

SUMMARY OF THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION'S 2000-2001 PANTHER CAPTURE SEASON

This report briefly summarizes the Florida Fish and Wildlife Conservation Commission's (FWC) 2000-2001 panther capture season activities. This summary does not include data collected prior to November 2000 or subsequent to April 2001. These data, along with a more detailed summary of the activities described hereafter, will be provided in the FWC's final report on *Florida Panther Genetic Restoration and Management*.

Capture Effort and Results

Our capture efforts began 07 November 2000 and continued through 12 April 2001. We captured 22 panthers and 1 Texas cougar during the study period. We recollared 10 panthers, captured and recollared 1 Texas cougar whose transmitter had failed, and added 12 new panthers to our radiocollared sample (Table 1). As of 24 April 2001, we have 45 panthers and 3 Texas cougars radiocollared (Table 2; Figure 1). However, nine of these panthers have radiocollars that are no longer functioning. Seventeen of the radiocollared panthers are confirmed first- or second-generation progeny of Texas cougars.

We devoted the majority (90%) of our capture effort on federally managed lands including Big Cypress National Preserve (48%), Florida Panther National Wildlife Refuge (22%), and Everglades National Park (20%; Figure 2). The remainder of our effort was dedicated on private lands (5%), Fakahatchee Strand State Preserve (4%), and Okaloacoochee Slough State Forest (OKSSF; 1%). Seventy percent of the capture effort was dedicated to the pursuit of uncollared panthers or panthers with failed radiocollars. The remaining effort was dedicated to routine recollars (26%) or handling of neonate kittens at dens (4%).

2000-2001 Panther Capture Effort

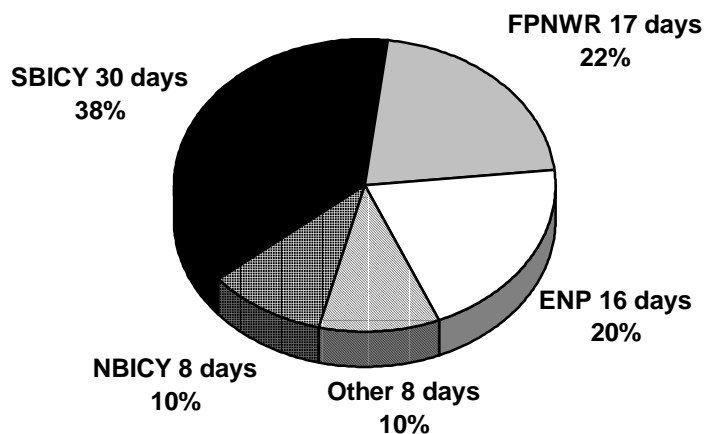


Figure 2

ENP = Everglades National Park; FPNWR = Florida Panther National Wildlife Refuge; NBICY = Big Cypress National Preserve north of Interstate 75; SBICY = Big Cypress National Preserve south of Interstate 75.

A primary objective of our capture work this season was recollaring panthers scheduled either for collar replacement or because of radiocollar failures. Ten panthers were scheduled for recollaring prior to the start of the 2000-2001 capture season for routine collar replacement. We recollared 7 of these cats; however, transmitters on 2 panthers (FP54 and FP69) failed prior to any capture attempts. Additionally, 1 panther (FP87_{B-FL}) scheduled for recollaring denned prior to any capture attempts and we chose to defer recollaring until her kittens are old enough to escape pursuing hounds (May-June 2001). In addition to the scheduled recollars, 2 adult male panthers (FP65_{F1} and FP79_{F1}) were captured for electro-ejaculation to obtain semen samples for monitoring the effect of genetic restoration on reproductive traits.

Four cats with failed radiocollars (TX105, FP66_{F1}, FP70_{F1}, and FP71_{F1}) were priority captures for this season. We successfully captured and recollared TX105; however, we did not capture FP66_{F1}, FP70_{F1}, or FP71_{F1}. Accessible public lands within the former home range of FP66_{F1} were adequately surveyed; however, we were not granted permission to access private lands that encompassed a large

portion of her former range. Twenty-three survey days were dedicated to capturing FP70_{F1} and the onset of hot weather prevented any effort being dedicated to FP71_{F1}. Additionally, we recollared FP59 whose transmitter began to fail during the capture season.

