On 19 May 2000 we found a calling male *Hyla gratiosa* (49 mm SVL) at USMC Camp Lejeune, Onslow County, North Carolina (USA) that exhibited a ca. 1 cm diameter mass under the skin of the venter. Necropsy revealed that an 3 cm loop of the intestine was pulled through a 2.5 x 3 mm hole in the midline of the body wall and was entrapped within the peritoneal cavity (Fig. 1). The intestine was moderately dilated but not obstructed. The bilateral fat bodies of this frog were severely atrophied. A fibrin clot occurred in the mesentery at the base of the lungs and stomach. Peritonitis was mild to moderate. All other internal organs were normal. This frog was one of several males in a breeding chorus in a large, isolated wetland. Its behavior was normal and it was apparently not hindered by the lesion. We suspect that the intestinal hernia was a deformity secondary to a malformation (hole) in the ventral midline. This hernia may be analogous to umbilical (i.e., yolk sac resorption site of hibernating) hernias in humans and other mammals. An intestinal hernia is an unusual deformity in frogs.

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Herein I describe predation on different species of frogs by a heron and two snake species observed during fieldwork in southern Pantanal. The observations were made at Base de Estudos do Pantanal/UFMS (19°34'S, 57°00'W), municipality of Corumbá, State of Mato Grosso do Sul, southwestern Brazil.

On two occasions I observed a rufescent tiger heron, *Tigrisoma lineatum* (Ardeidae), preying upon adult frogs at the edge of ponds during the day. On 13 Nov 2000 at 1630 h, a paradox frog, *Pseudis paradoxa*, was observed being preayed upon by the heron, and half an hour later another frog, *Leptodactylus chaquensis*, was also taken. On 13 Jan 2002, another *L. chaquensis* was observed being preayed upon by the heron. In all cases the frogs were partially submerged, and the birds were motionless searching for prey in the water. The Pantanal is rich in ponds that are used as foraging sites by many species of wading birds, thus any Ciconiiformes could represent important predators of adult frogs.

On 21 Nov 1997 at 2140 h, a colubrid snake, *Clelia bicolor*, was observed constricting a juvenile *L. chaquensis* at the edge of a flooded area. On 10 Jan 2002 at 1500 h, a green parrot snake, *Leptophis ahaetulla*, was observed preying upon an adult veined treefrog (female, 77 mm SVL), *Phrynoyas venulosa*. The distress call emitted by the frog called my attention, and I found the snake on a shrub in a flooded gallery forest, about 1.0 m above the water, head-down, and holding the frog with its jaws by the lateral portion of the frog's head. The treefrog remained motionless, secreting the white glue-like skin secretion, which was already spread on the snake's snout. At 1528 h, the snake had finished ingestion of the treefrog, and upon my approach, the snake immediately released the frog, that fled away swimming. The snake disappeared climbing the shrubs and trees. The treefrog was collected to be preserved and measured, and seemed to be dying, but one hour later was in good shape, and was released near the same site. Approximately one hour later, the snake returned to exactly the same branch of the tree.
shrub, and seemed to be looking for the lost prey.

The peculiar milky and sticky skin secretion produced by *P. venulosa* is considered to be toxic (Gallardo 1987. Anfibios Argentinos: Guía para su Identificación. Libreria Agropecuaria S.A., Buenos Aires, Argentina. 98 pp.), and it is suggested that these secretions might have a defensive function against predators (e.g., McDaidm 1968. Los Angeles County Mus. Contrib. Sci. 134:1-25; Duellman 1970. Monogr. Mus. Nat. Hist., Univ. Kansas [1]:xi + 753 pp.). Furthermore, the rubbery viscosity of the skin secretion was described as preventing snake predation on the veined treefrog by acting as a glue (Leary and Razafindratsita 1998. Amphibia-Reptilia 19:442-446; Manzanilla et al. 1998. Herpetol. Rev. 29:39-40). But the behavior of *L. ahaetulla* described here, returning to the same site, is evidence that this snake could be an important predator of *P. venulosa*, at least in the Pantanal, despite the frog's sticky and alleged toxic secretion. The treefrog's behavior—immobility during ingestion—could also be an important secondary defense, diminishing risks of injury and increasing the survival chance in the case of being regurgitated by the snake.

