

FIG. 1. Dorsal surface of *Gastrophryne carolinensis* tadpole with malformed right hind limb.

viron. 1:87–94). Other causes of amphibian malformations are UV radiation, chemical contamination, and parasitic infection (Blaustein and Johnson 2003, *op. cit.*). These types of exposures can result in a wide range of malformations from whole body abnormalities to missing limbs and/or digits to extra limbs and/or digits. Although it is known that UV radiation, chemical contamination, and parasitic infection can cause malformations, it is likely these variables interact with each other. Because the complex interaction of all three is unclear, we can better understand the mechanisms that cause deformities by adding to the growing breadth of knowledge on amphibian malformations.

We collected 200 larval *Gastrophryne carolinensis* from a permanent manmade wildlife pond in the Davy Crockett National Forest, Houston County, Texas, USA on 8 Aug 2007. The pond was created in 1992 and is located in a 72-acre Short-leaf Pine (*Pinus echinata*) stand. The stand was planted in 1990 and received a prescribed burn in 2003 and 2005 and has not been treated with herbicides or pesticides. Upon observation we noticed that one of the larvae had a malformed right hind limb. The lower portion of the right hind limb is enlarged (Fig. 1); however, it is unclear if the tibiafibula is duplicated. Also, the right hind foot has 13 digits that are oriented ventrally (Fig. 2A, 2B). The left hind limb is normal and the left hind foot has 5 normally posi-

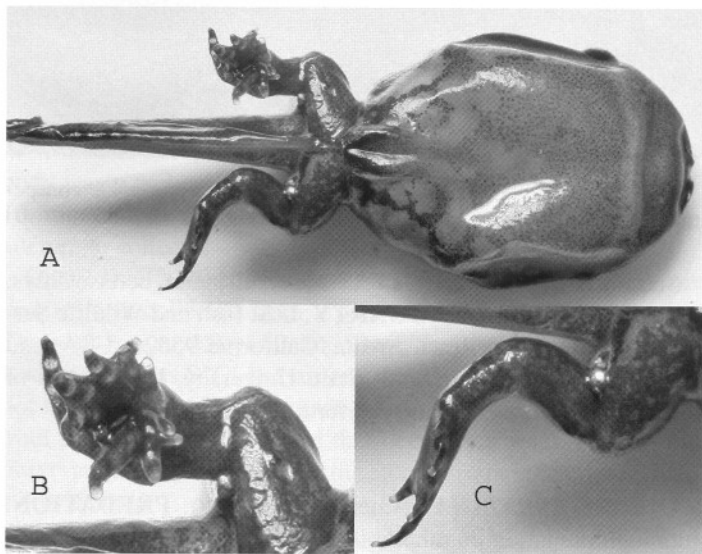


FIG 2. (A) Ventral surface of *Gastrophryne carolinensis* tadpole with malformed right hind limb. (B) Right hind limb of *Gastrophryne carolinensis* with 13 digits. (C) Normal right hind limb of same individual.

tioned digits (Fig. 2A, 2C). The larva is Gosner Stage 41 (Gosner 1960. *Herpetologica* 16:183–190) and has a broken tail. After close examination we concluded that the type of malformation could be polymelia, polydactyly, or polyphalangy (Meteyer 2000. Biological Science Report USGS/BRD/BSR-200-0005), or some combination of the three. Of the 200 individuals that were collected at this site this was the only one that had malformations. To our knowledge this is the first record of hind limb malformations in *G. carolinensis*. The larva was deposited in the Texas Cooperative Wildlife Collections, TCWC 92886.

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LEPTODACTYLUS DIPTYX (Tropical Bullfrog). **ENDOPARASITES.** *Leptodactylus diptyx* occurs in the Lower Chaco and oriental region of Paraguay; eastern lowlands of Santa Cruz (Bolivia), and northern Argentina (IUCN 2007. Conservation International and NatureServe. Global Amphibians Assessment. <http://www.globalamphibians.org>. Accessed 22 Oct 2007). To our knowledge, no previous report of parasitism exists for *L. diptyx*. The purpose of this note is to report *Catadiscus* sp. (Trematoda) and *Centrorhynchus* sp. (Acanthocephala) in *Leptodactylus diptyx* from Argentina. Two adult *Catadiscus* sp. in large intestine and five acanthocephalan larvae *Centrorhynchus* sp. in the coelomic cavity were found in a female *L. diptyx* (27.6 mm SVL) from the herpetological collection of Universidad Nacional del Nordeste (UNNEC 9000) collected 22 Nov 2006, Corrientes (city), Corrientes Province (WGS 84, 27.466°S, 58.783°W, elev. 65 m). In Argentina, species of *Catadiscus* are known from the anurans *Leptodactylus latinasus*, *Leptodactylus ocellatus*, *Pseudopaludicola boliviana*, *Lysapsus limellus*, *Pseudis minuta*, *Pseudis paradoxa*, and *Hypsiboas pulchellus* (Lunaschi and Drago 2007. *Zootaxa* 1476:51–68). *Centrorhynchus* sp. has been documented from several South American amphibians (Smales 2007. *Zootaxa* 1445:49–56; Smales 2007. *J. Parasitol.* 93[2]:392–398), but only two species from Argentina: *Leptodactylus latinasus* and *Leptodactylus bufonius* from Corrientes Province (Hamann et al. 2006. *Acta Parasitol.* 51[4]:294–299; González and Hamann 2006. *Rev. Esp. Herpetol.* 20:39–46).

Leptodactylus diptyx represents a new host record for *Catadiscus* sp. and *Centrorhynchus* sp. We thank L. Lunaschi for verification of the organisms.

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LITORIA RANIFORMIS (Southern Bell Frog). **CLUTCH SIZE.** Currently, there is no documented assessment of the clutch