

cha 2008, S. Am. J. Herpetol. 3:82–87). In the cases involving lizards with sexual dimorphism in body size, and when the sex of the cannibal was reported, the cannibalistic act was always committed by the sex with the larger body size (Siqueira and Rocha 2008, *op. cit.*). In our study, the opposite occurred; cannibalism was practiced by a single female, the sex with the smaller body size in this species.

The frequency of cannibalism occurrence in the population was low (1.4%), a finding consistent with the other reported cases of cannibalism in populations of Brazilian lizards (frequency ranged from 0.7 to 3.8%; Siqueira and Rocha 2008, *op. cit.*). According to Vitt (2000, Herpetol. Monogr. 14:388–400), lizards that capture large prey, such as vertebrates, may not need to forage for several days, owing to the large amount of nutrients provided by the ingested prey. Thus, what seems to be a “rare” event may be an event rarely recorded by investigators.

During the time we recorded the cannibalistic event, we observed an increased number of juveniles in the study area, reflecting a recruitment period. Relatively small body size, lack of experience in detecting potential predators, and the still inefficient recognition of habitat structure make juveniles potential prey for various types of predators (Siqueira and Rocha 2008, *op. cit.*; Vitt 2000, *op. cit.*). The elevated density of juveniles, along with the fact that a predator obtains greater nutritional benefits by capturing conspecifics or phylogenetically similar prey (Mayntz and Toft 2006, J. Anim. Ecol. 75:288–297; Pfennig 2000, Am. Nat. 155:335–345), might have been the main factors that led to the occurrence of this cannibalistic event.

The female specimen of *C. ocellifer* was deposited in the herpetological collection of the Universidade Federal do Rio Grande do Norte, Natal, Brazil (CHBEZ 2681). We thank the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for financing the PELD-Caatinga Program entitled Structure and Functioning, and for the research scholarship granted to RFDS (process 127543/2008-2), LBR (process 141993/2006-5), and EMXF (process 304077/2008-9); IBAMA provided a permit (Permit 206/2006 and Process 02001.004294/03-15).

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COLEODACTYLUS NATALENSIS (NCN). **PREDATION.** *Coleodactylus natalensis*, described from the Parque Estadual Dunas de Natal (Freire 1999, Bol. Mus. Nac. 399:1–14), is a gecko considered to be endemic to Atlantic forest remnants in Rio Grande do Norte State, Brazil (Sousa and Freire, *in press*). Considered the smallest lizard in South America, it is a denizen of leaf litter within shaded forests (Capistrano and Freire 2009, Publica 4:48–56; Freire 1999, *op. cit.*; Sousa and Freire, *op. cit.*). Aside from the description of the species (Freire, *op. cit.*), few ecological studies have been performed. Only some aspects of its diet, reproduction, and habitat preference have been published (Capistrano and Freire, *op. cit.*; Lisboa et al. 2008, Herpetol. Rev. 39:221; Sousa and Freire,

in press, Herpetol. Rev.). Few studies are available regarding prey-predator relationships between reptiles and arthropods within Brazilian communities, due to the time required for sampling and the elusive habits of many reptile species (Rocha and Vrcibradic 1998, Ciência e Cultura 50:364–368). Given the limited distribution of this species within remnant forests, additional information on its ecological relationships are essential to understanding its life history. Here, we report on an observation of predation on *Coleodactylus natalensis* by the ant, *Dinoponera quadriceps*.

The ant genus *Dinoponera* contains species with body sizes varying from 3–4 cm (Paiva and Brandão 1995, Ethol. Ecol. Evol. 7:297–312). *Dinoponera* ants are described as solitary foragers with predominantly carnivorous habits, ranging from humid forest soil to dry savannas (Fourcassié and Oliveira 2002, J. Nat. Hist. 36:2211–2227). The neotropical ant *D. quadriceps* is a typical queenless species of the subfamily Ponerinae, found in the isolated forest range (known locally as “Brejos de Altitude”) in the semi-arid Caatingas, Cerrado, and Atlantic Forest (Paiva and Brandão, *op. cit.*).