Captures were aborted on 4 uncollared panthers (3 dependent-aged kittens and 1 adult male) in SBICY. Two captures were aborted when dependent-aged kittens were treed simultaneously with another uncollared member of the family group whose capture was prioritized because of adult status or tree height. One of these kittens was treed during the capture of its mother (FP102); however, this kitten, along with another sibling, was treed again 3 weeks later. During this capture event, we proceeded with the safest of the 2 capture situations (FP103). Another capture was aborted on 14 March 2001 on a dependent-aged kitten due to concerns over high ambient temperature and the exhaustive state of the kitten. It is possible that this kitten, or a sibling, was treed and subsequently captured on 02 April 2001 (FP104). The capture of an uncollared adult male panther in SBICY was aborted on 14 February 2001 due to concerns that immobilization would further jeopardize its health because of his extreme exhaustive state. This panther was treed during survey work conducted by a second houndsman (Rocky McBride) hired by the National Park Service and supported by the FWC capture team during our surveys in SBICY.

Injuries

Two panthers, FP65_{F1} and FP104, were injured during capture events and were removed from the field for surgery and subsequent rehabilitation. Both panthers suffered leg fractures that were likely attributable to jumping out of trees either prior to or subsequent to darting (Table 1). FP65_{F1} and FP104 were treated at the University of Florida Veterinary Medical Teaching Hospital (VMTH) and are convalescing at White Oak Plantation and Lowry Park Zoo, respectively.

Reproduction

During the capture season, we handled litters of FP82, FP87_{B-FL}, and TX106 (Table 3). FP82 denned in December 2000 on OKSSF and we documented 3 kittens (K86♂, K87♀, and K88♀) on 03 Jan 2001. FP87_{B-FL} denned in January 2001 in SBICY and we documented 3 kittens (K89♀, K90♂, and

K91 ♂,). Additionally, TX106 denned in March 2001 on FPNWR and we documented 2 kittens (K92 ♀ and K93 ♂) on 17 March 2001. We also documented a 4-5 month-old kitten with FP83_{F1} during her capture. FP83_{F1}'s denning activity during October-November 2000 was not detected from aerial telemetry.

Mortalities

Four radiocollared panthers, 1 radiocollared Texas cougar, and 2 uncollared panthers died during the capture season (Table 4). TX107, a cougar scheduled for removal this capture season, died of pneumonia in SBICY in January 2001. FP23 died of unknown causes in SBICY in December 2000. UCFP37, UCFP38, and FP90_{F2} died from vehicular trauma on County Road 846 (December 2000), County Road 833 (April 2000), and US Highway 27 (April 2001), respectively. FP89 and FP11 died from intraspecific aggression on SBICY (November 2000) and private lands in Collier Co. (February 2001), respectively.

**Prepared by: FWC Panther Section
27 April 2001**

Table 1. Summary of Florida panther and Texas cougar captures during the 2000-2001 Florida Fish and Wildlife Conservation Commission's capture season (November 2000 - April 2001).

Cat ID ^a	Sex	Capture Date	Capture Location ^b	Age	Weight (lb.)	Physical Condition ^c	Kinked Tail	Cowlick	Descended Testicles	Vaginal Papillomas	Capture Comments and Medical Notes
FP59	M	15 Feb 2001	FPNWR	5.5 yr	133	I-II	No	Yes	2		Replaced failing radiocollar.
FP65 _{F1}	M	17 Nov 2000	PL	4.5 yr	~160	I	No	Yes	2		Suffered hyperthermia and open comminuted fracture of right tibia during routine capture. Removed for surgical correction (cable-ready plate/interlocking nail) at VMTH ^d , and convalescence at WOP. Refractured tibia following plate removal (3/01). Surgery (external fixator/interlocking nail) performed again at VMTH, convalescence at White Oak Plantation. Electro-ejaculated while in captivity.
FP79 _{F1}	M	15 Nov 2000	SBICY	4 yr	154	I-II	No	Yes	2		Replaced radiocollar, electro-ejaculated, cleaned and flushed minor puncture wounds from dog bites on tail.
FP83 _{F1}	F	07 Mar 2001	FSSP	1.75 yr	86	I-II	No	No		No	Replaced radiocollar. Raising at least 1 4-6 month-old kitten (treed but not handled – had not been handled in den).
FP85 _{B-FL}	M	26 Feb 2001	ENP	2 yr	108	II	No	No	2		Replaced radiocollar.
FP86 _{F2}	F	27 Feb 2001	SBICY	1.75 yr	58	III	No	No		No	Replaced radiocollar. Had multiple healing lacerations; chronic distal left tibial fracture – medial malleolus protrudes medially (healed); normal range of motion (ankle). Serum progesterone concentration consistent with recent ovulation and pseudopregnancy or early pregnancy.
FP88 _{F2}	F	01 Mar 2001	SBICY	1.75 yr	85	I	No	No		No	Replaced radiocollar. Serum progesterone concentrations consistent with pregnancy.
FP90 _{F2}	M	15 Jan 2001	BCSIR	1.5 yr	96	II	No	No	2		Replaced radiocollar.
FP91 _{F2}	F	21 Mar 2001	SBICY	1.75 yr	71	II	No	No		No	Replaced radio-collar. Basal serum progesterone concentration (not pregnant). No right patella abnormalities observed (darted needle had imbedded in the patella at capture last season).

