

INTERAGENCY FLORIDA PANTHER RESPONSE PLAN

The FWS, NPS, and FWC established an Interagency Florida Panther Response Team (Response Team) to respond to human-panther interactions in such a way to ensure public safety and the continued existence and recovery of the Florida panther. The Response Team, comprised of biologists, law enforcement officers, public information staff, and other agency representatives (Appendix 1), will follow the Response Plan to handle human-panther interactions and depredations.

The Response Team's responsibility will be to review information related to human-panther interactions and depredations, classify these situations based on the documented behavior of the panther, provide a timely action plan to the responsible agencies, and take appropriate action. The Response Team will meet at least annually to review previous activities and suggest needed revisions to the Response Plan for consideration by each agency's chain-of-command. Additional meetings may be held as needed. A comprehensive annual report summarizing the Response Team's actions will be provided to a senior-level Oversight Committee consisting of the FWS Southeast Regional Director, the FWS Refuge Manager of Florida Panther National Wildlife Refuge (NWR), the NPS Southeast Regional Director, the NPS Superintendent of Everglades National Park, the NPS Superintendent of Big Cypress National Preserve, and the FWC Executive Director. The Oversight Committee will approve revisions to the Response Plan, review actions by the Response Team, and provide guidance if warranted. For interactions classified as an Incident, Threat, or Attack, the Committee will be informed immediately and will coordinate actions with the Response Team.

This Response Plan draws upon the approaches used by western states to manage their puma populations but also recognizes the special needs posed by the endangered status of the Florida panther. Interactions between humans and pumas in the western states range from depredation upon livestock or pets, fleeting glimpses, repeated sightings, aggression towards humans without physical contact, and, in rare cases, attacks upon people. Most western states have protocols in place to document, investigate, and manage these incidents to increase public safety.

Under State and Federal laws and regulations, panther management and protection are the primary responsibility of the FWS and the FWC. The Florida panther is protected under the Federal Endangered Species Act of 1973 (16USC1531-1544) (ESA) and Florida Administrative Code (FAC) 68A-27. The NPS is responsible for coordinating panther management on NPS lands. These three agencies are integral to the management, conservation, and recovery of the panther and are committed to enforcing all applicable Federal and State laws. Florida panther capture and handling activities are permitted by the FWS through section 10 of the ESA and by the FWC under Title 68A of the FAC. Panther management activities on Seminole and Miccosukee Tribal lands are closely coordinated with Tribal members and designated Tribal employees. Necessary management actions will not exclude either Tribe from exercising their customary use and occupancy rights where they exist on NPS lands (Public Law 93-440 and Public Law 100-301).

INTERAGENCY FLORIDA PANTHER RESPONSE TEAM COMPOSITION, RESPONSIBILITIES, AND REPORTING

The Response Team includes biologists, law enforcement officers, and public information staff from FWC, FWS, and NPS (Appendix 1). Reports of human-panther interactions and depredations shall be directed to the appropriate agency based on the location of the interaction. In most cases of reported human-panther interactions and depredations, law enforcement officers and biologists will be the first agency personnel to respond. The lead agency will be responsible for collecting details and pertinent information and reporting those findings to the Response Team. Investigations will involve an assessment of the level of public concern by the Response Team's public information/outreach personnel. Communication with the Response Team will be accomplished by a variety of means including phone calls and emails.

The Response Team recognizes the critical importance of prompt and appropriate responses to potential public safety concerns that may occur because of human-panther interactions and depredations. The team will place a high priority on the efficient and timely completion of investigations, the development of recommendations, and the initiation of appropriate actions. If human-panther interactions occur outside of south Florida, the Response Team will coordinate with, and support, agency staff in those areas as needed. Response to interactions will include close coordination with local law enforcement and animal services agencies. These actions also will include outreach to inform the media, public and local elected officials of the interactions in a timely manner.

Geographic areas of responsibility shall be as follows:

- (1) NPS team members shall take the lead in managing human-panther interactions and depredations within the perimeter boundaries of Big Cypress National Preserve and Everglades National Park. NPS team members from Everglades National Park will be responsible for responding to the Miccosukee Reserved Area lands within the Park. If the situation involves non-federal in-holdings, NPS will coordinate with FWC.
- (2) FWS team members shall take the lead in dealing with human-panther interactions and depredations within the perimeter boundaries of Florida Panther NWR or on any other FWS property within Florida.
- (3) On Seminole and Miccosukee Tribal lands, the FWS (Florida Panther NWR Manager, Office of Law Enforcement agent or the Southeast Regional Native American liaison) will coordinate with the Tribes' designated representatives and the Response Team to address the Tribes' concerns regarding panther issues. FWC will provide logistical support as needed.
- (4) On all other lands in Florida (including military bases, National Forests and other public lands), the FWC team members shall take the lead on human-panther interactions and depredations. Access to private lands will be coordinated with the landowners. Because the

FWC has a full-time panther capture team and the other agencies do not, the FWC will assist the other agencies as needed.

