

### Managing Conflicts with Wildlife: Living with Panthers<sup>1</sup>

William M. Giuliano, Holly K. Ober, Lauren Watine, Raoul Boughton, Eric Hellgren, Darrell Land, and Mark Lotz<sup>2</sup>

Panthers are charismatic cats that are an important part of Florida's ecosystems and food webs. They may help maintain populations of some native species and control nuisance species such as wild hogs. In some areas, they provide great wildlife-viewing opportunities.

Panthers are generally secretive and rarely bother people. However, there are rare situations where panthers can become dangerous or damaging. In this document, we present some facts about panthers, describe dangers and problems they may cause, and provide suggestions on how to cope with these issues.

#### **Getting to Know Panthers**

- The Florida panther (*Puma concolor coryi*) is a member of the cat family (Felidae), and is one of more than 25 subspecies of pumas (also known as mountain lions and cougars; Figure 1).
- Pumas historically ranged throughout most of North, Central, and South America. The Florida panther is an isolated, remnant population in south Florida, and likely represents the only lions of eastern North America.
- Today, Florida panthers are protected as an endangered species under state and federal laws. However, panther numbers were reduced to an estimated 30 adults in a single population in southern Florida due to habitat loss,

persecution, and the effects of inbreeding in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. Conservation efforts, including genetic restoration, have enabled a five-fold increase in the population.



Figure 1. A Florida panther Credits: United States Fish and Wildlife Service National Digital Library

• Florida panthers have a cat-like appearance with long, round tails. Adults are a relatively uniform tan color with lighter fur on the belly, chest, and inner legs; young cats are spotted.

- 1. This document is WEC354, one of a series of the Department of Wildlife Ecology and Conservation, UF/IFAS Extension. Original publication date December 2014. Reviewed August 2018. Visit the EDIS website at http://edis.ifas.ufl.edu.
- 2. William M. Giuliano, former Extension specialist, Department of Wildlife Ecology and Conservation; Holly K. Ober, Extension specialist, Department of Wildlife Ecology and Conservation; Lauren Watine, former graduate assistant, Department of Wildlife Ecology and Conservation; Raoul Boughton, Extension specialist, Department of Wildlife Ecology and Conservation; Eric Hellgren, professor, Department of Wildlife Ecology and Conservation; Darrell Land, biologist, Florida Fish and Wildlife Conservation Commission; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.

- Puma size varies throughout the animal's range; Florida panthers are often smaller than animals from more northern and western areas. Adult males can weigh upwards of 160 lbs and may be 6–8 feet long, and large females are around 100 lbs and 5–7 feet long.
- Pumas have only a mediocre sense of smell for a mammalian carnivore, but excellent hearing and vision.
- Pumas are generally solitary, elusive animals. Although typically quiet, they use a variety of vocalizations (purrs, chirps, meows, moans, and yowls; they do not roar) and scrapes/scent marking to communicate.
- Signs of the animals typically include tracks (Figure 2), scat (Figure 3), scratches, scrapes (Figure 4), prey drag marks (Figure 5), and kills (Figure 6).



Figure 2. Panthers' big paws leave distinctive tracks. Credits: www.myfwc.com



Figure 3. Panther scat Credits: D. Land and M. Lotz

 Panthers are habitat generalists, using forests, prairies, and wetlands, primarily based on prey and cover availability.



Figure 4. Scrapes can be a telltale sign that a panther is around. Credits: www.myfwc.com



Figure 5. Drag marks indicating a panther has moved its prey Credits: D. Land and M. Lotz

- They are strict carnivores, with more than 90% of their diet consisting of feral hog, white-tailed deer, raccoon, and armadillo. Panthers will occasionally kill house cats, dogs, and livestock, particularly calves.
- Panthers are ambush predators and depend on stealth to get near prey. They are efficient predators and typically kill their prey by biting through the skull, severing the spine by a neck bite, or strangling the prey by crushing the trachea. They usually drag the kill to cover for later feeding, and they may "cache" it (hide it for a later meal) by covering it with twigs, leaves, and other debris (Figure 7).



Figure 6. Panther kill showing chewed ribs Credits: D. Land and M. Lotz



Figure 7. Panthers often cover prey in a cache for later use Credits: D. Land and M. Lotz

- Female panthers typically breed and give birth every two years. Mating can occur throughout the year, and gestation (pregnancy) is about three months. Most births occur in late spring. Females are sexually mature at 1.5–2.5 years of age, and males at 2–3 years of age.
- Female panthers select den sites in thick ground cover, usually a saw palmetto thicket. Litter sizes range from 1–4 kittens and average 2.5 kittens per litter. Kittens remain in the den for up to 2 months.
- Kittens stay with their mother for 1.5–2 years, when they can survive on their own. The female will then breed again.
- Panthers can live 12 years or more. Intraspecific aggression (panthers killing other panthers) and road kills are the primary causes of death for panthers, but others include disease and shootings.

