1. The Florida Panther Population: 1500-1800

In the early 1500s, an indigenous community known as the Calusa lived in the southwestern portion of Florida. They relied on the rich biodiversity of Florida's aquatic ecosystems and traveled its intricate waterways, which included what we now know as Marco Island. The Calusa's lives revolved around the Gulf of Mexico, fishing, and trading with neighboring communities.

In 1896, more than 300 years after their demise, archaeologists unearthed an artifact on Key Marco that provided a glimpse into the Calusa's rich history—the Key Marco Cat. This meticulously carved wooden sculpture shows a crouching feline-like creature, thought to be inspired by the Florida panther. The Key Marco Cat was a testament to the Calusa's skilled craftsmanship and their reverence for the natural world.

Within the Calusa culture, the Florida panther represented a powerful and mystical being, embodying balance in the natural world. Its presence symbolized an intricate connection between the physical and spiritual realms. The Calusa, like many indigenous cultures, admired and respected the panther for its prowess and beauty.

The arrival of Juan Ponce de Leon in 1513 forever altered the course of Florida's history. Ponce de Leon, a Spanish explorer, embarked on a quest for territory and gold. In his quest, he brought European diseases, slavery, and warfare, which took a heavy toll on indigenous communities, transforming their way of life. In 1521, Ponce de Leon and his men attacked the city of Calusa. He was wounded by a poisoned arrow loosed by a Calusan warrior defending his home. This injury ultimately led to the demise of Ponce de Leon.

The death of Ponce de Leon did not prevent further European colonization. As the Spanish colonized Florida, they introduced domesticated animals, including cattle. The panther, respected by indigenous cultures that chose to live with it in harmony, became a source of conflict as it preyed on the cattle of the colonizers.¹

These colonizers received encouragement from Spanish authorities to hunt panthers. The majestic creatures that once coexisted in an ecological balance with the indigenous people of Florida, were now in danger. Before European colonization, it was estimated that as many as 3,000 panthers lived in what is now the southeastern United States.

¹Smith, Ryan P., Smithsonian Magazine. This hand-carved Panther statuette embodies a lost civilization's harmony with nature. Smithsonian.com. https://www.smithsonianmag.com/smithsonian-institution/hand-carved-panther-statuette-embodies-lost-civilizations-harmony-nature-180969711/ (2019, January 7)

2. The Florida Panther Population: 1800-1960s

By the early 19th century, Florida witnessed a significant turning point in its relationship with the panther. In 1832, the state passed its first bounty law for panthers, marking the beginning of an era where these magnificent creatures would become hunted and feared.²

In 1887, Florida authorized \$5.00 in payment for panther scalps, further incentivizing the hunting of the already decreasing population.³ During the late 19th and early 20th centuries, Florida saw extensive agricultural land clearing and lumbering, the first large-scale habitat destruction and fragmentation the state had seen. The once expansive southern forest was reduced by nearly 40 percent between 1850 and 1919. Pine forests, covering 36.4 million hectares, were considered destroyed by 1920.⁴

Simultaneously, the white-tailed deer, a primary source of prey for the panther, saw its population plummet from approximately 13 million in 1850 to less than one million by 1900, largely because of this habitat destruction.⁵ In 1900, biologists estimated there were merely 500 panthers left in Florida, a stark contrast to the once-thriving population of 3,000 or more.⁶

Panthers, with their imposing size of 75 to 160 pounds, struck fear in the hearts of many. Stories of panthers entering towns in search of food further fueled these fears. In March 1919, the Ocala Evening Star featured a front-page account of a panther on the streets of Perry, Florida, where it attacked two dogs. Such incidents were rare but contributed to human anxieties. Farmers would join forces with hunters to protect livestock by eliminating wild cats, including panthers, supporting a bounty system.⁷

Panthers remained classified as game animals until 1958. As years passed, however, human-related factors took a toll on panther populations. The Florida Fish and Wildlife Service reported that road kills became the most common human-related cause of panther fatalities in the wild.⁸ Throughout Florida's history, panthers have endured hunting, habitat destruction, and shifting perceptions. From being revered by indigenous cultures to becoming hunted and feared, these remarkable creatures have played a complex role in the state's ecological and cultural narrative.