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**LEPTODACTYLUS OCELLATUS** (Râ Manteiga). **PREDATION.** On 15 October 2001 at 1035 h we observed natural predation by *Butoe magnirostris* (Roadside Hawk: Falconiformes: Accipitriformes) on an adult *L. ocellatus* (Centro de Estudos e Pesquisa Biológicas - CEPIB 6738 - femur: 50.8 mm; tibia: 56.6 mm; tarsus: 29.3 mm) on an unvegetated bank of the Uruguai River (27°30'02"S, 51°47'50"W), municipality of Machadinho, in the state of Rio Grande do Sul, Brazil. This observation is the first report of avian predation on *L. ocellatus*.

We thank the staff of NATURAE - Projetos e Consultoria Ambiental Ltda. in the Cotiara Faunal Rescue Operation for help during fieldwork.

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**PHYLLomedusa Sauvagii** (Painted-belly Leaf Frog) **PHYSICAL COMBAT.** Phyllomedusa sauvagii is one of six species that belong to the poorly-defined *tarsius* group and is one of the most distinct species of *Phyllomedusa* (Cannatella 1980. Occ. Pap. Mus. Nat. Hist. Univ. Kansas 87:1-40). On 2100 h we observed an interaction between two (84.5 mm and 87.2 mm) in a temporary pond (Serrinha Assentamento Canãa, 20°41’32.3"S; 56°44’34.3"W, municipality, Mato Grosso do Sul, Brazil). The smaller male climbed to the top of the shrub and the big male stayed on the shrub while emitting a different type of sound. Finally, the larger male managed to pull the smaller one into the pond. The larger male assumed the top of the shrub where the smaller male had been vocalizing from the top of a shrub, and the big male was trying to extricate itself from the other. Both males were slow as each one tried to grab the head of the other by flinging its arms and legs. The two clutching until their bellies remained in contact, but at the same time one was trying to extricate itself from the other.

Submitted by DOMINGOS DE JESUS FILHO Universidade Federal de Mato Grosso do Sul (ZUFMS 0508). All accounts of visual displays in this species (Hall 1999-2000. Herpetol. Nat. Hist. 7:175-180) and *Phyllomedusa* (*P. distincta*, Castanho, unpubl. data) do not state any visual displays in this encounter. There is a report of territorial behavioral display in this encounter between two male *P. hypochondriaca* (Hall 2000. Herpetol. Rev. 31:84-86) similar to that reported here in *P. sauvagii*.

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**Physalaemus cf. Fuscomaculatus** **COMBAT.** Several groups of birds prey upon poikilothermic vertebrates (Duellman and Trueb 1994. Biology of Anurans. Hopkins Univ. Press. 670 pp.). *Physalaemus cf. fuscomaculatus* (Leptodactylidae) is found in open vegetation in southern Peru and reproduces during the rainy season (Rossa-Filho 1999-2000. Herpetol. Rev. 31:84-86). On 26 Nov 2000, in the municipality of Caçapori do Oeste (State of Rondônia, Brazil), we observed an adult female (36 mm SVL) being predated by a bird. *Physalaemus cf. fuscomaculatus* (36 mm SVL) being predated by a bird (Fig. 1). We observed the interior right portion of its mouth broken and the animal was suspended in the air for 10 min with only their ventral surface visible. We observed different sounds. Finally, the larger male managed to pull the smaller one into the pond. The larger male assumed the top of the shrub where the smaller male had been vocalizing within 5 min. The two individuals were deposited in the Zoological Collection at the Universidade Federal do Mato Grosso do Sul (ZUFMS 0508).

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