

**Changes in the Trade of Amphibians and Reptiles over a 10-year Period**

TAPLEY ET AL. (2011). *The Herpetological Journal* 21:27–34) compared the trade in reptiles and amphibians in the United Kingdom between 1992–3 and 2004–5. In particular, the impacts of captive breeding and color and pattern morphs on price structures were examined. The number of amphibian and reptilian species in the trade more than doubled over this period, and less than a third of the species traded were common to both trading periods. More traded species were listed by CITES in 1992–3 than in 2004–5. Taking into account inflation, the study showed that the price of all groups of reptiles and amphibians recorded increased over the ten-year period, and that some snake species had done so dramatically when color and pattern morphs were considered. The price change of chelonians was probably the result of responses to changes in various trade regulations. Price increases for amphibians seemed to represent their increased popularity, coupled with the overhead costs of captive breeding on a commercial scale being transferred to the hobbyist. The increased popularity of captive-bred color and pattern morphs could alleviate pressure on



MICHAEL A. POWELL

Despite many conflicts with human interests, non-native Green Iguanas (*Iguana iguana*) are ubiquitous in southern Florida and are not currently subjected to any systematic, organized management efforts.

wild stocks. On the other hand, as such animals are predominantly being produced outside their countries of origin, no benefits accrue to local people and trade could undermine sustainable-use programs for wild animals.

**Exotic Reptiles in Florida**

Florida and Hawaii have the two worst invasive species problems in the U.S. Florida in particular is especially susceptible to the establishment of alien reptiles. In addition to the sheer numbers of established non-native reptilian species in the state, many of these species present novel difficulties for management, or have other characteristics making effective management extremely challenging. Moreover, initiation of management action requires more than recogni-

tion by experts that a potentially harmful species has become established. It also requires the political will along with concomitant resources and appropriate personnel to develop effective methods and apply them. ENGEMAN ET AL. (2011. *Current Zoology* 57:599–612) reviewed the situation in Florida, including assessment of risk for establishment, and used a subset of prominent species to illustrate in more detail the array of circumstances involving invasive reptilian species in Florida, including routes of introduction, impacts, and potential and implemented management actions. These examples not only highlight the severity of the invasive reptile problems in the state, but they also show the diversity in resolve and response toward them and the factors that motivate these responses.



SUZANNE L. COLLINS, GWAH

Red-eared Sliders (*Trachemys scripta*) showed the greatest (754%) price increase over a 10-year period of all turtles traded in the United Kingdom.

**NATURAL HISTORY RESEARCH REPORTS**

**Survival, Breeding Frequency, and Migratory Orientation in Jefferson Salamanders**

Accurate estimates of demographic parameters, such as survival and breeding frequency, are necessary for the conservation and management of animal populations. Additionally, life-history data are required for gaining an empirical understanding of the ecology of natural populations. DE LISLE AND GRAYSON (2011. *Herpetological Conservation and Biology* 6:215–227) monitored a population of Jefferson Salamanders (*Ambystoma jeffersonianum*) breeding in a permanent mountain-top pond at the southern limit of this species' geographic range in Virginia over four years. The authors used closed mul-

tistate mark-recapture models with Pollock's robust design to estimate the demographic parameters of this population. Additionally, they used point-of-capture data to compare the orientation of migrations into and out of the pond within and among years. The model selection results support consistent annual adult survival across years with higher estimates for males compared to females. Estimates of the probability of breeding in sequential years were high for both sexes during the four years of the study. Model rankings and capture probability estimates indicate that females had a higher probability of detection when entering the breeding pond, likely reflecting differences between the sexes in arrival time at the pond. Directionality

was evident in some but not all annual migrations, despite indications of individual fidelity



KRISTINE GRAYSON

Our understanding of reproduction and natural history of pond-breeding amphibians benefited greatly by a study of Jefferson Salamanders (*Ambystoma jeffersonianum*) in Virginia.

in orientation across years. This study provides the first estimates of breeding probability and assessment of migratory orientation patterns for *A. jeffersonianum* and contributes to the understanding of the reproductive ecology and natural history of pond-breeding amphibians.

### Habitat Use and Home Ranges of Longnose Leopard Lizards

An understanding of species' habitat requirements is needed for effective land management decisions, but for many North American reptiles, habitat use information is lacking. The Longnose Leopard Lizard (*Gambelia wislizenii*) is a predatory lizard of most North American deserts, and, although common in the interior of its range, appears to be declining at some peripheral populations. To understand habitat use and movement patterns, SCHORR ET AL. (2011. *Herpetological Conservation and Biology* 6:312–323) used telemetry and two habitat comparison methods to study a *G. wislizenii* population at the eastern boundary of the range. *Gambelia wislizenii* home ranges at Canyons of the Ancients National Monument, Colorado, are the largest recorded. Habitat analysis using microsite-attribute comparisons and compositional analysis documented second-order habitat preference for

Big Sagebrush- or Utah Juniper-dominated landscapes. *Gambelia wislizenii* was found in areas with moderate shrub and forb cover with much bare ground, but not in areas dominated with

grass cover. Incorporating management strategies that limit grass encroachment and maintain bare ground cover with moderate tree and shrub cover might help sustain populations of *G. wislizenii*.



PAUL MOREY

Home ranges of the Longnose Leopard Lizard (*Gambelia wislizenii*) at Canyons of the Ancients National Monument, Colorado, are the largest recorded. This predatory lizard of most North American deserts, here eating a Sagebrush Lizard (*Sceloporus graciosus*), was found in areas with moderate shrub and forb cover and much bare ground, but not in areas dominated with grass cover.

## NEWS BRIEFS

### Snakes on a Train!

A clumsy smuggler, who managed to get away, failed to contain the dozens of King Cobras and other snakes he was transporting from Ho Chi Minh City in Vietnam to Hanoi (probably to be sold illegally to restaurants). After panic broke out on the train and police were called,



OMAR ABIFF

Upscale restaurants in Vietnam can charge as much as the equivalent of \$500 for a meal of King Cobra.

the snakes were collected and turned over to a sanctuary. Upscale restaurants can charge as much as the equivalent of \$500 for a meal of King Cobra, beginning with the selection of the snake, having it killed at tableside, and including a serving of a snake's-blood appetizer. In one survey, 84% of Hanoi's restaurants were serving illegal wild animals of some sort, including weasel, monitor lizard, and porcupine.

“News of the Weird for August 7”  
*Daily Herald*, Provo, Utah

### Giant Crocodile Captured Alive in the Philippines

Villagers and veteran hunters have captured a one-ton Saltwater Crocodile (*Crocodylus porosus*), which they plan to make the star of a planned ecotourism park in a southern Philippine town. Mayor Edwin Cox Elorde said dozens of villagers and experts ensnared the 21-foot (6.4-meter) male along a creek in Bunawan township in Agusan del Sur Province after a three-week hunt. It could be one of the largest crocodiles to be captured alive in recent years, he said, quoting local crocodile experts.

Elorde said the crocodile killed a water buffalo in an attack witnessed by villagers last month and was also suspected of having attacked a fisherman who went missing in July. He said



Saltwater Crocodiles (*Crocodylus porosus*) are the largest extant crocodylians. A male (not the individual illustrated) measuring 6.4 m in total length was captured by residents and crocodile farm staff along a creek in Bunawan in the southern Philippines.

he sought the help of experts at a crocodile farm in western Palawan province. “We were nervous, but it’s our duty to deal with a threat to