessive hunting because of an unfounded fear for livestock and human safety. More recently, loss of its habitat has left the Florida panther with fewer places to live and find food. Extensive inbreeding—the result of isolation from other populations with which it once intermingled—has diminished the Florida panther's gene pool. Highway mortality and fighting between individuals, particularly males, have further reduced Florida panther numbers.

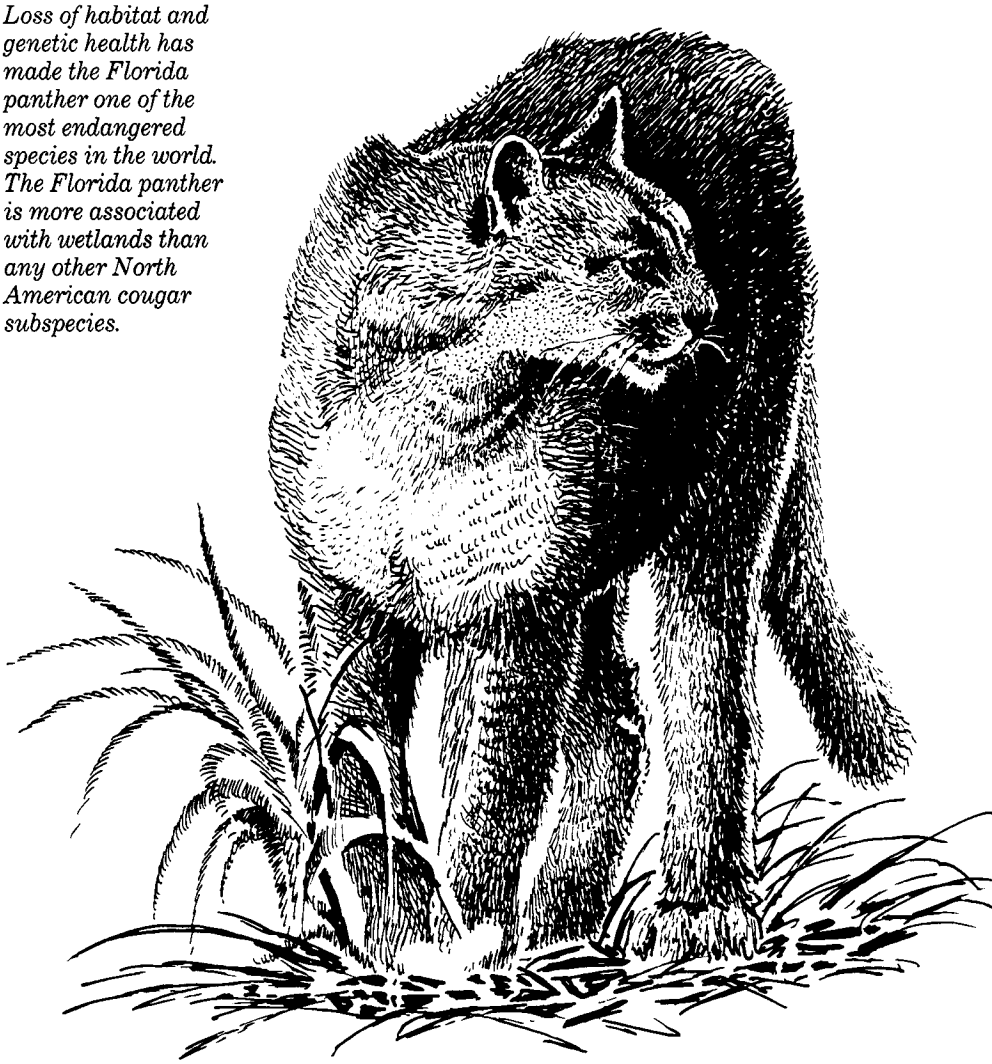
The Florida panther is a subspecies of the cougar, or mountain lion. Cougars have very muscular bodies, powerful jaws and a tail that is nearly two-thirds the length of their body. Adult males weigh an average of 125 pounds and measure 7 feet from their nose to the tip of their tail. Females weigh about 80 pounds and are about 6 feet in length. With their short, round ears and round face, they look very much like domestic cats. Adult cougars have tawny-colored fur on their backs; white fur on the chest, belly and inner legs; and black coloring on the tip of the tail, the back of the ears, and on parts of the face. Coloration provides camouflage concealment for adult cougars while hunting and for kittens left alone in the brush while their mother hunts for food.

Although similar in appearance and habit, 100 years of isolation have made the Florida panther distinctly different from other cougars. Its fur is darker, shorter, and coarser, and though the Florida panther has a smaller body size and smaller feet than other cougars, it has longer legs. There are also differences in skull measurements. Many Florida panthers are further distinguished by a cowlick in the middle of their back and a right-angle crook at the end of their tail—traits attributed to genetic isolation and inbreeding.

Florida panthers are mostly nocturnal animals and tend to avoid one another, except when males and females come together to breed. Adult males defend territories averaging 200 square miles while females have territories of about 75 square miles. Female panthers are ready to breed at about 2 years of age and males reach breeding maturity at about 3 years. Like domestic cats, the female panther announces her availability with persistent howls and cries until she attracts a mate. Unless a litter is lost, female panthers typically breed every other year. A litter of 1 to 3 kittens is born in a simple den that often consists of little more than dense vegetation to protect them from the weather and hide them from predators.

