

## CROCODYLIA

**CROCODYLUS ACUTUS** (American Crocodile). **CANNIBALISM.** Cannibalism is presumed to be common in crocodylians and may be an important population regulating mechanism in this group (e.g., Hutton 1989. *Amer. Zool.* 29:1033–1049; Polis and Myers 1985. *J. Herpetol.* 19:99–107). Cannibalism has been observed in a few species (e.g., *Alligator mississippiensis*: Delany 1986. *J. Wild. Manage.* 50:348–353; *Crocodylus niloticus*: Cott 1961. *Trans. Zool. Soc. Lond.* 29:211–357), but no published reports exist for the American crocodile (*Crocodylus acutus*). Here, we report cannibalism by juvenile *C. acutus*.

Our first observation was made 2 August 2000, while radio-tracking hatchling *C. acutus* at the Florida Power and Light Company's Turkey Point Power Plant in southeastern Dade Co., Florida, USA (25°26'14"N, 80°20'17"W). We tracked a transmitter signal to an unmarked juvenile crocodile of undetermined sex (80 cm total length [TL], 1.2 kg). Examination of this juvenile upon capture revealed that the transmitter was in its gut; we had originally attached it to a hatchling crocodile (26.6 cm TL, 60 g) on 20 July 2000. We then scanned the juvenile's abdomen for the identifying microchip (AVID Identification Systems, Inc., Norco, California) used to tag the transmitted hatchling and detected 8 microchips, each originally placed in a different *C. acutus* hatchling in 1999 or 2000, including that of the transmitted individual. This hatchling had been radio-tracked successfully for 5 days until on 1 August 2000 it made an unusually long move (262 m) from the previous day's location. This and a sudden reduction in transmitter signal strength motivated us to attempt to sight or capture the transmitted hatchling. Two of the other microchips detected in the juvenile crocodile's abdomen had been placed in hatchlings released at the same time and place as the radio-transmitted individual. The remaining 5 microchips were originally used to tag hatchlings in July 1999. We do not know the gut residence time of a microchip, so we cannot distinguish whether these hatchlings were recently (days to weeks) cannibalized by this juvenile, or whether these microchips had been retained as gastroliths for up to a year.

Our second observation involved a 117.5 cm TL (4.6 kg) *C. acutus* of undetermined sex captured in the cooling canal system of the Turkey Point power plant. This individual had been initially captured and marked by tail scute clipping on Key Largo and was later recaptured and microchipped in the cooling canal system of the Turkey Point power plant on 26 April 2000. On 19 April 2001, we recorded a microchip from its abdomen originally used to tag a 33.7 cm TL (100.8 g) *C. acutus* hatchling. That hatchling had been captured and released in the cooling canal system of the Turkey Point power plant on 12 August 2000.

The Florida Power and Light Company provided financial support, equipment, logistical support, and allowed us to work on their property. The University of Miami Department of Biology, the Army Corps of Engineers, the Department of Interior's Critical Ecosystem Studies Initiative, administered by the National Park Service, and the USGS's Florida Caribbean Science Center funded PMR as part of cooperative agreement number 1445-CA09-95-0111 with the University of Miami.

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## SERPENTES

**BOTHROPS ATROX** (Common Lancehead). **DIET.** In July 2001, a male *B. atrox* (LPHA 1789; 1040 mm total length) was collected by S. Claudino on the right bank of the Tapajós River, Itaituba (55°59'W, 4°17'S), Pará State, Brazil. The specimen was verified by Rubens Nobuo Yuki and was deposited in the scientific collection of the Linha de Pesquisa em Herpetologia da Amazônia in the Laboratório de Pesquisas Zoológicas (LPZ) of the Faculdades Integradas do Tapajós (FIT). The stomach contents were examined and found to contain a male *Mastigodryas boddaerti* (LPHA 1790; ca. 670 mm total length). The body of the *M. boddaerti* was contorted and apparently had been ingested head-first because its anterior region was oriented toward the intestine of the *B. atrox*, and was in an advanced stage of digestion. *Bothrops atrox* eat species of lizards (*Ameiva*, *Gonatodes*, *Tropidurus*, and *Cnemidophorus*) (Cunha and Nascimento 1982. *Bol. Mus. Para. Emílio Goeldi, sér. Zool.* 112:1–58), small birds, rodents (Cunha and Nascimento 1975. *Bol. Mus. Para. Emílio Goeldi, nov. sér. Zool.* 83:1–42), amphibians, and snakes ("*Leimadophis typhlus*" [= *Liophis typhlus*] and *Atractus torquatus*) (Egler et al. 1996. *Herpetol. Rev.* 27:22–23; Greene 1997. *Snakes: The Evolution of Mystery in Nature*. Univ. California Press, Berkeley. 351 pp.).

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**CHIRONIUS FLAVOLINEATUS** (NCN). **PREDATION.** *Chironius flavolineatus* is a medium-sized colubrid snake with a wide distribution, from northern Brazil to northeastern Paraguay and central Bolivia, but little is known about its natural history (Dixon et al. 1993. Revision of the Neotropical Snake Genus *Chironius* Fitzinger [Serpentes, Colubridae]. Monografie XIII. Museo Regionale di Scienze Naturali. 279 pp.). It is a semiarboreal species (pers. obs.), and feeds mainly on frogs (Dixon et al., *op. cit.*). On 9 December 2001, during a diurnal road sampling of snakes at about 1030 h, we observed a white-tailed hawk, *Buteo albicaudatus*, perched on a tree branch ca. 2 m above ground, holding a snake. The observation was made on an unpaved road in a pristine shrubby grassland of Cerrado (savanna-like vegetation) at Itirapina Ecological Station (IES; 22°13'24"S, 47°54'03"W; ca. 750 m elev.), southeastern Brazil. Just after we spotted the hawk, it flew away with the snake in its talons. We followed the hawk by car and foot, whereupon the hawk released the snake and flew away. We found the dead snake on the ground. It was an adult female *Chironius flavolineatus* (estimated SVL 680 mm; SVL remaining 564 mm; tail length 375 mm; 155 remaining ventral scales) lacking the head and anterior portion of the body. The snake had several cuts and punctures along the body (N = 20) and a puncture on the tail, indicating that the hawk might have fought with the snake to subdue it. On the anterior portion of the body there were only cuts, and on the posterior portion there were