Table 1. Continued.

Cat ID ^a	Sex	Capture Date	Capture Location ^b	Age	Weight (lb.)	Physical Condition ^c	Kinked Tail	Cowlick	Descended Testicles	Vaginal Papillomas	Capture Comments and Medical Notes
FP92 _{F2}	M	12 Jan 2001	FSSP	1.5 yr	101	II-III	No	No	2		Replace radio-collar. Had apparently fought FP59 several days earlier – had severe lacerations, puncture wounds, abscesses (<i>Clostridium</i> sp. cultured) and was dehydrated. Opened and flushed abscesses, and administered fluids and long-acting penicillin (penicillin G procaine/benzathine).
FP95 _{F1}	F	07 Nov 2000	ENP	2.75 yr	93	II	No	No		No	Initial radio-collaring. Opened and flushed deep puncture wounds to caudal left thigh (dog bites), administered long-acting penicillin.
FP96	M	07 Jan 2001	FPNWR	9 mo	52	III	Yes	No	1		Initial radio-collaring. Ringworm (<i>Microsporium canis</i>) isolated from pinnae.
FP97	M	19 Jan 2001	FPNWR	11 mo	60	II-III	Yes	No	2		Initial radio-collaring. Sibling of FP99.
FP98	M	25 Jan 2001	NBICY	2.5 yr	128	I-II	Yes	Yes	1		Initial radio-collar. Likely the uncollared male Roy McBride treed in Bear Island 01 Nov 2000. Grade II/VI systolic heart murmur heard on right and left sides, loudest at heart base.
FP99	M	26 Jan 2001	FPNWR	11 mo	64	II-III	Yes	Yes	2		Initial radio-collaring. Sibling of FP97. Grade II/VI systolic heart murmur heard on right and left side, loudest at heart base. Hung up in tree – cyanotic, but not in respiratory arrest, when lowered to ground. Administered oxygen via mask.
FP100	M	31 Jan 2001	NBICY	~4 yr	153	I-II	Yes	No	1		Initial radio-collaring. Grade I-II/VI systolic heart murmur. Opened and flushed deep puncture wounds to caudal left thigh (dog bites), administered long-acting penicillin.
FP101	F	02 Feb 2001	NBICY	~2 yr	58	II-III	Yes	Yes		No	Initial radio-collaring. Serum progesterone concentrations inconclusive – suspect not pregnant.

Table 1. Continued.

Cat ID ^a	Sex	Capture Date	Capture Location ^b	Age	Weight (lb.)	Physical Condition ^c	Kinked Tail	Cowlick	Descended Testicles	Vaginal Papillomas	Capture Comments and Medical Notes
FP102	F	20 Feb 2001	SBICY	3 yr	66	II-III	No	No		No	Initial radio-collaring. Grade II/VI systolic heart murmur. Also treed one kitten but did not capture until 3/13/01 (FP103). Had old musculoskeletal injury of lattisumus dorsi and epaxial muscles of left side.
FP103	F	13 Mar 2001	SBICY	10 mo	43	II-III	No	No		No	Initial radio-collaring. Offspring of FP102. Separated from dam approximately 5 days post-capture to 12 days post-capture before reuniting.
FP104	M	02 Apr 2001	SBICY	7 mo	48	II-III	No	No	2		Initial radio-collaring. Suspected offspring of FP70. Suffered a simple closed right radius and ulna fracture. Removed for surgical correction (dynamic compression plates) at VMTH, and convalescence at Lowry Park Zoo.
FP105	F	12 Apr 2001	FPNWR	~6 yr	88	II	Yes	Yes		No	Initial radio-collaring. Mother of FP97, 99, 106. No murmur but had an arrhythmia.
FP106	F	12 Apr 2001	FPNWR	13 mo	66	II	Yes	No		No	Initial radio-collaring. Mother is FP105, siblings – FP97, 99.
TX105	F	01 Dec 2000	ENP	~7 yr	75	III-IV	No	No		No	Replaced failed radio-collar. Still traveling with daughter (FP94).