During a study of behavioral ecology on 7 March 2009, in the Parque Estadual Mata da Pipa (PEMP), municipality of Tibau do Sul, State of Rio Grande do Norte, Brazil (6.24861°S, 35.05750°W; datum WGS84; elev. 63 m), PAGES saw an adult male *C. natalensis* (18.3 mm SVL) in the leaf litter of dense forest at 1100 h. The gecko crossed paths with a *D. quadriceps* (~3 cm from the anterior tip of the head to the posterior end of the abdomen) that was foraging in the near vicinity. The ant immediately grabbed the gecko by the neck with its jaws and proceeded to carry it to the nest. The animals were intercepted in order to collect the lizard.

This is the first record of a known predator for *C. natalensis*. We deposited the specimen (CHBEZ 2518) in the herpetological collection of the Universidade Federal do Rio Grande do Norte, Natal, Brazil. We thank the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the research scholarship granted to PAGES (process 127543/2008-2) and EMXF (process 304077/2008-9).

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COLEODACTYLUS NATALENSIS (NCN). **DIET.** *Coleodactylus natalensis*, described from the Parque Estadual Dunas de Natal (Freire 1999, Bol. Mus. Nac. 399:1–14), is considered endemic to Atlantic Forest remnants in Rio Grande do Norte State, Brazil (Sousa and Freire, *in press*). Considered the smallest lizard in South America, it is a shaded forest leaf-litter dweller (Capistrano and Freire 2009, Publica 4:48–56; Freire 1999, Bol. Mus. Nac. 399:1–14; Sousa and Freire, *op. cit.*). The diet of *C. natalensis* in Parque Estadual Dunas de Natal is mostly arthropods. Isopods and spiders are the most frequent prey based on numbers, volume, and frequency, implying a preference for large prey that is less abundant in leaf litter (CMCAL, pers. obs.). *Coleodactylus meridionalis* has a similar diet, differing only in its relatively larger prey (Dias et al.

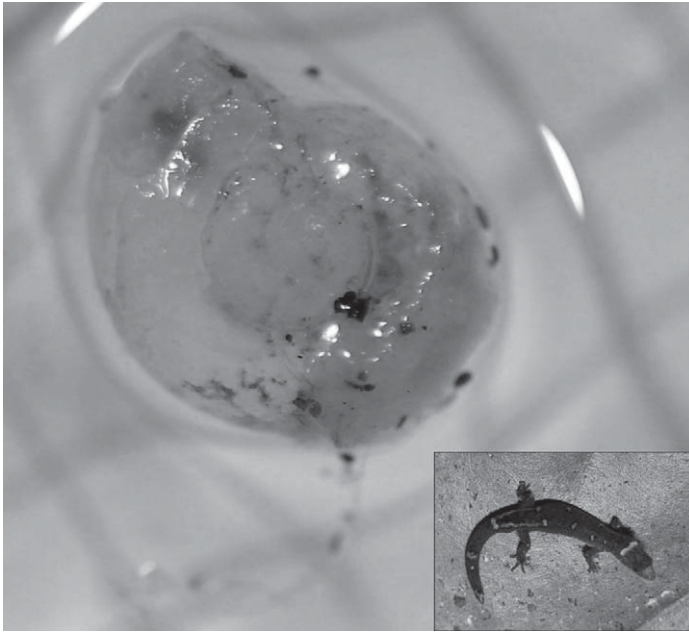


FIG. 1. The *Streptaxis* sp. snail taken from the stomach of *Coleodactylus natalensis* (inset).

2003. *Herpetol. Rev.* 34:142–143). *Coleodactylus septentrionalis* feeds mainly on termites (Isoptera) and earwigs (Dermaptera) (Vitt et al. 2005. *Herpetol. Monogr.* 19:137–152). *Coleodactylus amazonicus* seems to prefer collembolans (Collembola) and mites (Acari) (Ramos 1981. *Acta Amaz.* 11:511–526; Vitt et al., *op. cit.*). Though members of the genus *Coleodactylus* consume a relatively diverse assemblage of invertebrate prey, records of mollusk consumption are lacking. Hence, here we provide the first report of mollusk ingestion in the genus.

