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**HYDROMEDUSA MAXIMILIANI** (Brazilian Snake-necked Turtle). **ALGAL COLONIZATION.** Algae of the genus *Ba-sicladia* (Chlorophyta, Cladophoraceae) are often noted growing on the shells of freshwater turtles, which offer the algae an attractive substrate for colonization (Edgren et al. 1953. *Ecology* 34:733–740; Ducker 1958. *Hydrobiology* 10:157–174; Semir et al. 1988. *Cienc. cult.* 40:885–888). The relationship between algae and turtles has been described as commensal (assuming the turtles receive little or no benefit from the algae) or mutualistic (the turtle using the algae as camouflage, perhaps while foraging, and the algae using the turtle as a safe and mobile substrate) (Edgren et al., *op. cit.*; Niel and Allen 1954. *Ecology* 35:581–584; Proctor 1958. *Ecology*, 39:634–645; Dixon 1960. *Texas J. Sci.* 12:36–38).

In November 2004 we captured seven *Hydromedusa maximiliani* in Reserva Biológica Municipal Santa Cândida (21.6888889°S, 43.3444444°W, 770 m elev.), Juiz de Fora, Minas Gerais state, Brazil. Algae on the turtle's shells were collected with a scalpel and fixed in Transeau and formaline 4% solution. Biometric analysis suggested that six of these specimens were adults, with an average maximum carapace length of 150.60 ± 12.51 mm, and one was considered a juvenile, with a carapace length of 128.60 mm. All specimens had *B. cf. chelonum* adhering to their carapaces, on the vertebral plates, principally on the anterior and posterior regions, and on the marginal plates. The same distribution of algae was also noted for the chelids *Phrynops geoffroanus* and *Hydromedusa tectifera* from Brazil (Semir et al. 1988. *Cienc. Cult.* 40:885–888). The algae occurred mainly in the anterior and posterior regions of the carapace on the marginal scutes, there being little algae on the costal and central scutes.

A possible correlation between the feeding habits of turtles and frequency of epizoo-phyte growth is supported by the observation that carnivorous species that ambush or actively hunt their food may be more often subject to algal growth. Examples include the chelydrids *Macrochelys* and *Chelydra*, kinosternids *Sternotherus* and *Kinosternon*, and the emydids *Deirochelys* and *Emys*, all of which hunt active prey, such as frogs, fish and aquatic insects (Niel and Allen 1954. *Ecology* 35:581–584). *H. maximiliani* has similar predatory feeding habits (Souza and Abe 1995. *Chel. Cons. Biol.* 1:320–322). The presence of algae on the carapace of this species may serve as protection against predators but would also decrease detection by prey. This record of *B. cf. chelonum* colonizing *H. maximiliani* is apparently the first report of the algae growing on this turtle species and supports a possible mutualistic relationship between the algae and the turtle host.

This work was licensed by IBAMA (Process nº 02015.003546/04-11), and was performed under the principles adopted by COBEA (Brazilian School of Animal Experimentation), which were approved by the Committee of Ethics in Animal Experimentation (Pro-Rectory of Research) of the Federal University of Juiz de Fora, in a meeting which took place on 04/12/2004 (Protocol nº 011/2005-CEA).

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**MACROCHELYS TEMMINCKII** (Alligator Snapping Turtle). **AERIAL BASKING.** *Macrochelys temminckii* is rarely observed out of the water. Terrestrial activity is typically limited to nesting females and hatchlings traveling from nest to water. Only two dead-on-road individuals are known (Ewert et al. 2006. *In* Meylan [ed.], *Biology and Conservation of Florida Turtles*, pp. 58–71. Chelon. Res. Monogr. No. 3, 376 pp.). Apparently, only four instances of observed or inferred aerial basking have been reported: on a log in Texas (Ewert 1976. *Herpetologica* 32:150–156; also see Ewert et al., *op. cit.*), on a fallen tree in Texas (Farr et al. 2005. *Herpetol. Rev.* 36:168), on a basking trap in Mississippi (Shelby and Jenson 2002. *Herpetol. Rev.* 33:304), and an adult basking on a river bank, also in Mississippi (Selman et al. 2009. *Herpetol. Rev.* 40:79). Here I report aerial basking of *M. temminckii* on land in Florida.