^aFP denotes panthers captured for radiocollaring; TX denotes Texas cougars used for Panther Genetic Restoration; F1 subscript denotes Florida panther x Texas cougar offspring; F2 subscript denotes offspring of F1 x F1 mating; B-FL subscript denotes offspring of F1 x Florida panther mating; B-TX subscript denotes offspring of F1 x Texas cougar mating.

^bENP = Everglades National Park; BCSIR = Big Cypress Seminole Indian Reservation; FPNWR = Florida Panther National Wildlife Refuge; NBICY = Big Cypress National Preserve north of Interstate 75; FSSP = Fakahatchee Strand State Preserve; SBICY = Big Cypress National Preserve south of Interstate 75; PL = private lands north of Bear Island.

^c I=excellent, II=good, III=fair, IV=poor, V=grave

^d University of Florida Veterinary Medical Teaching Hospital

Table 2. Status of radio-collared Florida panthers and Texas cougars as of 25 April 2001.

Cat ID ^a	Sex	Location ^b	Last Collaring	Comments
FP32	F	FPNWR	24 Jan 2000	Last recollaring
FP48	F	NBICY	09 Jan 1998	Collar out 05 Jul 2000
FP49	F	NBICY	01 Feb 2000	
FP54	M	FSSP	02 Feb 1998	Collar out 23 Oct 2000
FP55	F	SBICY	09 Mar 2000	
FP56	F	NBICY	07 Mar 1997	Collar out 23 Feb 1998
FP57	F	FSSP	29 Jan 1998	Collar out 07 Apr 2000
FP59	M	FPNWR/PL	15 Feb 2001	
FP60	M	FSSP/FPNWR	09 Mar 1999	Recollar 2001-2002
FP61 _{F1}	F	ENP	17 Feb 2000	
FP62	M	Polk/Oceola Co.	25 Mar 1998	Collar out 24 Jul 2000
FP65 _{F1}	M	OK Slough	17 Nov 2000	In rehab at White Oak Plantation
FP66 _{F1}	F	PL	09 Dec 1997	Collar out 01 May 2000
FP67	F	PL	04 Jan 1999	Recollar 2001-2002
FP69	F	NBICY	15 Aug 1998	Collar out 05 Feb 2001
FP70 _{F1}	F	SBICY	25 Feb 1998	Collar out 24 Jan 2000
FP71 _{F1}	F	SBICY	05 Mar 1998	Collar out 12 Jul 2000
FP73 _{F1}	F	BCSIR	10 Jan 2000	
FP75	F	NBICY/PL	09 May 2000	
FP77	F	NBICY/BCSIR	22 Jan 1999	Recollar 2001-2002
FP78	F	FPNWR	16 Feb 1999	Recollar 2001-2002
FP79 _{F1}	M	SBICY	15 Nov 2000	
FP81	M	PL/BCSIR	14 Jan 2000	
FP82	F	OKSSF	25 Jan 2000	
FP83 _{F1}	F	FPNWR	24 Feb 2000	
FP85 _{B-FL}	M	ENP	26 Feb 2001	
FP86 _{F2}	F	SBICY	21 Feb 2001	
FP87 _{B-FL}	F	SBICY	28 Feb 2000	Recollar May-June 2001
FP88 _{F2}	F	SBICY	01 Mar 2001	
FP91 _{F2}	F	SBICY	21 Mar 2001	
FP92 _{F2}	M	CREW	12 Jan 2001	
FP93 _{B-TX}	F	SBICY	10 Apr 2000	
FP94 _{F1}	F	ENP	01 May 2000	
FP95 _{F1}	F	ENP	07 Nov 2000	
FP96	M	FPNWR	07 Jan 2001	Recollar 2001
FP97	M	FPNWR	19 Jan 2001	Recollar 2001
FP98	M	NBICY/PL	25 Jan 2001	
FP99	M	FPNWR	26 Jan 2001	Recollar 2001
FP100	M	NBICY/BCSIR	31 Jan 2001	
FP101	F	NBICY/BCSIR	02 Feb 2001	
FP102	F	SBICY	20 Feb 2001	
FP103	F	SBICY	13 Mar 2001	Recollar 2000-2001
FP104	M	SBICY	02 Apr 2001	In rehab at Lowry Park Zoo
FP105	F	FPNWR	12 Apr 2001	
FP106	F	FPNWR	12 Apr 2001	
TX105	F	ENP	01 Dec 2000	
TX106	F	FPNWR/FSSP	21 Jan 2000	
TX108	F	ENP	14 Dec 1999	

