

AN ALERT CONCERNING A POSSIBLE THREAT TO THE AMPHIBIAN FAUNA EAST OF THE ANDES: DISCOVERY OF THE AMERICAN BULLFROG IN EASTERN COLOMBIA

by

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Resumen

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Se encontraron en el oriente de Boyacá renacuajos de Rana Toro, *Rana catesbeiana*, una especie introducida. La introducción de esta especie extranjera en la cuenca amazónica puede causar cambios dramáticos en la fauna nativa de ranas.

Palabras clave: Amazonia, amenaza a la conservación, especie introducida.

Abstract

Free-living tadpoles of the American Bullfrog, *Rana catesbeiana*, an introduced species, were found in eastern Boyacá. The introduction of this alien into the Amazon Basin could cause dramatic changes in the frog fauna there.

Key words: Amazonia, conservation threat, introduced species.

During routine fieldwork in eastern Boyacá in early October 2005, my students and I managed to collect two tadpoles (ICN 53002) of the American Bullfrog (*Rana catesbeiana*) in a small pond (20 X 80 meters) on the floodplain of the Río Guavio (Boyacá: Santa María, vereda Charco Largo, 450 m.s.n.m.; 4° 44 ' N, 73° 18 ' W). The

pond varied in depth from a few centimeters to about 1 meter—the bullfrog tadpoles were in the deepest part of the pond. Other tadpoles collected in the pond, usually in shallower water with abundant grasses, were the native hylids *Dendropsophus mathiassoni*, *D. minutus*, *Hypsi-boas punctatus*, *Scinax rostratus*, and *S. ruber*. *Rana*

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catesbeiana was introduced into Colombia in the late 1980s by persons interested in promoting the farming of frogs to produce frog legs but the species was prohibited by INDERENA. The history of the introduction is documented by Rueda Almonacid (2000). In spite of being more or less under control, the species escaped into the environment along the Río Mediacanoa en Valle del Cauca early in 1994 and quickly assumed plague proportions over much of the Alto Río Cauca (**Daza Vaca & Castro Herrera, 2000, Rueda Almonacid, 2000**; Andrés Acosta and Fernando Castro, personal communications).

Rueda Almonacid (2000: 379) also documented the introduction of the species into the Valley of the Río Magdalena in western Cundinamarca and eastern Tolima. This latter introduction apparently arose as a result of interchange of frogs from Caldas for exploitation in the coffee zone. A decade after the liberation of this predator into natural ecosystems in the interandean valleys of Colombia, it remains a local problem. The native amphibian faunas of these interandean valleys are modest faunas but are threatened locally.

An additional possibility is that buying and selling of fingerling fishes for exploitation in ponds is a source of introductions because tadpoles can be included in such shipments of fishes (such was thought to be the source of

the spread of this species in the western part of the Great Plains in the United States). My suspicion is that the introduction into southeastern Boyacá came about via fisheries commercialization. If so, the threat of additional introductions is a severe one. The amphibian fauna east of the Andes is a much larger fauna and cautionary inventories of ponds used for fisheries commercialization along the western edge of Meta are urgently needed.

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