CLASSIFICATION AND RESPONSE TO HUMAN-PANTHER INTERACTIONS AND DEPREDATIONS

The Response Team identified five human-panther interaction classifications: Sighting(s), Encounter, Incident, Threat, and Attack. Panther depredation on domestic animals is discussed separately. When investigating an interaction or depredation, agency personnel will determine if a panther was present and if so, evaluate its behavior and conduct a risk assessment. The Cougar Management Guidelines (Cougar Management Working Group 2005) provide guidance in developing human risk criteria for each classification. Normally, interactions are between panther, people, and prey and the resulting behavior of the panther can be interpreted as an indicator of the potential risk to the human (Table 1). Some interactions will not fit clearly into a specific category, but will have to be evaluated on individual circumstances of the particular situation. Additionally, humans may unintentionally provoke undesirable behavior in a panther by running away and triggering the chase behavior, not allowing the animal an escape route, or approaching an animal that is feeding or has young. Any interaction that was intentionally caused by humans will be thoroughly investigated. All these factors will be considered when classifying human-panther interactions and depredations.

The Response Team members making the first contact will secure the site if necessary, gather information, complete the Public Interview Form, and distribute the completed form along with a preliminary assessment of the situation to the entire Response Team. If further investigation is warranted, a Field Investigation Report will be completed and forwarded to the Response Team. The Response Team members will review the preliminary assessment and make the final classification. Certain situations might require immediate action on the part of the Response Team without participation by all team members.

Radio-telemetry has been utilized by biologists for over 25 years to gather life history information about Florida panthers. Locations of panthers derived from radio-telemetry equipment merely define the animal's position at a given time. When telemetry shows that a panther's location may be cause for concern, the Response Team will evaluate the level of significance of these locations based on the animal's behavior as outlined in the listed classifications.

On rare occasions, panthers have been located within urbanized areas. Typically, these individuals are young, dispersing males in search of new territory. In past cases, the panther has resolved the situation by leaving the highly populated area and returning to more suitable panther habitat. As human development continues to encroach on the remaining panther habitat, the occurrence of panthers in suburban or even urban environments is more likely. Verified sightings in areas that are clearly not panther habitat and that are densely populated, such as business districts, highly commercial areas, dense housing developments or other suburbs, will be investigated promptly and evaluated by the Response Team.

If a panther's behavior indicates a threat to human safety, it will be permanently removed from the wild. The ESA permits the removal of an endangered species that "constitutes a demonstrable but not immediate threat to human safety..." If the panther's location presents a possible threat to public safety (e.g., a dispersing male panther wanders into an urban neighborhood and cannot find its way out) or there is a threat to the survival of the panther (e.g. a panther wanders into an area that contains numerous physical hazards), depending on specific circumstances, the panther may be captured and relocated to suitable habitat, if available, or to an approved captive facility. In extreme circumstances, euthanasia may be necessary.

Under certain circumstances, aversive conditioning will be utilized to manage a human-panther interaction or depredation situation. Aversive conditioning is an experimental management technique that utilizes non-lethal methods (loud noises, trained dogs, capture, marking, etc.) to cause an animal to associate humans with an unpleasant experience. In some circumstances, relocating the animal within its home range may serve as aversive conditioning. Although not an extensively researched technique, aversive conditioning has been utilized with a small number of individuals. Results have varied and depend on factors such as the degree of attraction to the area for food, cover, mating, etc. Aversive conditioning is not intended to alter instinctive prey choices, but rather to change the panther's behavior when in proximity to humans. Consequently, aversive conditioning may not be successful if the panther is attracted to prey and the prey attractant is not removed, enclosed in a proper facility, or excluded from the human-occupied location.

