

# The Florida Panther in Everglades National Park

James A. Kushlan

Everglades National Park  
Homestead, Florida

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The Florida panther is a highly endangered subspecies that is suspected to still occur only in Everglades National Park and the Big Cypress Swamp. A federal recovery team was appointed in 1976 tasked with writing a recovery plan for the subspecies. The author of this report is a member of the team. However, the status of the Florida Panther in Everglades National Park or Big Cypress remains in doubt and has not been undocumented appropriately. To assess the status of the panther in South Florida, surveys were undertaken in Everglades National Park in 1977 and in 1978. Also historical records and sightings were assembled and evaluated. The present report includes the results of those two years of inventory, the historic record, and a consideration of how the panther might be monitored. A survey was also undertaken in the Big Cypress, reported separately.

The surveys produced significant information on panther distribution. However, I concluded that no quantitative monitoring system is possible at this time. The lack of basic population information, the difficulty of observation, the lack of a monitoring system, and the extremely low population indicate the need for an intensive research effort on this species.

## 1977 Results

Twenty-five reasonably credible observations of panthers have been reported in and near Everglades National Park from January through October 1977. Most of these are from park personnel and other qualified people. These are generally type II and III observation under Layne and McCauley's classification and are unconfirmed by Game Commission standards. Despite efforts by the Commission Panther Swat Team, no "confirmed" evidence is available for this period.

The sightings cluster near Long Pine Key as shown in the figure, as is to be expected based on park records and the greater effort expended in this area by park personnel. Two records near *Flamingo* are near the other historic concentration of sightings. Outlying sightings occurred near Homestead Air Force Base. This record was by a very credible observer under good conditions. One sighting west of the Everglades near mangrove swamp occurred during the dry season when the marsh between there and higher ground was passable. Two sightings were near 40-mile bend. They occurred several months apart and were made by different observers. The first was of an adult and two small kittens. Another sighting occurred on a levee in the Conservation Area. Surprisingly, this is near a round-the-clock construction area.

I interpret these records, all recent although officially "unconfirmed," to indicate the continual presence of panthers in Everglades National Park.

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## 1978 Results

On the basis of long-term records, wildlife observation files, we determined two areas in Everglades National Park where panthers were likely to be found, Long Pine Key and Flamingo. This determination was later confirmed by a more detailed analysis by Mindy McCauley and James Layne. In summer 1977, personnel from the Florida Fish and Game Commission surveyed these areas for one week. They did not find sign but did determine that certain survey routes would be most suitable for locating panther sign.

Beginning in November 1977, several survey routes were run: 1. Long Pine Key from the Research Center to gate 2B through the Campground, along the auto trail, back to Gate 7, along the 7 mile road back to the Research Center; 2. Hole-in-Donut along road to Hays Barn Building A and back; 3. Flamingo on Rowdy Bend Road, Bear Lake Trail, Coastal Priarie Trail, Christain Point and Snake Bight. The Long Pine Key and Hole-in-Donut routes were run 7 times from 7 November to 25 December 1977. The Flamingo route was run once on 27 February 1978. No panther sign was found in most cases because the roadways were either completely unsuitable for tracking or because they were only suitable after light rain. This coupled with the low numbers of animals believed to be in the area indicated that survey routes were impractical to run on a scheduled basis.

During 1977 and 1978, however, 72 visual sightings of panthers have occurred in the park (Table 1). A sizeable proportion were contributed by Ron Sutton who took an interest in locating panthers. Bill and Ray Vorwald, park volunteers, also spent considerable time searching for panthers. These sightings suggested that panthers might be monitored by use of such records particularly if individuals can be identified by their tracks.

Table . Concrete evidence of Panthers gathered in 1978.

