



U.S. Fish & Wildlife Service

Florida Panther Update

Field Stories

June 2011

Spring Panther Kittens 2011

Eight panther kitten dens have been documented through May in 2011. Details of all 2011 dens can be found on Florida Fish and Wildlife Conservation Commission's (FWC) Panther Pulse: http://www.floridapanthernet.org/index.php/pulse. Births can occur at any time of year but are most common in the late spring. Below is a list of spring dens since March 10 by date handled, with the mother's identification number and researcher commentary.

April 15 - **FP162** – see this issue's article, "FP162 Loses Den to Jarhead Fire."

April 26 - **FP184**'s den was found in Big Cypress National Preserve (Add Lands). The den was in a very tall and very dense palmetto thicket. "There were four healthy kittens" commented FWC's Mark Lotz, "I have only seen one den with more than four in the past. It was four and a tail. We assumed the fifth kitten was still-born and mom ate it; but regardless, she gave birth to five."



Four Well-camo'd Offspring of FP184. Photo Credit, FWC

April 29 - FP182, the daughter of FP161, was born in BCNP in February 2009 and first collared a year later. Her first litter of four kittens was located in the dense mix of native and exotic shrubs of the abandoned Ochopee farm fields. Continued monitoring documented that FP182 was attending to her kittens until May 23, after which she did not return. BCNP staff checked the den site on May 31 and found what appeared to be an adult male panther scrape nearby. Based on FP182's large movements, the den has failed.

May 26 - FP188's den was found in private property north of Corkscrew Rd, Lee County in an area of native vegetation within agricultural fields. The den site, a fern bed within cypress trees, was pinpointed in the morning. FP188 left late that afternoon, about five o'clock. The work-up was finished just in time for FWC biologists to hike back in the dark.

June - **FP151**, a nine-year-old female, was located in February with newly collared male FP187, making him the suspected sire of her new litter of kittens. BCNP staff are monitoring her movements via the remote den box and plan to mark her kittens in mid-June.



One of FP188's Three Kittens, Fur Still Damp from a Spring Rainstorm. Photo Credit, FWC

FP162 Loses Den to Jarhead Fire

By Deborah Jansen, Big Cypress National Preserve (BCNP)

Fire Engulfs the Den: On April 15, BCNP biologists marked four kittens, K322-325, at the den of FP162, unaware of the tragedy that was to follow. Eleven days later, a thunderstorm crossed the preserve north of the den and ignited what became the Jarhead Fire. This fire expanded rapidly under drought conditions and strong winds, necessitating a national fire incident team to be called in to control it. The team was shown the location of the den and control strategies were discussed. Despite efforts to protect the den, the wild fire swept over it and killed the four kittens on May 2. The den recorder indicated that FP162 remained with her kittens until Jarhead engulfed the area. Five-week-old kittens are not able to flee a fire. FP162 did thankfully survive, uninjured.



Jarhead Fire on May 4. Photo Credit, Naples Daily News

The Panther Mother: Tasked with raising her young alone, a female panther bears a heavy burden for the population. She carries the fetuses for three months. Then, after giving birth, she nurses, grooms, and protects her kittens at the den for six to eight weeks. She balances this with her need to secure nourishment for milk production, so she leaves the den to stalk and kill an animal (usually a deer) equal to her size. A female will spend the next twelve to eighteen months teaching her inexperienced youngsters

U.S. Fish & Wildlife Service

about their environment, about dangers, about getting food. The story of female Florida panther 162 is an example of the struggle, and the perils involved in raising and protecting the young.

FP162's Dens: We first began studying a then three-year-old FP162 after collaring her in February 2008 when the hounds chanced upon her in the company FP138, the male they were trailing. She denned three months later, but when we entered the den to mark the kittens, we found two dead and partially eaten kittens, K268 and K269. One of the two collared male panthers nearby may have found the den and killed the kittens.

FP162 next denned in May of 2009, where her one kitten was marked K280. She denned again ten months later in March of 2010, with three kittens K294-296. Counting her April 2011 den, we believe all ten of her marked kittens from her last four dens have perished. Kittens are not collared so our assessment of kitten mortality is based on the female's initiation of dens less than a year apart. The loss of so many kittens may seem unusual, but a recent analysis of panther kitten survival (Hostetler et al: http://www.wec.ufl.edu/faculty/olim/Hostetler et al 2010 FP kitten survival BiolConservation.pdf) published in 2010 found that overall only one in three panther kittens survive to a year of age. In addition, kitten survival has decreased with the increasing panther population. A crowded habitat amplifies the chances that an adult male panther will find and kill kittens.



Trail Cam Photo of FP162 Moving K280 in 2009 Photo Credit, Ralph Arwood

Searching for her Kittens: After the fire, FP162 was nearby when Big Cypress biologists removed the kitten remains the next day. They continued to monitor her return trips to the den both by trail cameras and the den box. She returned to the den almost every day for the next twenty-three days, searching for her kittens. In past situations in which a kitten has been killed on a road, panther biologists have learned that placing the body off the road for the mother to find may help break the maternal bond (see February 2010 Update). In this case, access into the active fire perimeter was restricted and there was no cover to protect the kittens from scavengers.

Epilogue - Remembering K322: Although seeing live wild panther kittens is always an extraordinary experience, sometimes events make certain individuals unique and remembered. K322 touched many people in her short life.

Male panther kittens typically outweigh females, even when only two to three-weeks-old. Surprisingly K322 weighed more than her three brothers when we found them at FP162's den on April 15. Their mom returned early the next morning and, one by one, carried each male kitten in her mouth across the prairie to a new dense palmetto thicket. She didn't return, however, for K322.

For five days this female kitten waited for her mother, but instead, the BCNP team appeared on the scene to retrieve the cameras and heard her cry. She was weighed on site to confirm whether or not she was still being nursed. She had lost 23% of her body weight.

We fed her kitten milk replacer and then flew her by helicopter to the Oasis Visitor Center. Word of her arrival spread and many staff members at Big Cypress National Preserve enjoyed their first glimpse of a Florida panther kitten, excitedly forwarding photos via cell phones to their friends. After consulting with USFWS Florida Panther Coordinator Chris Belden, all agreed the priority was to get her back with her siblings. If that failed, she would be placed in captivity.

The next day, April 22, FP162 was away from her den, so K322, now six ounces heavier, received her second helicopter ride. After a brief search, we found one of her brothers. After a "rubdown" of soil and leaf litter to mask our scent, she was slipped in next to him. They exchanged a few startled spits, and then K322 began intently sniffing her surroundings. We quickly left. The monitoring box indicated that mom FP162 returned to this den between 0600 and 0700 the next morning and did not move the kittens. We had great hopes for K322 and could not have anticipated that the Jarhead Fire would take her life. On May 3, Big Cypress staff retrieved the remains of the four panther kittens. The transponders of each could still be scanned. K322 had been accepted by her mother as shown by the fact that once again she weighed more than her brothers.



K322 Sniffing Around the New Den with her Brother Close Behind. Photo Credit, Ralph Arwood

Florida Panther Update Partnership. This newsletter is made possible through the efforts of the following agencies:

Florida Fish and Wildlife Conservation Commission (FWC) www.floridapanthernet.org

Big Cypress National Preserve (BCNP) www.nps.gov/bicy

Florida Panther National Wildlife Refuge (FPNWR) www.fws.gov/floridapanther



Past Update Issues: www.floridapanther.org/newsletter.html Contact us: floridapanther@fws.gov

Updates are Compiled and Distributed by Roxann Hanson, Refuge Volunteer