^aFP denotes panthers captured for radiocollaring; K denotes kittens handled at panther or Texas cougar dens; TX denotes Texas cougars used for Panther Genetic Restoration; F1 subscript denotes Florida panther x Texas cougar offspring; F2 subscript denotes offspring of F1 x F1 mating; B-FL subscript denotes offspring of F1 x Florida panther mating; B-TX subscript denotes offspring of F1 x Texas cougar mating.

^bENP = Everglades National Park; BCSIR = Big Cypress Seminole Indian Reservation; FPNWR = Florida Panther National Wildlife Refuge; OKSSF = Okaloacoochee Slough State Forest; NBICY = Big Cypress National Preserve north of Interstate 75; FSSP = Fakahatchee Strand State Preserve; SBICY = Big Cypress National Preserve south of Interstate 75; EWMA = Everglades Wildlife Management Area; CREW = Corkscrew Regional Ecosystem Watershed; PL = Private lands.

Distribution of Radiocollared Florida Panthers and Texas Pumas
27 April 2001

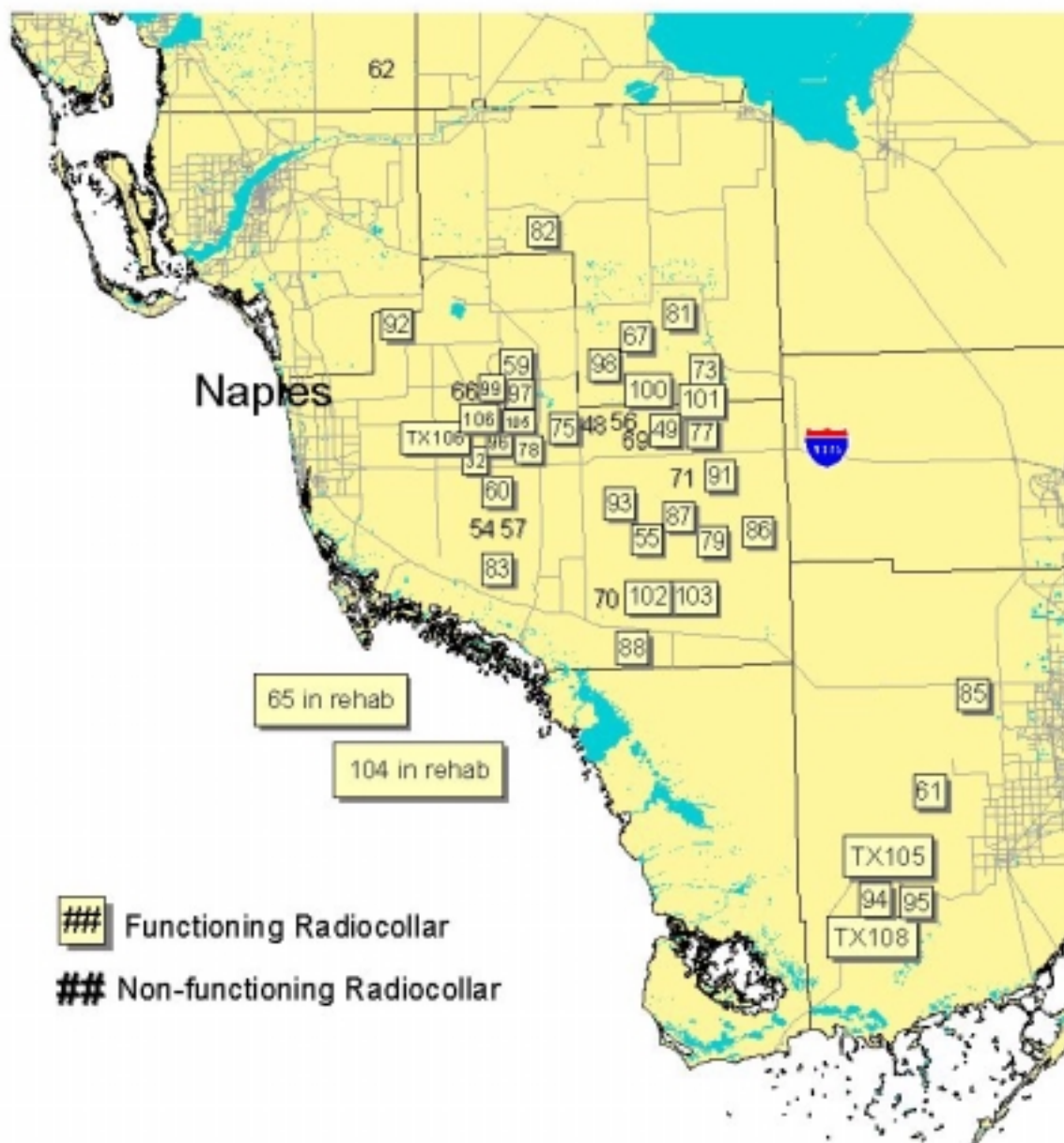


Figure 1

Table 3. Summary of neonate kittens handled at Florida panther dens November 2000 – April 2001.

	Kitten ID	Location ^a	Date Handled	~ Age	Weight	Kinked Tail	Comments
FP82	K86 ♂	OKSSF	03 Jan 2001	2 wks	3 lbs. 2 oz	Y	K87 had multifocal discrete areas of alopecia, crusting, and scabs on forehead and crown. Histology was nondiagnostic. K87 was also thinner than siblings. K86, 88 appeared in good health.
	K87 ♀	OKSSF	03 Jan 2001	2 wks	2 lbs. 5 oz	Y	
	K88 ♀	OKSSF	03 Jan 2001	2 wks	3 lbs. 7 oz	N	
FP87 _{B-FL}	K89 ♀	SBICY	07 Feb 2001	2 wks	2 lbs. 10 oz	N	No significant observations when handled. All kittens appeared in good health.
	K90 ♂	SBICY	07 Feb 2001	2 wks	3 lbs. 8 oz	N	
	K91 ♂	SBICY	07 Feb 2001	2 wks	3 lbs. 9 oz	N	
TX106	K92 ♀	FPNWR	17 Mar 2001	2 wks	2 lbs. 11 oz	N	Both kittens appeared in good health.