DATE	AREA AND NAME	TRACK #
23 Feb 78	Area 1 - Panther Camp	Scat and photos of tracks
3 Mar 78	Area 2 - Hole in the Donut	#1A-7A
6 Mar 78	Area 3 - Peacock Camp	#1-5
6 Mar 78	Area 4 - burn	#6-8
6 Mar 78	Area 5 - E of burn	#9
7 Mar 78	Area 2 - Hole in the Donut	#10A
12 & 13 Mar 78	Levee 28	dead animal (killed 8 Mar 78)
27 Mar 78	Area 1 - Panther Camp	#10-17
27 Mar 78	Area 6 - Houghton	#19-25
11 Apr 78	Area 7 - Pine Block D	#26
1 May 78	Area 6 - Houghton	#27 and 28

Note: all track # have casts except #13 and #28

#8A, 9A, and 18 are # w/no track measurements or casts

Table 3 Total of number of wildlife observation cards of Florida Panther.

1935	1	1967	3
1949	12	1968	5
1950	10	1969	4
1951	6	1970	8
1952	3	1971	5
1953	1	1972	4
1954	4	1973	6
1955	0	1974	5
1956	5	1975	2
1957	2	1976	10
1958	13	1977	39 (13 Sutton)
1959	8	1978	33 <sup>a</sup> (as of 19 May 1978)
1960	2		
1961	1		
1962	5		
1963	1		
1964	5		
1965	9		
1966	7		

<sup>a</sup>8 include concrete evidence

A drawback is that tracks are not commonly found even where sightings occur because of hard substrate. On 23 February 1978, S. Bass and D. Taylor surveying an area of the Big Cypress by helicopter found tracks north of the Jetport. On 3 March 1978 the Vorwalds found tracks in the Hole-in-the-Donut. As a result, attention was concentrated in these areas and more evidence was gathered (Table 2). Four additional helicopter flights were taken and by May sufficient evidence had accumulated to establish the occurrence of panthers in this area.

Based upon our discoveries in the Big Cypress Swamp and a panther killed illegally in the same area, the Florida Game and Fish Commission sponsored a one month survey of the Big Cypress conducted by ENP personnel, Kent Reeves. His data suggest the 5 animals may occur north of the Jetport, but he did not find other areas of activity.

#### Proposed Monitoring Procedures

No consistent surveys will <sup>be</sup> run. Areas will be visited when sightings or other evidence suggest a panther is active in an area. Ground searches for sign will then be conducted. In addition one or more search will be conducted north of the Jetport. Some search locations will require use of helicopters.

Data will be recorded on the attached data forms. Searches that result in no sign will also be recorded along with linear distance and time of search. A map will be prepared showing each search area. Distance between tracks and the tracks will be measured, photographs taken with ruler and conditions noted. Casts will be taken of representative tracks of all 4 feet. As much scat as possible will be collected and dried. Area containing evidence will be photographed from the air. Plaster casts will be numbered consecutively starting with the ones collected in FY 1978. Track measurements (to nearest mm) are length of track, width of track, width of hind pad. Stride measurements (to nearest cm) are length of stride and width of stride.

Data forms are stored in panther notebook. Casts will be wrapped and stored. Photographic slides will be placed in notebook. Duplicate casts will be sent to Game Commission. An observation card will be made out and copies sent to the Game Commission.

Data will be summarized in June and October. A report will be written yearly in October.



PANTHER FIELD FORM 1 - TRACKS

Area \_\_\_\_\_

Observer \_\_\_\_\_

Track # \_\_\_\_\_

Page \_\_\_\_ of \_\_\_\_

Date \_\_\_\_\_

Track #	left/right fore/hind	length (mm)	width (mm)	width hind pad (mm)	stride length (cm)	stride width (cm)	Comments
							track condition, age...

map of area

Tracks in relation to each other, direction, other tracks in area, etc.

abundance rank #  
(1=low; 5=high)

- Bobcat
- Deer
- Raccoon
- Turkey
- Other-

Panther Field Form 2 - Observations

General field notes Page \_\_\_\_\_ of \_\_\_\_\_

Date \_\_\_\_\_

Weather \_\_\_\_\_

Observer \_\_\_\_\_

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General area  
Area #...

Sign  
tracks, scat, scrapes....

Comments  
substrate, right/left...

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Map of Area

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abundance rank #  
1=low; 5=high

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Bobcat  
Deer  
Raccoon  
Turkey  
-Other-