CONSERVATION RESEARCH REPORTS

Do Breeding Facilities for Chelonians Threaten Their Stability in the Wild?

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) postulates that trade should not imperil the survival of a species in the wild. CITES defines breeding categories as "captive bred," "captive born" or "farmed," and "captive raised" or "ranched." **VINKE AND VINKE** (2009. *Schildkröten im Fokus* 6(4):3–21; 2010 English translation in *Schildkröten im Fokus online* 1:1–18 <www.schildkroeten-im-fokus.de/pdf/2010tradestudy.pdf>) presented and evaluated import and export statistics for different species and countries. Those data were frequently incorrect and inconsistent. In some instances chelonians were misidentified, or they entered a country as "wild caught" and left as "captive bred." The authors addressed the limitations of CITES and suggested means by which importing nations could enhance the conservation status of many species (i.e., by confirming non-detrimental findings emanating in the nation from which animals were exported, such as contentions that animals were not removed from nature). This is mandatory for any importation of listed species into the European Union, but non-detriment studies are lacking for many exporting nations. Because banning trade in a given species might take years to implement, even when an exporting country brazenly breaches the rules, requirements for international trade in live turtles and tortoises should include complete data on all stock movements, individual marking and documentation of breeders, and a requirement for disclosure of all pertinent data before any permit for export or import of "captive-bred" animals is issued. If the current mechanisms of exploitation tolerated under the cover of CITES are not stopped, the threat posed to chelonian species in the wild by the international live animal trade is on a par with that of habitat destruction.

MEL J. RIVERA RODRÍGUEZ

Turtles hatched at breeding farms have often not been "farm-bred," despite claims to the contrary. This fortunate hatchling Red-footed Tortoise (*Chelonoidis carbonaria*) was bred in semi-captivity for conservation purposes and released into the wild.

Using Natural History Collections to Understand Effects of Climate Change

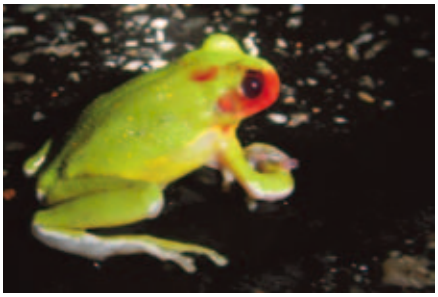
JOHNSON ET AL. (2010. *BioScience* 61:147–163) proposed that natural history collections (NHCs) are important sources of the long-term data needed to understand how biota respond to ongoing anthropogenic climate change. These include taxon occurrence data for ecological modeling, as well as information that can be used to reconstruct mechanisms through which biota respond to changing climates. The full potential of NHCs for climate change research cannot be fully realized until high-quality data sets are conveniently accessible for research, but this requires that higher priority be placed on digitizing the holdings most useful for climate change research (e.g., whole-biota studies, time series, records of intensively sampled common taxa). Natural history collections must not neglect the proliferation of new information from efforts to understand how present-day ecosystems are responding to environmental change. Such new directions will require a strategic realignment for many NHC holders to complement their existing focus on taxonomy and systematics. To set these new priorities, NHC holders and global change biologists must establish strong partnerships.

GEORGE ZUG

Research employing natural history collections is critical for assessing long-term trends, such as effects of anthropogenic climate change. Here, Kate Jackson examines a cobra at the National Museum of Natural History (Smithsonian Institution).

Traffic, Urbanization, and Amphibian Encounter Rates

Although amphibians have relatively high rates of road mortality in urban areas, the conditions under which traffic threatens the survival of local amphibian populations remain unclear. In the Sandhills region of North Carolina, **SUTHERLAND ET AL.** (2010. *Conservation Biology* 24:1626–1635) counted living and dead amphibians along two transects (total length 165 km) established on roads in areas with varying degrees of urbanization. They found 2,665 individuals of 15 species, and amphibian encounter rates declined sharply as traffic and urban development increased. Regression-tree models indicated that 35 amphibians/100 km occurred on roads with <535 vehicles/day, whereas the encounter rate decreased to only 2 amphibians/100 km on roads with >2,048 vehicles/day. Although mortality rate peaked at higher traffic levels (47% dead on roads with >5,200 vehicles/day), the number of dead amphibians was highest at low levels of traffic. This suggests that areas where amphibian mortality is concentrated may actually contain the largest populations remaining on a given road transect.



RON SUTHERLAND

This unfortunate Barking Treefrog (*Hyla gratiosa*) looks alive, but didn't move when nudged. Upon closer examination, fire ants were already aggregating to start their feast.

NATURAL HISTORY RESEARCH REPORTS

Predators Restrict Foraging Behavior in Black Spiny-tailed Iguanas

The presence of a predator may have direct and indirect effects on the behavior of prey. Although altered behavior may help prey avoid predators, it also can have a potential impact on critical activities such as foraging. Predator-prey interactions are routinely studied in laboratory-based experiments owing to the perceived difficulties of conducting such experiments in natural settings. **FARALLO ET AL.** (2010. *Phyllomedusa* 9:109–119) conducted an experimental study