The observation was made as part of a long-term (since 2003) ecological study of *Macrochelys temminckii* in northern peninsular Florida. On 19 October 2008 at 1300 h, I found a juvenile (18.6 cm CL, 1.68 kg) *M. temminckii* on the northern bank of the Santa Fe River, Columbia Co. Florida, 1.7 km upstream from the US 27 bridge. This turtle was basking in partial sunlight at least 2 m from the water's edge. The turtle was found on sandy soil and appeared completely dry. Air temperature and water temperature (10 cm depth) were 23.3 and 22.5°C, respectively. Upon capture, this turtle was found to have been originally marked with a passive integrated transponder (PIT) on 9 July 2008, and had traveled ca. 2.5 km from the initial capture site. Additionally, I counted over 100 leeches that were attached to the turtle. This is the first report of aerial basking in Florida. Aerial basking in this species is certainly rare, but may occur sporadically in response to thermoregulatory needs of individual turtles.

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**PHRYNOPS HILARII** (Hilaire's Side-necked Turtle). **FEEDING BEHAVIOR.** The freshwater chelid turtle *Phrynops hilarii* is one of the most abundant chelonians in Rio Grande do Sul state, Brazil. Research by the Chelonia-RS Project in the lake at Moinhos de Vento Park, Porto Alegre city (30.0269444°S, 51.2011111°W) has been carried out intermittently since 2003. Between August and December 2008, 29 *P. hilarii* were captured and marked. Straight-line carapace length ranged between 113 and 387.2 mm (mean = 280.21; SD = 81.2). In the lake, which is ca. 4675 m<sup>2</sup> in area and has a maximum depth of 1.5 m, there are four other chelonian

species (*Trachemys dorbigni*, *T. scripta*, *Acanthochelys spixii*, and *Hydromedusa tectifera*). This note provides additional data about the diet and feeding behavior of *P. hilarii* at this location.

Predation of waterfowl and other birds by chelonians has been reported for the Snapping Turtles, *Chelydra serpentina*, and the Red-eared Slider, *Trachemys scripta elegans* (Ernst et al. 1994. *Turtles of the United States and Canada*. Smithsonian Inst. Press, Washington, D.C.; Ligon 2007. *Herpetol. Rev.* 38:201–202; Pryor 1996. *Wilson Bull.* 108:190–192). However, predation of non-aquatic birds by *P. hilarii* has not been previously described.

Pigeons (*Columba livia*) are abundant in the park and capture of the species by *P. hilarii* was observed by Daniel Borba Rocha and co-workers in 2004. On 9 October 2007, I described (field notes of the Chelonia-RS Project) the predation of a pigeon by a *P. hilarii* while the bird was drinking water at the margin of the lake. The turtle, without leaving the water, grabbed the bird by the neck with its jaws, and pulled it to the bottom of the lake, while other turtles (*T. scripta* and *P. hilarii*), also bit at the bird. On 22 January 2009, pictures and a report about pigeon predation by the Hilaire's Side-necked Turtle were published in a local newspaper (Zero Hora newspaper 2009. 15849:42). In this situation, the capture occurred on land as pigeons foraging on the margins of the lake were ambushed by a *P. hilarii*. When the birds got close to the margin of the lake, the turtle left the water and quickly attacked one

of the birds (Fig 1A). The prey, at different times, was captured by the legs (Fig. 1B, C) or by the base of the neck (Fig. 1D). After the capture, the turtle brought the prey into the water and submerged with it (Fig. 1E). In the water, other turtles, presumably attracted by the movement and by the chance of obtaining food, also attacked the prey (Fig. 1F, G). A video showing what was reported here is available at <http://csbujes.blogspot.com/>.

The predation of small aquatic birds by turtles is apparently occasional, and/or opportunistic in nature, however, the behavior of leaving water displayed by *P. hilarii* suggests an intentional act of capture not previously described.