By the 1960s, panther numbers had dropped to fewer than 20.⁹ In 1967, the Florida panther was designated as an endangered species.

⁵Halls, Lowell K., ed. 1984.White-tailed deer, ecology and management. The Wildlife Management Institute; Washington, D.C.

⁹ Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (pp. 21–22). National Geographic.



²Buel (2), J. W. *Heroes of the Plains*. St. Louis, MO: Historical Publishing Company, 1881.

³Tinsley, J.B. 1970. *The Florida Panther*. Great Outdoors Publishing Company; St. Petersburg, Florida.

⁴Williams, M. 1990. Americans & their forests, a historical geography. Cambridge University Press; New York, New York.

⁶U.S. Fish & Wildlife Service. (1998). Florida Panther. Retrieved October 23, 2023, from http://npshistory.com/brochures/nwr/wildlife-fact-sheets/florida-panther-

^{1998.}pdf. 7 Florida panthers leap out of the past - the US Caribbean & Florida Digital Newspaper Project - Expanding Access to Historical News. https://ufndnp.domains.uflib.ufl.edu/florida-panthers-leap-out-of-the-past/. 2020, June 12.

⁸ Florida panthers leap out of the past - the US Caribbean & Florida Digital Newspaper Project. The US Caribbean & Florida Digital Newspaper Project - Expanding Access to Historical News. https://ufndnp.domains.uflib.ufl.edu/florida-panthers-leap-out-of-the-past/> 2020, June 12.

3. The Florida Panther Population: 1960s-2010

From the 1960s until 1995, the Florida panther population fluctuated between 19-30 individuals.¹⁰

In an experimental effort to enhance the genetic health of the Florida panther and promote population growth, the U.S. Fish and Wildlife Service collaborated with other organizations. In 1995, scientists and experts moved eight female panthers from a Texas subspecies into south Florida. The introduction of new genetic material through immigration aimed to bolster the panther population, bringing the population from about 25 individuals in 1995, to 50 individuals in 2000, 80 individuals in 2003, and about 118 individuals in 2008.¹¹

Despite these conservation efforts, the primary cause of mortality for Florida panthers continues to be vehicle collisions, killing nearly 30 every year. One way to mitigate losses has been by building wildlife crossings where busy roads intersect Florida Wildlife Corridor lands. Before transportation agencies invest in wildlife crossings, though, habitat corridors on both sides of the road first need to be permanently protected. Land can be protected as a public preserve or with a permanent conservation easement on a working farm or ranch.¹²

Another impact on panther mortality is intraspecific aggression. Florida panthers typically live alone, except when breeding and raising young. According to the Mountain Lion Foundation, "Male panthers will fight and attempt to kill other panthers that enter established territories, which can range up to 250 miles. Kittens are also at risk from male panthers since their deaths will allow their mothers to breed again." It is estimated that intraspecific aggression led to roughly 90 deaths between 1990-2012, about half of its current population size.¹³

This persistently high death rate and low birth rate suggest that the Florida panther population is far from carrying capacity, the maximum number of individuals an ecosystem can support without degradation.¹⁴

¹⁰McBride, R. T., McBride, R. T., McBride, R. M., & McBride, C. E. (2008). Counting Pumas by categorizing physical evidence. *Southeastern Naturalist*, 7(3), 381–400. https://doi.org/10.1656/1528-7092-7.3.381

¹¹U.S. Fish & Wildlife Service. (1998). Florida Panther. Retrieved October 23, 2023.http://npshistory.com/brochures/nwr/wildlife-fact-sheets/florida-panther-1998.pdf.

¹²Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (pp. 202-203). National Geographic.

¹³ Florida's Mountain Lions. Mountain Lion Foundation. (2023, May 24). https://mountainlion.org/us/florida/

¹⁴Platt, J. R. (2020, July 16). For Florida Panthers, extinction comes on four wheels. The Revelator. https://therevelator.org/florida-panthers-deaths/

4. Florida Panther Population: 2010 to Today

Betty Osceola, a member of the Miccosukee tribe of Florida, is committed to helping to restore the panther's habitat. She wants to rectify the consequences of the Tamiami Trail's construction in the 1940s. This road construction caused destruction of the tribe's dwellings and ceremonial grounds, in addition to a significant portion of the panther and its prey's habitat, as a result of a 70 percent reduction in water flow.¹⁵

