the many research programs that are conducted there.

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CROCODYLIA

CROCODYLUS MORELETII (Morelet's Crocodile). **BEHAVIOR**. On 2 September 1998 at ca. 2345 h, we found a pod of hatchling Morelet's crocodiles concealed in dense aquatic vegetation (primarily *Typha* spp.) ca. 3 m from a recently excavated nest at Gold Button Lagoon (17°55'N, 88°45'W), Orange Walk District, Belize. Sixteen hatchlings were collected for mark-recapture purposes. Upon capture each hatchling vocalized, and vocalizations continued several minutes after animals were placed in a holding bag. Shortly after vocalizations began, a large crocodile (eyes and snout visible only) ca. 50 m from the bank began swimming slowly toward our canoe. The crocodile approached to within 20 m, stopped, and remained there until we left the area (30 minutes later).

On 9 September at ca. 0130 h, we returned to the same area and spotted two hatchlings ca. 20 m from the nest site. A large crocodile (eyes and snout visible only), presumably the same animal observed previously, was observed in close proximity (< 1 m) to the hatchlings. As our canoe approached, the large crocodile submerged and we captured the hatchlings, which vocalized during and after capture. As we then paddled to the nest site to search for more hatchlings, the large crocodile surfaced < 1 m from the canoe. We noticed a white, linear scar on the crocodile's left premaxillary region. The crocodile made no attempt to approach closer, and we slowly left the nest site. The crocodile then followed us for ca. 75 m into a small cove and finally stopped as we moved into shallow (< 0.5 m) water. In this cove, we collected more hatchlings, which also vocalized. After ca. 30 min, we began paddling out of the cove, and the large crocodile resurfaced < 1 m from the canoe. As we slowly passed by, the crocodile lunged and bit the side of the canoe. We continued paddling out of the cove, and the crocodile followed for ca. 75 m, until we had passed the first nest site.

On 23 and 24 September at ca. 2330 h, we returned to the nest site in a fiberglass boat powered by a 12-volt trolling motor. On both nights, the large crocodile (identified by the scar) quickly approached to within 1 m and followed for ca. 50 m as we moved through the area. On more than one occasion, the crocodile was nudged with a paddle and did not respond. At one point on 24 September, the crocodile surfaced (head only) directly in front of the boat and did not submerge as the boat passed directly over it.

On 25 September at ca. 2230 h, we returned to the nest site. The same crocodile approached the boat and was captured with a breakaway cable snare. During capture, the crocodile bit a hole in the hull of the boat. Cloacal examination revealed the crocodile (148.5 cm SVL, 290.0 cm TL) to be a male. The animal was marked and released at the site of capture.

On 6 October at ca. 2300 h, we returned to the nest site. As we approached to within ca. 75 m, we observed a large crocodile (head visible only) rapidly swimming away and submerging. Although we were unable to move close enough to positively identify it, we speculate that this was the same animal seen on previous nights, as no other large crocodiles had been observed in the area. During a 30 min search of the area, we saw no sign of the crocodile.

Female Morelet's crocodiles will defend both nests and young (Alvarez del Toro 1974. Inst. Mexico Rec. Nat. Renov. 70 pp.; Hunt 1975. Copeia 1975:763–764; Perez-Higareda 1980. Bull. Maryland Herpetol. Soc. 16:52–53; Platt 1996. The Ecology and Status of Morelet's Crocodile in Belize. Unpubl. Ph.D. dissertation. Clemson University), but to our knowledge parental care by males of this species has not been reported. Parental care by other male crocodilians has been previously observed (Garrick and Lang 1977. Amer. Zool. 17:225–239; Lang et al. 1986. Nat. Geog. Res. 2:519–525; Rom Whitaker, pers. comm.) but this behavior is not believed to be widespread among all species. We suspect the crocodile observed here was the male parent of the hatchlings we collected, and the aggressive behavior displayed was in response to the distress vocalizations of its young. Also of note was the absence of the crocodile at the site following its capture. Capture may induce wariness in crocodilians (Webb and Messel 1979. Aust. Wildl. Res. 6:227–234; Santiago et al. 1998. J. Herpetol. 32:320–324), and we suspect this to be the case here.

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TESTUDINES

CARETTOCHELYS INSCULPTA (Pig-nosed Turtle). **ECTOPARASITES**. On 26 October 1996, two leeches were collected from two adult female *Carettochelys insculpta* captured in the Daly River at Oolloo crossing, Northern Territory, Australia. The river at this site is characterized by clear, shallow water during the dry season (when the leeches were collected) and deep turbid water during the wet season. The Daly possesses sandy and rocky substrates, is ca. 70 m wide, and averages 1.5 m deep during the dry season. Aquatic vegetation is mostly *Vallisneria* sp., which is extensively grazed upon by the omnivorous *C. insculpta* (Welsh 1999. Resource Partitioning among the Freshwater Turtles of the Daly River, Northern Territory. Ph.D. dissertation, University of Canberra, Canberra, Australia. 101 pp.). The first leech was found affixed to the neck of one turtle, whereas the second leech was attached to the forelimb of the other. The leeches were placed in 95% ethyl alcohol, and were subsequently identified as *Placobdelloides bancrofti*. According to Sawyer (1986. Leech

Biology and Behaviour, Vol. 2, Feeding, Biology, Ecology, and Systematics. Oxford University Press, New York, New York. 754 pp.), this leech species has not been collected since the original description from the host turtle *Emudura krefftii* in the Burnett River, Queensland, Australia. Thus, we document a new host record and range extension for *Placobdelloides bancrofti*, and the first hirudinean parasite for *Carettochelys insculpta*. Leeches were deposited in the reference collection of R. W. Davies at Monash University, Melbourne, Australia.