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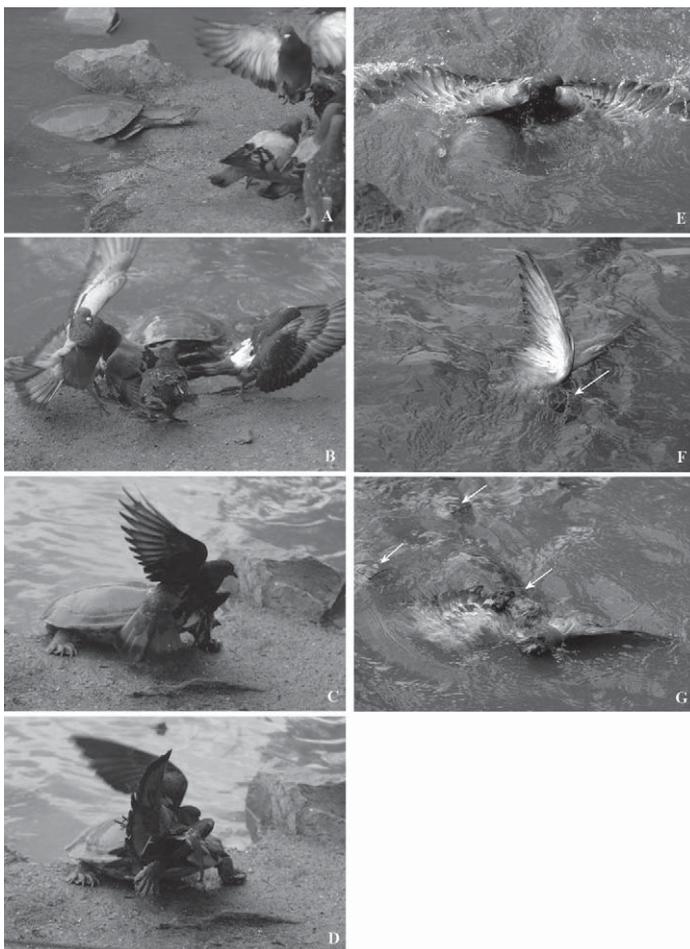


FIG. 1. Sequence of predation by Hilaire's Side-necked Turtle on pigeons in Moinhos de Vento Park, Porto Alegre City, Rio Grande do Sul, Brazil.

**PSEUDEMYYS RUBRIVENTRIS** (Northern Red-bellied Cooter). **HATCHLING BEHAVIOR.** We observed the locomotion and behavior of hatchling *Pseudemys rubriventris* that emerged and departed from a nest at Jug Bay Wetland Sanctuary, Anne Arundel County, Maryland, USA (38.7858333°N, 76.7136111°W). At Jug Bay, Red-bellied Cooters nest in open, sunny areas 100–225 m from a large freshwater tidal wetland bordering the Patuxent River (Swarth 2004. *In Swarth et al. [eds.], Conservation and Ecology of Turtles of the Mid-Atlantic Region*, pp. 73–84. Bibliomania!, Salt Lake City, Utah). Turtle hatchlings often disperse quickly from the nest and may move directly to water or to dense vegetation or under leaves where they are difficult to observe. Tuttle and Carroll (2005. *Northeast. Nat.* 12:331–348) tracked hatchling Wood Turtles (*Glyptemys insculpta*) as they moved from nests to water in New Hampshire; researchers in New Jersey found that hatchling Wood Turtles did not travel directly to water, but remained in a field for days to weeks (Castellano et al. 2008. *Chelon. Conserv. Biol.* 7:113–118).

Here we describe the post-emergence movements and behavior of Red-bellied Cooter hatchlings under natural field conditions. The hatchlings under observation emerged from a nest discovered at 0900 h on 27 June 2007 when the female was observed laying eggs. The nest was immediately covered with a screened predator exclusion cage and was checked daily after 1 September 2007 to determine the date of hatchling emergence. The nest was in well-drained, sandy substrate next to a tractor shed, about 90 m from a large tidal wetland. The nest was partially shaded by the shed canopy roof and there was no vegetation within several meters.

Following a 98-day incubation period, eight hatchlings emerged from the nest at 1715 h on 3 October 2007. Air temperature was 27°C and there had been no rain for more than six days. The hatchlings were contained at the nest under the predator exclusion cage until the next morning. (Upon excavation, the nest held five dead,