

Eastern cougar

Status

Federal status: G5TH NH, Endangered

NH state status: SH, Not listed

ME state status: SH, Special concern

The Eastern cougar (*Puma concolor couguar*) is the currently recognized subspecies that was historically found in the northeast U.S. The Eastern cougar is believed by the USFWS (1990) to be extinct throughout its historic range due to predation by humans, habitat loss, and low deer populations in the 1800s. It is identified by IUCN as critically endangered and in CITES Appendix I as most critically endangered.

It has recently been suggested there are only six subspecies of *Puma concolor* based on genetic analysis across all populations. If this assessment is accepted, then all cougars inhabiting North and Central America north of Nicaragua will be classified as *Puma concolor couguar*. In other words, the eastern cougar would no longer be a different subspecies than cougars in other parts of the U.S. The total population of all cougars in the U.S. and Canada is estimated to be 16,000.

The panel indicated that the range-wide viability outcome depends on whether or not the eastern cougar is a true subspecies. Assuming it is a valid subspecies, the outcome range-wide and for the WMNF would be E because it is believed to be extirpated throughout its range. This will not change over next 20 years. If the taxonomy is changed so all North American cougars are considered to be one subspecies; or if eastward migration of cougars from the west continues, the outcome would be different range-wide. Regardless the WMNF outcome is E now and likely to remain E into the future as cougar have not been documented on the Forest in decades and are not known near enough to reestablish a population in the next couple decades.

Distribution

The cougar, *P. concolor*, was historically distributed from northern British Columbia to southern Chile and Argentina, and from coast to coast in North America. The historic distribution was reduced by two-thirds due to persecution by humans and destruction and fragmentation of habitat.

The exact range of *P. concolor couguar* is unknown because few specimens of certain origin exist. However, it is thought to have occurred in South Carolina, Tennessee, Kentucky, Indiana, all states to the north, and in the Canadian provinces of Nova Scotia, New Brunswick, Quebec, and Ontario. The last known New England specimen of *P. concolor couguar* was taken in 1938 in Somerset County, Maine.

The nearest extant population of *P. concolor* is in Manitoba, unless populations of uncertain origin in Michigan and Minnesota are included. It is generally accepted that no population of eastern cougar exists in New Hampshire, Maine, or Vermont. Any cougars found in these states do not represent relict populations, but rather are transient or transplanted individuals from the west. In recent years, confirmed cougar sign has been documented in Vermont, Maine, and New Brunswick. For these documentations, it was

not possible to determine subspecies or whether the cougars were formerly captive animals.

Habitat

Habitat descriptions in this summary are for *P. concolor* in general, not for the eastern cougar subspecies. There is no information on habitat for the eastern cougar subspecies. Results from studies of western or Florida cougars do not necessarily apply to eastern cougars, but they are the best available information.

Cougars have been reported in a wide variety of habitats ranging from sea level to 13,000 feet, and from desert to tropical rain forests. In the Rockies, cougars are associated with areas of pinion pine, juniper, mountain mahogany, ponderosa pine, oak and other brush lands. Young may be born in caves, under uprooted trees, or in dense thickets. When crossing a plain or valley, cougars usually follow a watercourse because of concealment provided by vegetation along the banks. *P. concolor* requires abundant deer-sized prey and some isolation from humans. It has been estimated that an area of 370-820 square miles would be needed for a population of 15-20 adult cougars to have a low risk of extinction.

Roads and human activity degrade cougar habitat and are detrimental to viability. In Arizona and Utah, home ranges of established resident cougars and young cougars that became residents had lower-than-average road densities, no recent timber sales, and few or no sites of human residence; all disturbances had potential adverse impacts, especially on dispersing juveniles.

It would be expected that eastern cougars would occupy a similar range of diverse habitats, occurring wherever deer are abundant and people are not.

Limiting Factors

Loss of remote undisturbed habitat is the greatest threat to cougar population viability. Cougars are extremely threatened by fragmentation of habitat, which causes increased mortality as individuals travel between suitable habitat areas. In Florida, between 1979-1990, 50% of all panther deaths were due to highway collisions.

Feline distemper, feline leukemia, and rabies and has caused death in wild cougar populations. Domestic cats can spread feline leukemia virus to cougars.

Key factors limiting the potential for viable cougar populations in the WMNF are likely to be: (1) young vegetation to support suitable prey base; (2) lack of a source population within dispersal distance; and (3) mortality from collisions on roads. These limiting factors are uncertain because they have not been examined closely because cougars have been considered extirpated for decades.

Viability concern

This taxon is considered extirpated and is identified by the USFWS as a species that must be included in evaluations of WMNF activities. A population in Michigan moved about 400 miles from Manitoba in approximately 20 years, so it is possible that cougars might be much closer to the WMNF in the next 20 years. Human development may slow or otherwise limit dispersal capability.

Management activities that might affect populations or viability

Currently, there are no WMNF management activities that would affect eastern cougars as they are extirpated from the Forest. Any future viable population on the Forests would require dispersal or reintroduction.

Cougars use an array of habitats. Therefore only construction of major roads, development that attracts people to an area, and management that affects deer populations would alter cougar habitat suitability.

References

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