During a study of the structure of lizard assemblages in the Parque Estadual Mata da Pipa (PEMP), municipality of Tibau do Sul, State of Rio Grande do Norte, Brazil (6.24861°S, 35.05750°W; datum WGS84; elev. 63 m), we examined the stomach contents of 16 *C. natalensis*. During this examination, we found a snail of the genus *Streptaxis* (Gastropoda, Streptaxidae) (2.1 mm long, 1 mm width, 10.99 mm³ volume; Fig. 1), in the stomach of an adult female (20.3 mm SVL, 0.14 g) captured at 1230 h on 13 March 2009 (dry season) in the leaf litter of dense forest.

We deposited the *C. natalensis* (CHBEZ 2509) in the herpetological collection of the Universidade Federal do Rio Grande do Norte, Natal, Brazil. We thank the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the research scholarship granted to PAGS (process 127543/2008-2) and EMXF (process 304077/2008-9). We thank Marc Hayes for helpful comments on this note and Roberto Lima for identifying the snail.

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DIPLOGLOSSUS DELASAGRA (Cuban Pale-necked Galliwasp). **REPRODUCTION AND PARENTAL CARE.** Three endemic species of the subfamily Diploglossinae occur in Cuba, including *Diploglossus delasagra*, *D. garridoi*, and *D. nigropunctatus* (Thomas and Hedges 1998. *Copeia* 1998:97–103), however, information available on the natural history of these species is scarce. This is probably due to the cryptic and elusive habits exhibited by members of this genus, as observed in most anguids. For this reason, we feel that any attempt to gather and provide information on these species may be relevant to the current knowledge and understanding of their biology.

On 15 June 2007, a gravid female *D. delasagra* was collected in the leaf litter of a woodland patch by an unpaved road connecting the Las Palmas rural community (22.200889°N, 78.8394861°W, WGS84) and the town of Enrique Varona (Falla) (22.172875°N, 78.2002889°W), Chambas municipality, Ciego de Avila province, Cuba. These localities are separated from one another by ca. 6.4 km. The animal was brought to the Centro de Investigaciones de Ecosistemas Costeros (CIEC), and kept in captivity in order to collect data on its reproductive biology.

The individual was kept alive in a plastic bucket placed in a dark room for about 48 h from the time it was collected until it was brought to CIEC. Afterwards, the lizard was placed into a 170 × 190 mm plastic terrarium. One sample of the nearby semi-deciduous forest leaf litter was taken, allowing us to have a 3–4 cm depth layer at the bottom of the container. It was kept at room temperature, avoiding direct sunlight and thus excessive dehydration. Every two days, the leaf litter was sprayed with tap water to maintain relatively constant moisture.

The animal was periodically fed by providing forest soil-dwelling invertebrates, taking into consideration the feeding preferences for this species (Martínez Reyes and Moreno 2003. *In* L. Rodríguez Schettino [ed.], *Anfibios y Reptiles de Cuba*, pp. 90–97. UPC Print, Vaasa). The invertebrates were mostly spiders, ants, termites, and small mollusks. Around the mouth of the container, a thick mesh was firmly tied up to keep prey from escaping, and provide the lizard access to fresh air.

Behavioral observations were conducted during daylight hours in 90 min intervals for four days, 5–8 July 2007, between 0730 to 1900 h. The observations also comprised one 24 h cycle, but only on 9 July. Each observation period lasted 15 min, which totalled 12 h of direct observations. During the behavioral experiment, leaf litter temperature ranged between 27.5 and 30.6°C.

The female measured 96.0 mm SVL and 8.58 g body mass, and laid six eggs, which coincided with Schwartz and Henderson (1991. *Amphibians and Reptiles of the West Indies. Descriptions, Distributions, and Natural History.* University of Florida Press, Gainesville. xvi + 720 pp.); however, Cuban species of this genus may have up to nine eggs per clutch (Martínez Reyes and Moreno, *op. cit.*). Oviposition took place between 19 and 25 June; the clutch size was six eggs and after four days (29 June) measurements were made. Three eggs were chosen to be measured because they were laid at a shallow depth of 10 mm. The resulting egg measurements were slightly lower than those obtained by Barbour and Ramsden