	K93 ♂	FPNWR	17 Mar 2001	2 wks	3 lbs. 1 oz	N	

^aBCSIR = Big Cypress Seminole Indian Reservation; OKSSF = Okaloacoochee Slough State Forest; SBICY = Big Cypress National Preserve south of Interstate 75; FPNWR = Florida Panther National Wildlife Refuge.

^bFP denotes panthers captured for radiocollaring; K denotes kittens handled at panther or Texas cougar dens; TX denotes Texas cougars used for Panther Genetic Restoration; F1 subscript denotes Florida panther x Texas cougar offspring; F2 subscript denotes offspring of F1 x F1 mating; B-FL subscript denotes offspring of F1 x Florida panther mating; B-TX subscript denotes offspring of F1 x Texas cougar mating.

^cENP = Everglades National Park; BCSIR = Big Cypress Seminole Indian Reservation; FPNWR = Florida Panther National Wildlife Refuge; OK Slough = Okaloacoochee Slough; NBICY = Big Cypress National Preserve north of Interstate 75; FSSP = Fakahatchee Strand State Preserve; SBICY = Big Cypress National Preserve south of Interstate 75.

Table 4. Florida panther and Texas cougar mortalities documented during the 2000-2001 capture season (November 2000 – April 2001).

Cat ID ^a	Sex	Date	Location ^b	Cause
FP89	M	10 Nov 2000	SBICY	Intraspecific aggression
FP23	F	01 Dec 2000	SBICY	Unknown
UCFP37	F	29 Dec 2000	County Road 846	Vehicular trauma
TX107	F	18 Jan 2001	SBICY	Pneumonia
FP11	F	27 Feb 2001	Private lands, Collier Co.	Intraspecific aggression
UCFP38	F	14 Apr 2001	County Road 833	Vehicular trauma
FP90 _{F2}	M	26 Apr 2001	US27, Palm Beach Co.	Vehicular trauma

^aFP denotes panthers captured for radiocollaring; UCFP denotes uncollared Florida panthers, typically roadkills; TX denotes Texas cougars used for Panther Genetic Restoration.

^bSBICY = Big Cypress National Preserve south of Interstate 75.