

## Herpetology 1994

In this column the editorial staff presents short abstracts of herpetological articles we have found of interest. This is not an attempt to summarize all of the research papers being published; it is an attempt to increase the reader's awareness of what herpetologists have been doing and publishing. The editors assume full responsibility for any errors or misleading statements. JCM

### SABAH CROCODILE SURVEY

R. B. Stuebing et al. [1994, Biological Conservation 69:1-7] conducted 12 spotlight surveys for the Indo-Pacific crocodile, *Crocodylus porosus*, June 1987 to July 1988, along a 37-km stretch of the Klias River, Sabah, Malaysia. Crocodiles sighted were divided into three size classes: Class 1 (hatchlings and juveniles < 1 m in length); Class 2 (subadults and young adults 1-3 m in length); and Class 3 ("eyes only," usually adults > 3 m in length). Salinity and temperature readings were taken for each sighting and each location was mapped. A total of 182 crocodiles were sighted with densities in the range of 1.1-3.6/km. Class 1 individuals were most frequently encountered (63.2%) followed by Class 3 (24.2%) and Class 2 (12.6%). Crocodiles were most abundant in the upper mangrove section of the river, while the distributions of Class 1 and Class 2 individuals differed significantly (t-test for non-paired samples,  $p \leq 0.05$ ) with regard to location along the river. There were no significant differences in habitat salinity between classes although there were in water temperature (t-test for nonpaired samples,  $p \leq 0.05$ ) between Classes 1 and 3, with smaller crocodiles more frequently sighted at temperatures of 30-31°C. The population densities are higher than reported in 1984, but the structure reflects a population under pressure from hunting.

### NEW GUINEA POPULATIONS OF THE GIANT ASIAN SOFTSHELL TURTLE

A. G. J. Rhodin et al. [1993, Chelonian Conservation and Biology 1(1):19-30] note that the Asian giant softshell turtle, *Pelochelys bibroni*, is distributed widely from southeast Asia to the island of New Guinea. In Papua New Guinea it occurs in two apparently disjunct populations in the northern and southern lowlands. This report extends the known distribution eastward in the northern lowlands, provides additional information about the southern population's distribution and describes morphological differences between the two geographical isolates. Preliminary findings suggest that the southern New Guinea population is different from southeast Asian populations of *P. bibroni*, and may represent a new and undescribed species.

### A NEW TERRESTRIAL TOAD FROM BOLIVIAN CLOUD FORESTS

M. B. Harvey and E. N. Smith [1994, Herpetologica 50(1): 32-38] describe *Bufo justinianoi* from the cloud forests in the departments of Santa Cruz and Cochabamba, Bolivia. It is in the *Bufo veraguensis* group and occurs in sympatry with three other members of this species group. It most closely resembles *Bufo quechua*. It is known from two localities. The tadpoles are believed to live in streams. A new metamorph is 15 mm in snout-vent length and adults reach 54 mm.

### WORLD COMMERCE IN HERPETOFAUNA

L. Dayton [1994, New Scientist, 29 January, pp. 12-13] discusses the massive world trade in amphibians and reptiles. The following statistics are listed. Madagascar exported 230 *Mantella* frogs in 1980, by 1990 the number rose to 20,000. TRAFFIC estimates 10 million reptiles are legally killed annually for their skins. This number excludes 100,000 farm-raised crocodiles. The World Wide Fund for Nature estimates 1 million live reptiles and amphibians are bought and sold annually, but an IUCN representative states this number to be "absurdly low." In 1990 Indonesia exported 4500 tons of frog legs to the European Union; and the IUCN reported 2000 tons of live turtles and frogs were imported into Hong Kong between 1988 and 1991; 252 tons of live snakes entered Hong Kong and Taiwan in 1991; 116.2 tons of geckos were imported into Taiwan and South Korea in 1992. TRAFFIC figures show that tegu lizards, *Tupinambis* sp., are the most common species in trade, with an average of 2.2 million per year in commerce between 1983 and 1989. The majority of these lizard skins are used for boots made in El Paso, Texas. The value of skins imported into the European Union, the U.S. and Japan total \$150 million per annum, and the U.S. imports \$275 million per annum in finished reptile products.

### ABUNDANCE OF KANSAS SNAKES

H. S. Fitch [1993, Trans. Kansas Academy Sciences 96(3-4): 213-224] reports on 44 samples of the Kansas snake fauna from localities distributed over the state, with a total of 33,117 snakes of 34 species. *Diadophis punctatus* proves to be by far the most common species. Others that are both widespread and numerous are *Coluber constrictor*, *Thamnophis sirtalis*, *Pituophis catenifer* and *Nerodia sipedon*. *Thamnophis radix*, *Elaphe emoryi*, *Agkistrodon contortrix*, *Lampropeltis triangulum*, *Nerodia rhombifera* and *Heterodon nasicus* also are well represented in the state. However, a group of diminutive species of secretive and/or fossorial habits, including *Carphophis amoenus*, *Sonora semiannulata*, *Storeria dekayi*, *Tantilla gracilis*, *T. nigriceps* and *Tropidoclonion lineatum*, all predators on invertebrates, are found to attain much higher densities (scores or even hundreds per hectare) than the larger kinds that prey on vertebrates.

### A NEW AQUATIC LEPTODACTYLID FROG FROM BOLIVIAN CLOUD FORESTS

I. De la Riva [1994, Herpetologica 50(1):38-45] describes *Telmatobius yuracare* from three localities in the Cordillera Oriental of Bolivia. The 38-58 mm frog inhabits high gradient streams with cold water and their side pools. Adults use deep portions of the pool or stream, while juveniles use the streamside. Larvae were found in river pools. Males have a distinctive humeral spine, unknown in other members of the genus.