Aversive conditioning, by definition, causes disturbance to a panther and may result in take as defined in the ESA in the form of harassment and possibly harm. Agencies will minimize the extent of take associated with aversive conditioning and ensure that any such take is authorized, pursuant to section 7 and section 10 of the ESA. Radio-collaring is not an aversive conditioning technique, although when done, it is unpleasant to the animal and may serve as an initial step of aversive conditioning. Radio-collaring can only be done for research purposes under an ESA section 10(a)(1)(A) permit. Aversive conditioning should only be conducted by individuals who are knowledgeable about puma behaviors or have been trained to understand the concept and use of the technique. If the Response Team determines that aversive conditioning will be conducted near roads and highways, law enforcement personnel will assure that all safety precautions will be taken.

Table 1. Florida Panther Behaviors and Associated Risk to Humans

LOW RISK	LOW-MODERATE RISK	MODERATE-HIGH RISK	HIGH RISK
Retreats at sight of human	Takes a defensive posture, but then quickly retreats	Does not retreat when humans take offensive/aggressive actions	Unprovoked aggression or predatory behavior directed toward humans.
Displays a lack of attention or indifference to humans	Hiding	Hissing, snarling, and other vocalizations that make the panther conspicuous and communicates to the human that it is viewed as a threat to its safety or in defense of its young or cached prey	Close approach that requires a person to take defensive action to avoid direct contact
Displays a wariness of humans and does not approach	Shifting position	Body low to the ground; head may be up	Body and head low to ground; fur out; rear legs pumping
Several moments of mutual eye contact before retreating	Following behavior	Intense staring	Direct, physical contact between a panther and a human due to aggressive behavior on the part of the panther and not related to protection of kittens or cached prey
Makes various movements not directed at humans		Following behavior, coupled with hiding or a fairly rapid walk but punctuated by numerous stops	Crouches with tail twitching
Shows signs of curiosity including ears up, standing still temporarily and then retreating		Ears are slightly flattened or laid back	
		Twitching of tail	

HUMAN-PANTHER INTERACTIONS

SIGHTING(S): *A visual observation or fleeting glimpse of a panther from a distance.*

Risk Factor = LOW

Behavior:

- **Retreats at sight of humans**
- **Displays a lack of attention or indifference to humans**
- **Displays a wariness of humans and does not approach**

Panther sightings fall into two categories, verified - those with corroborating evidence and unverified - those without such evidence. Response Team biologists will examine any physical evidence provided by the public. A panther sighting with corroborating evidence will be considered a verified sighting. Photographs of the animal or photographs and/or casts of tracks can help with identifying the animal in question. Sightings in occupied panther range do not require any specific management action but can be used as an outreach opportunity. People reporting a panther sighting can be directed to PantherNet (www.myfwc.com/panther) to learn more about panthers in Florida. Verified sightings outside of the known occupied range and in high human-use areas (e.g., suburban, urban) will be investigated by a wildlife biologist and reported to the Response Team.

Repeated and Verified Sightings: *Repeated observations or confirmed reports of panther sign or activity at short time intervals in the same general area.*

Several panther sightings in locations that are inhabited by humans and that occur over the course of several days or weeks in the general area will result in field visits from agency personnel. The Response Team will evaluate if a panther that is sighted repeatedly in close proximity to people or inhabited structures poses a risk to public safety. The Response Team will also try to determine the cause of the repeated use (i.e., cached prey item, den, prey attractant). The Response Team members making the first contact will gather information, complete the appropriate forms, and distribute these completed forms along with a preliminary assessment of the situation to the entire Response Team. Multiple panther sightings are not necessarily indicative of any public safety concern; however, educating people about visiting, living, and recreating in panther habitat is always prudent. These situations should be treated as public outreach opportunities. The public will be provided with the “Living with Panthers” brochure or directed to visit PantherNet (myfwc.com/panther/) to download the brochure and safety tips.

The Response Team shall be notified of all verified repeated panther sightings and the entity receiving these sighting reports shall complete a Public Interview Form (Appendix 4). Completed forms shall be submitted via email to the Response Team within seven (7) days of the subsequent sightings. The Response Team will review the Panther Response Form, and

if management actions are warranted will coordinate resources among all affected agencies and will develop an action plan utilizing the appropriate actions listed in Appendix 2.