In 1973, the same year the Florida panther was listed under the U.S. Endangered Species Act, the last female panther was documented north of the Caloosahatchee River until 2016, when Carlton Ward, Jr. photographed one with a camera trap. The Caloosahatchee flows from Lake Okeechobee west to Fort Myers and had been the northern boundary to the panthers' known breeding range for 43 years. Male panthers facing competition with other males in the south had been crossing the river to migrate in search of their own territory. One male born in South Florida was killed by a hunter in 2011 in western Georgia. Before 2016, though, males migrating north of the Caloosahatchee River was the first sign that the panthers' breeding population might be able to naturally expand beyond South Florida.

Currently, the population has rebounded to nearly 200, but Florida panthers are still isolated in South Florida.

Furthermore, panthers' **mortality** and **natality** rates have been impacted by an unknown toxin referred to as feline leukomyelopathy (FLM). This disease has likely afflicted 35 panthers and 42 bobcats throughout the state since spring 2017. Scientists are unsure of the cause, but suspect neurotoxins, or a combination of factors, such as a nutritional deficiency combined with a neurotoxin. Since the disease is found in at least two feline species, it is not a genetic condition passed from parent to offspring.¹⁷

With the Florida panther population on the brink of recovery, it is vital to reclaim more of their historic territory to help expand their numbers into northern Florida.¹⁸

¹⁸ Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (pp. 21–22). National Geographic.



¹⁵ Osceola, B. (2023, February 3). *Path of the Panther*. Path of the Panther - https://pathofthepanther.com/about/

¹⁶Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (p. 25, 70-71). National Geographic.

¹⁷Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (p. 48). National Geographic.

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5. The Future of the Florida Panther Population

The Florida panther, a symbol of the state's unique wildlife, faces a precarious future as a result of habitat loss driven by rapid population growth and land development. Florida's growing human population, with nearly a thousand new residents arriving daily, leads to the construction of new roads, houses, and commercial structures. These developments destroy approximately 100,000 acres of wildlife habitat annually, far exceeding conservation efforts.¹⁹

As human communities expand into panther territories, conflicts arise. Residents in areas like Golden Gate Estates in the Everglades have lost pets and livestock to panthers, but are committed to coexisting peacefully. Some residents have taken proactive and precautionary measures to protect themselves and wildlife through enclosures and livestock guardian dogs.²⁰

Conservationists including Cary Lightsey stress the compatibility of cattle ranching and wildlife preservation. Cattle need birds to help remove flies and insects from their hides; cattle graze and clear out areas of dense forest where deer and turkeys can roam. Those birds that eat insects on and around cattle are a source of food for panthers.²¹

Cary Lightsey and others dedicate land to conservation easements, protecting Florida's heritage for future generations. Ranchers, though, can face obstacles in securing conservation easements if state funding is limited, and with competing interests of real estate developers.²²

Additionally, the number one cause of death among Florida panthers continues to be vehicle collisions. In 2023, thirteen panthers, or 5-10 percent of the estimated population, died as a result of collisions with vehicles.²³

To save the Florida panther, it's essential to expand their range within the Florida Wildlife Corridor. Eight vulnerable acres within the 18 million-acre corridor must be further protected to reduce the risk of vehicle collisions, habitat loss, and human encounters. This will require strong commitments from public and private interests.²⁴ Wildlife corridors are gaining recognition, with several U.S. states enacting corridor legislation. Wildlife corridors offer a unifying framework for preserving Earth's biodiversity and ensuring the survival of iconic species such as the Florida panther.

¹⁹Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (pp. 6-7). National Geographic.

²⁰Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (p. 137). National Geographic.

²¹Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (p. 171). National Geographic.

²²Ward, C., & Hiaasen, C. (2023). In *Path of the Panther: New Hope for Wild Florida* (pp. 171, 174). National Geographic.

²³ "Panther Pulse." Florida Fish And Wildlife Conservation Commission, myfwc.com/wildlifehabitats/wildlife/panther/pulse/. Accessed 15 Nov. 2023.

²⁴Ward, C., & Hiaasen, C. (2023). In Path of the Panther: New Hope for Wild Florida (pp. 212-213). National Geographic.