

PRELIMINARY REPORT

NESTING AND HABITAT OF CROCODYLUS ACUTUS  
IN NORTHEASTERN FLORIDA BAY, 1977

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DISTRIBUTION OF THE AMERICAN CROCODILE IN EVERGLADES  
NATIONAL PARK, FEBRUARY-SEPTEMBER, 1977

A preliminary population study of the American crocodile (Crocodylis acutus) in Everglades National Park was initiated in 1977. An integral part of this study was determining the distribution of crocodiles in the park. This report is based upon all crocodile observations recorded from February to September, 1977.

Since the American crocodile is rarely encountered, an intensive search was begun which involved the assistance of NPS research and resource management personnel and various public groups. Letters were sent to a number of commercial fishermen and marina operators in the Florida Bay area asking for their cooperation in reporting all crocodile sightings to ENP. Posters, describing the difference between crocodiles and alligators, were distributed at strategic locations within and outside the park. It was hoped that these posters would help educate the public about crocodiles and encourage the reporting of all crocodile observations. Surveys of crocodile habitat, by boat, airplane, helicopter, canoe and foot, were conducted by NPS research personnel during 1977 and all crocodile observations were recorded. The distribution of crocodiles was derived from a compilation of all positive sightings from the above sources.

Table 1. lists the crocodile sightings for 1977. The geographical range of crocodiles (Figure 1.) extends at least from Gator Lake on the west, east along Florida Bay and north to Key Largo and Turkey Point. There are unverified but credible reports of crocodiles at Black Point, Biscayne Bay. On the west coast, there is a single observation recorded from as far north as Naples. As expected, the major concentration of crocodiles is along NE Florida Bay (Madeira Bay, Little Madeira Bay and

Joe Bay). Crocodile sightings have not been reported from Cape Sable though this area contains some habitat superficially similar to that in NE Florida Bay.

The smallest crocodiles seen were 0.9 and 1 m, both from the ground. The largest seen was about 3.5 m. The mean size of all observations was approximately 2 m. Crocodiles smaller than 0.9 m were not seen because most observations were recorded from aerial surveys.

Robert J. Austin  
James A. Kushlan  
15 September 1977

Table 1. Crocodile observations recorded in Everglades National Park and surrounding areas during 1977.  
Observations are plotted on Figure 1.

No.	Date	Time	Observer	Observation Type	Size(m)	Location
1.	2/20/77	AM	H. Grigsby	ground	3.1-3.7	Taylor River
2.	3/01/77	0900	P. Patty	air	1.8-2.1	Long Sound Backwaters
3.	3/05/77	2145	C. Kunde	ground	3.1	S. of Card Sound Bridge
4.	3/10/77	2200	C. Jeffrey	ground	1.8	Trout Creek
5.	3/12/77	2300	C. Jeffrey	ground	1.5	Joe Bay
6.	3/15/77	1330	P. Patty	air	1.8	Madeira Rookery
7.	3/15/77	1500	P. Patty	air	1.4	Little Henry Lake
8.	3/19/77	FM	J. Hammond	ground	-	Park Rd; 3.2 km N. of Flamingo
9.	4/12/77	1030	ENP Visitor	ground	1.8	Head of Hell's Bay Canoe Trail
10.	4/23/77	1130	H. Blatt	ground	2.1-2.4	Taylor River
11.	4/25/77	-	R. Miele	air	3.1	Madeira Beach
12.	4/25/77	-	R. Miele J. Hammond	air	3.1	Madeira Beach
13.	4/28/77	-	P. Patty	air	2.1	Joe Bay
14.	4/28/77	-	W. Robertson J. Ogden	ground	2.4-3.1	East Creek
15.	5/03/77	1330	I. Campbell J. Kushlan	air	1.8	Creek, W. of Mud Bay

Table 1. continued.

No.	Date	Time	Observer	Observation Type	Size(m)	Location
16.	5/03/77	1000	L. Campbell J. Kushlan	air	2.1	Cuthbert Lake
17.	5/10/77	-	P. Patty A. Lussier	air	1.5	Henry Lake
18.	5/11/77	1100	L. Campbell B. Loftus	ground	1.2	C-111 Canal
19.	5/16/77	1300	L. Campbell	air	1.8	Little Madeira Bay Backwaters
20.	5/27/77	1310	L. Campbell P. Patty	air	1.8	Turkey Point Canal No. 32
21.	5/27/77	1310	L. Campbell P. Patty	air	1.5	Turkey Point Canal No. 32
22.	6/04/77	1400	J. Minassian	ground	0.9	Mud Creek
23.	6/07/77	0930	L. Campbell	air	1.5	Mud Lake
24.	6/07/77	1010	L. Campbell	air	2.0	E. Fox Lake
25.	6/07/77	1100	L. Campbell	air	2.4	Gator Lake
26.	6/07/77	-	T. Ellis	ground	2.7	Basin Hills Canal
27.	6/25/77	0945	H. Blatt	ground	2.4	Trout Creek
28.	6/30/77	various	H. Blatt	ground	2.4	Estate Pond, Key Largo
29.	6/--/77	various	T. Ellis	ground	1.7	Jewfish Creek

Table 1. continued.

No.	Date	Time	Observer	Observation Type	Size(m)	Location
30.	6/--/77	various	T. Ellis	ground	1.8	Jewfish Creek
31.	6/--/77	various	T. Ellis	ground	2.1	Jewfish Creek
32.	7/--/77	AM	G. Schmelz	ground	1.2-1.5	Halderman Creek, Naples
33.	7/22/77	1055	R. Austin	air	1.8	Mud Lake
34.	7/--/77	PM	C. Petrovic	ground	1.2-1.5	Creek, N. of Garden Cove
35.	8/01/77	1800	B. Ulrich	ground	1.0	Coot Bay Pond
	8/02/77					
36.	8/08/77	1915	R. Austin	ground	1.0	Coot Bay Pond
37.	8/10/77	1400	EMP Visitor	ground	1.5-1.8	Tarpon Bay
38.	8/15/77	1300	R. Austin	air	2.4	West Lake
39.	8/17/77	1855	R. Austin	air	2.4-2.7	East Creek
40.	8/17/77	1920	R. Austin	air	2.1	Fan Palm Hammock
41.	8/17/77	1840	R. Austin	air	2.1	Little Madeira Bay
42.	8/19/77	0850	R. Austin R. Miele	air	1.8	Joe Bay Backwaters
43.	8/19/77	0900	R. Austin R. Miele	air	1.8	Joe Bay Backwaters
44.	8/19/77	0950	R. Austin R. Miele	air	2.1	Taylor River

Table 1. continued.

No.	Date	Time	Observer	Observation Type	Size(m)	Location
45.	8/19/77	1115	R. Austin R. Miele	air	1.8-2.1	Little Madeira Point
46.	8/23/77	1520	R. Austin M. Salzburg	ground	1.5	Coot Bay Pond Canal
47.	8/25/77	1957	R. Austin	air	1.8	Mud Lake
48.	9/06/77	1630	G. Tamm S. Andree	ground	-	Coot Bay Pond
49.	9/06/77	1630	G. Tamm S. Andree	ground	-	Coot Bay Pond
50.	9/07/77	1845	R. Austin	air	2.4	West Lake
51.	9/07/77	1855	R. Austin	air	2.4	West Lake
52.	9/14/77	1837	R. Austin	air	2.1	Little Madeira Bay

Figure 1. Geographical range of the American crocodile in Everglades National Park and surrounding areas during 1977.