- Home range size varies widely and depends on food, season, and other factors, and can include more than 120,000 acres for males and 45,000 acres for females. A female panther will tend to establish home ranges near her mother's home range but males can disperse hundreds of miles from their birth site.
- Panthers are *crepuscular*, which means that they are often most active at dawn and dusk, but they can be seen at any time of day.

## Potential Risks and Damage Associated with Panthers

- The primary conflict between panthers and people relates to their potential to prey upon livestock and other domesticated animals, including pets. These attacks are rare, but they do sometimes occur.
- Identifying the predator responsible for livestock depredation can be difficult, with panthers often blamed when domestic/feral dogs or other predators are the responsible species. It is sometimes possible to rule out panthers by examining the killed animal for characteristic marks.
- Indicators of a panther-killed prey item include bite marks (canine tooth punctures) near the base of the jaw, head, or back of the neck near the skull; ribcage opened up and ribs chewed down half way or more towards the spine; and the carcass being dragged to a secluded location and covered (Figure 6).
- Livestock killed by coyotes will frequently show bites around the neck and throat; signs of attack on the hindquarters and sides; and smaller bite marks and consumption of the nose, especially on young animals. Coyotes usually feed primarily on the flanks, and they consume the internal organs.
- Animals killed by bobcats and black bears often look similar to those killed by coyotes, though bears sometimes also crush the skull and/or spine. Both bears and bobcats often drag off and cover their prey.
- Indicators of domestic/feral dogs include livestock with bite marks and mutilation that appear indiscriminately around the body; and very little or no feeding on the animal.
- Although there has never been a confirmed attack of a Florida panther on a human, mountain lions have attacked people. These attacks are very rare and occurred in the western United States.

# How to prevent risks and damage associated with panthers

- For many people who live in panther country, seeing a
  panther is a rare treat. Panther sightings are not necessarily an indication of a problem, but it is wise to take
  precautions to avoid conflicts.
- Keep livestock in well-lit corrals at night rather than leaving them out to pasture or free ranging. Exclusion using fencing can get expensive, but for relatively small areas it may be an effective control option, especially if electric fencing is feasible. Fencing should be 8–10 feet tall with a roof or overhang, if the fence is not electric.
- Reduce livestock predation losses by increasing stocking rates and shortening calving periods.
- Consider guard dogs to protect livestock.
- Dissuade panthers from areas around livestock by removing the thick cover they hide in. Creating a coverfree buffer around pasture moves livestock away from the habitat that supports panthers' preferred native prey, such as feral hogs and deer. Locate pastures as far from forest cover as possible (more than 300 feet).
- Protect cats and dogs and other small domestic species by keeping them indoors or in fenced areas, and do not leave their food outside.
- There are no records of Florida panther attacks on humans, but such an attack is not impossible, and people in panther habitat should take precautions to avoid attack.
- Be especially watchful and cautious at dawn and dusk, when panthers are most active and foraging.
- Avoid areas where preferred panther prey are found, and do not attract these prey via supplemental feeding.
- Hike, bike, and walk in a group.
- If you see a panther at a distance, enjoy it but remain calm and do not make any sudden moves. Do not move towards the panther, and be sure to give it plenty of space to retreat. Never approach or surprise a panther!
- If you encounter a panther at close range:
- Give the animal plenty of space and an escape route, and it will likely move off.
- If you are with small children, bring them close to you and pick them up if possible.
- Do not run. Running may stimulate the panther's chase instinct; instead, hold your ground and face the animal.

- Appear larger by standing upright and raising your arms; speak to the animal in a strong, assertive voice; throw objects at the panther; and if you have any objects near at hand that can be used to produce noise, bang them together or otherwise use them to make loud, unexpected sounds that might scare the panther away.
- If you are attacked, fight back! Use rocks, sticks, tools, and your bare hands, and continue to stand and face the animal. Do not "play dead;" stand and fight. Remember that they will try to bite your head and neck.
- As soon as possible and without taking your eyes off the panther, move away and seek safe refuge in a house, building, or vehicle.
- Report sightings of Florida panthers or share panther photos at https://public.myfwc.com/hsc/panthersightings/getlatlong.aspx

#### More Information

http://myfwc.com/wildlifehabitats/managed/panther/—Information on Florida panther ecology and conservation provided by the Florida Fish and Wildlife Conservation Commission

http://edis.ifas.ufl.edu/topic\_panther—UF/IFAS extension document providing information on the biology of large carnivores, including panthers, in Florida