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CHELYDRA SERPENTINA (Common Snapping Turtle). **DENSITY and BIOMASS**. Snapping turtle densities have previously been estimated to be 0.17/ha (Pearse 1923. Ecology 9:24–28), 1.2/ha in South Dakota (Hammer 1969. J. Wildl. Mgmt. 33:995–1005; standing crop biomass, 9.1 kg/ha, calculated by Iverson 1982. Oecologia 55:69–76), 7.3–8.0/ha in Michigan (20.6–21.6 kg/ha; Congdon et al. 1986. Amer. Midl. Nat. 115:165–173), 6.8–13.3/ha in South Carolina (15.9–33.9 kg/ha; Congdon et al. 1986, *op. cit.*), and at least 59/ha in Tennessee (Froese and Burghardt 1975. Herpetologica 31:204–208; 181 kg/ha estimated by Iverson 1982, *op. cit.*). While trapping for turtles for reproductive studies in a 0.71 ha pond in the Blue Creek drainage, 16.9 km NNE of Oshkosh, Garden Co., Nebraska, USA, we discovered a population of snapping turtles so dense as to interfere with efficient trapping of other turtles. We therefore removed all trapped snapping turtles and held them for subsequent live release. Between 31 May and 5 July 1999, we removed and measured 36 snappers (15 male, 14 female, 7 uncertain sex; 15.6–40.4 cm maximum carapace length), estimated to weigh 171.3 kg. Because of the large mesh size on our traps (50 mm), these data certainly represent minimum numbers present. Thus, the minimum density of snapping turtles in this pond was 50.7/ha, similar to the estimate from Tennessee (Froese and Burghardt 1975, *op. cit.*). However, because of the larger body size of Nebraska turtles, standing crop biomass was considerably higher, at nearly 242 kg/ha. This value is substantially higher than the mean biomass of 102.1 kg/ha (maximum, 586 kg/ha) for 49 populations of 33 species of turtles reviewed by Iverson (1982, *op. cit.*).

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STERNOTHERUS ODORATUS (Common Musk Turtle). **AERIAL BASKING.** Carr (1952. Handbook of Turtles. Cornell Univ. Press, Ithaca, New York. 542 pp.) characterizes *Sternotherus odoratus* as "a highly aquatic species, being one of the few turtles that apparently never bask in the sunshine." Ernst et al. (1994. Turtles of the United States and Canada. Smithsonian Inst. Press, Washington, D.C. 578 pp.) state that the *S. odoratus* basking habit is poorly developed and that they are rarely found out of water. During an 18-year study (1965–1983) of *S. odoratus* in Pennsylvania there were only 16 observations of aerial basking (Ernst 1986. J. Herpetol. 20:341–352; Ernst, pers. comm.), all of which occurred in the AM and were concentrated in April and May, when air temperatures ranged from 19.8 to 22.2°C. Typical aquatic basking, with the turtle floating at or just under the surface or clinging to near-surface aquatic vegetation, was more prevalent from June through August (112 observations), with water temperatures ranging from 18.5 to 24°C.

Here, I report more frequent aerial basking in *S. odoratus*. During intensive summer stream surveys that incorporated use of skin-diving gear, 15 *S. odoratus* were observed aerially basking within a 2500 m section of the North Fork of White River, Ozark Co., Missouri, USA. All observations were made between 26 June and 11 October 1969, and also between 12 June and 24 July 1970. Most basking sites were on the eastern stream margins, which benefited from increased PM insolation. All observations occurred between 1150 and 1620 h. Typical aquatic basking by *S. odoratus* was only observed on three occasions, although numerous yearling *Graptemys geographica* were observed basking in this manner. Eight *S. odoratus* basked on logs at or near water level. Seven were basking on limbs of small woody saplings or bushes, located at positions from bank-level to heights of more than 1 m. Several turtles basked in sun/shade mosaics created by tree canopy cover. Startled turtles typically plunged from these basking perches into the water below. I was unable to obtain equivalent data for all turtles. However, both genders (N = 7; 3 M, 4 F), and turtles of a wide size range (N = 13; 2.5–7.8 cm PL, 9.4–201 g) basked aerially. All basked alone except one male (8.7 cm CL, 6.6 cm PL, 122 g), which basked with a *Graptemys geographica* and a small *Pseudemys concinna* on a drift log. All *S. odoratus* were near the streams margins and in still pools where the stream bottom was silty mud or silty sand, often with rooted aquatic vegetation. None was observed in areas of stream-swept chert, dolomite, or limestone bottoms. I have no April or May data, and the pools where *Sternotherus* were observed are distant from survey access points and often were not reached in the AM. Also, comparing the Pennsylvania aquatic habitats to those of the North Fork of White River is difficult.

The North Fork of White River is a heavily spring-fed stream of renowned clarity, which flows through a narrow, forested valley. Water temperature data from North Fork collecting sites recorded maximum monthly temperatures of 20°C in June, 22.5°C in July, 22°C in August, 21°C in September and 16°C in October. Corresponding monthly air temperature maximums, measured ca. 0.5 m from the water, were 28°C in June, 28.5°C in July, 29.8°C in August, 29.5°C in September and 21°C in October (Nickerson and Mays 1973. The Hellbenders: North American "Giant Salamanders." Milwaukee Public Museum Publ. Biol. Geol. No. 1. 106 pp.). The mean preferred temperature of *S. odoratus* is 21–