Kittens weigh about a pound and are born with their eyes closed. Their mother nurses them for about 2 months until they are able

Loss of habitat and genetic health has made the Florida panther one of the most endangered species in the world. The Florida panther is more associated with wetlands than any other North American cougar subspecies.



to eat fresh meat. The spots on their fur and bands on their tails fade as they get older, and their blue eyes turn light brown. Kittens are most vulnerable during their first 6 months when they are left alone for long periods, sometimes as long as 2 days, while their mother hunts for food. Hawks, owls, black bears, and even adult male panthers, prey on kittens. Panther young stay with their mother for 1½ to 2 years. When mothers determine that their young are old enough to be on their own, they often leave them at a kill site and do not return.

Florida panthers, like all cougars, stalk and ambush their prey. Hiding under cover, they sometimes wait hours for the right moment to attack. Panthers can leap distances of more than 15 feet. They rely on surprise to catch their prey because although they can run up to 35 miles per hour, they can only do so for distances of about 200 yards. While panthers prefer to eat large animals such as deer and wild pigs, they will eat raccoons, armadillos, rabbits, rats, birds and even alligators. They've also been known to eat grasshoppers and grass. An adult panther requires the equivalent of 35 to 50 deer each year to survive, and females with young may need twice that much. Since it takes many raccoons to equal one deer, hunting large prey is more energy efficient. Studies show that panthers feeding on a diet primarily of deer and wild pigs are healthier than those eating smaller animals.

With the tremendous amount of development over the last few decades, loss of habitat has become a serious threat to the Florida panther's survival. The Florida panther prefers a habitat of hardwood hammocks and pine flatwoods but is also found in wet prairies, marshes and swamp forests. Alligator Alley, a major highway that runs across south Florida, was built in the 1960s and provided access to the heart of panther territory. The improved road system was followed by the lumbering, mining, and oil and gas exploration industries, as well as housing, commercial, agricultural, and recreational development. Draining of wetlands by a vast system of canals, intended to facilitate additional development, has also made the area more accessible to off-road vehicles.

Destruction of habitat is not the only human activity that has had a detrimental effect on the Florida panther population. Early settlers viewed panthers as a threat to both livestock and people. In the late 1800s a $5 bounty, or reward, was offered for each Florida panther pelt. Reliable historic population figures are not available. However, biologists estimate that the population may have numbered approximately 500 at the turn of the century. By 1966 the Florida panther population was estimated to be as low as 100 to 300. Although hunting of Florida panthers was prohibited under state law as early as 1950, four are known to have died from gunshot wounds between 1978 and 1984. At least one Florida panther has died of mercury poisoning. Collision with motor vehicles is another common cause of death, particularly during the breeding season when male panthers roam, looking for mates or opportunities to expand their territories.

Another significant threat to the Florida panther is its decreasing ability to produce healthy young. Abnormalities, most of which are thought to be genetic in origin rather than the result of poor nutrition, disease or environmental contaminants, occur in more than 90 percent of male Florida panther sperm. Many panthers also suffer from congenital heart defects. Biologists believe these abnormalities are likely due to extensive inbreeding among the few remaining animals.

Disease also threatens small inbred populations like the Florida panther. Panthers have tested positive for a number of viruses, indicating that they had been exposed to or were infected with several potentially pathogenic agents. Actual impacts of diseases on the population is not clearly known.

In 1967, under a law that preceded the Endangered Species Act of 1973, the Florida panther was designated as an endangered species. An endangered species is considered in danger of extinction throughout all or a significant portion of its range within the foreseeable future. A threatened species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Today biologists predict the Florida panther will likely disappear in 20 to 40 years unless drastic measures are taken. A single catastrophic event could reduce that time.

The U.S. Fish and Wildlife Service is actively working with various federal and state agencies and private organizations to save the Florida panther from extinction and return the population to healthy numbers. Areas of emphasis include protecting and enhancing the population in south Florida (including habitats and prey resources), restoring genetic health to the population, and developing the techniques and technology needed to successfully reestablish panthers into other historic range areas.

To protect both the panther and its habitat, nearly 30,000 acres in south Florida have been set aside to form the Florida Panther National Wildlife Refuge. This refuge is adjacent to other state and federal lands; together, they provide nearly 1 million acres of protected habitat for the Florida panther. Roads can divide panther habitat into fragments that are too small to meet the territorial needs of a panther. They can also

act as barriers, preventing movement within and between territories. Biologists hope to maintain and reestablish links connecting panther habitats. Road improvements such as fencing, wider shoulders, underpasses for wildlife and bridge extensions have helped reduce road fatalities.

In an experimental effort to improve the genetic health of the Florida panther, the Fish and Wildlife Service in cooperation with other organizations introduced eight female cougars of a Texas subspecies into Florida in 1995. Before it became isolated, the Florida panther normally bred with this subspecies along the western part of its historic range. This effort will enhance the genetic health of the Florida panther. Although one female died after being struck by a vehicle, six litters containing nine kittens had been produced by the end of 1997. All kittens have been tagged with transponders for future identification. To date, three kittens have been recaptured by wildlife biologists and outfitted with radio transmitters, allowing them to be closely monitored. Biologists hope to radio instrument all offspring. It's too soon to know if these measures will save the Florida panther, but its future is more promising now than it has been in a long time.

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