ENCOUNTER/MULTIPLE ENCOUNTERS: *An unexpected direct meeting or a series of meetings over a short period between a human and a panther. Panther exhibits non-threatening behavior. Multiple encounters involve the same panther, which over a short period has shown no aggression nor has deliberately approached people in an area.*

Risk Factor = LOW – MODERATE

Behavior:

- **Retreats at sight of humans**
- **Displays a lack of wariness to humans and does not approach**
- **Displays a wariness of humans and does not approach**
- **Makes mutual eye contact and then retreats**
- **Takes a defensive posture, but then quickly retreats.**
- **Makes various movements not directed at humans**
- **Shows signs of curiosity including ears up, standing still temporarily and then retreating.**

An initial response consisting of a site visit and interviews with observers will be conducted by law enforcement and biologists responsible for that geographic area within 24 hours after receiving the report. They will secure the area if warranted, document and evaluate the evidence and attempt to determine the cause of the encounter (i.e., cached prey item, den, and prey attractant). The Response Team shall be notified of all reported panther encounters within 24 hours of the site visit and interviews. The Response Team members making the first contact will gather information and complete the Public Information Form (Appendix 4) and a Field Investigation Report (if warranted). Completed forms with a preliminary assessment of the situation shall be submitted via email to the Response Team. If necessary the Response Team shall coordinate resources among all affected agencies and will develop an action plan utilizing the appropriate actions listed in Appendix 2.

INCIDENT: *An interaction between a panther and a human as described in an Encounter, except that the panther displays potentially threatening behavior.*

Risk Factor = MODERATE - HIGH

Behavior:

- **Does not retreat when humans take offensive/aggressive actions.**
- **Shows signs of curiosity including ears up, intent attention, may be shifting positions.**
- **Intense staring, following or hiding behavior.**

Natural panther behaviors such as defense of kittens or kills, or stalking prey may be perceived to be threatening by people; however, these occurrences are coincidental to a chance meeting and are not indicative of a public safety concern.

An initial response consisting of a site visit and interviews with observers will be conducted by law enforcement officers and biologists responsible for that geographic area no later than 12 hours after receiving the report. They will secure the area if warranted, document and evaluate the evidence, and attempt to determine the cause of the incident (i.e. cached prey item, den, and prey attractant). The agency initiating the investigation shall complete a Public Interview Form and a Field Investigation Report (Appendix 4) and submit them, along with a preliminary assessment of the situation, via email to the Response Team within 24 hours of the site visit.

The Response Team will review the reports and evaluate the presented evidence. The Response Team will make a final determination on the incident and provide written recommendations to the responsible agency via the agency's chain of command. This process ensures that one member from the Oversight Committee will review every recommendation. The Response Team shall coordinate resources among all affected agencies and will develop an action plan utilizing the appropriate actions listed in Appendix 2.

Not all of the listed actions will be applicable to every encounter and new techniques may be developed. Some of these actions may be implemented immediately by agency staff and prior to the involvement of the Response Team in order to provide for human and panther safety.

THREAT: *An unprovoked aggressive/predatory behavior toward a human that requires the individual to take defensive action to avoid direct contact.*

Risk Factor = HIGH

Behavior:

- **Crouches with tail twitching, intense staring, ears flattened, body low to the ground, head may be up (pre-attack behavior).**
- **Ears flat, fur out, tail twitching, body and head low to ground, rear legs pumping (attack imminent).**

A panther shall also be classified as a threat if these three circumstances occur:

- 1) the panther has been involved in a previous encounter, incident, or depredation;
- 2) the panther's behavior departs from expected or known behavior; and
- 3) previous management actions have not deterred the animal's actions.

Immediately after receiving the report, an initial response consisting of a site visit and interviews with observers will be conducted by law enforcement and biologists responsible for that geographic area. They will secure the area if warranted, document and evaluate the evidence, attempt to determine the cause of the panther's behavior (i.e., cached prey item, den, prey attractant) and permanently remove the panther. The Response Team will be notified by phone as soon as possible. The responding agency will complete immediately the Public Interview Form and Field Investigation Report (Appendix 4) and submit them, along with a preliminary assessment, via email to the Response Team and Oversight Committee. The Response Team shall coordinate resources among all affected agencies and will develop an action plan utilizing the appropriate actions listed in Appendix 2. Some of these actions may be implemented immediately by agency staff and prior to the involvement of the Response Team in order to provide for human safety.

Managing public safety and the conservation needs of an endangered species can be challenging and complex; however, a panther that poses a demonstrable threat to public safety shall be permanently removed from the wild. A panther deemed to be a public safety concern will not be relocated to another area because there are no suitable locations where a panther would not likely encounter human communities. There is no guarantee that relocated animals will remain in the release area. The relocated panther may cause a disruption of the local panther social structure, thereby creating local population instability and possibly contributing to additional intraspecific aggression. Permanent removal is the only management option for panthers that pose a demonstrable threat to human safety.