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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 editor assumes full responsibility for any errors or misleading statements.

REPRODUCTIVE CYCLES IN CAPTIVE BLOOD PYTHONS

D. F. DeNardo and K. Autumn [2001, Copeia (4):1138-1141] note that proper timing of the reproductive cycle to assure mate access is critical to optimizing success. They tested the importance of male presence on the progression of the female reproductive cycle in the blood python, *Python curtus*. Upon reaching sexual maturity, captive-born, individually raised virgin female snakes were housed with either a conspecific male or female. The reproductive condition of the females was monitored using ultrasonography. At the onset of the reproductive season (late autumn), all females initiated early follicular growth; however, only females housed with males initiated vitellogenesis, and these females ovulated and oviposited viable eggs. Females not housed with males showed arrested follicular development in that they maintained hydrated, nonvitellogenic follicles that underwent follicular regression after three months. The requirement for male presence prior to vitellogenesis is premature for fertilization but assures the female of a mate prior to mobilizing substantial energy stores into reproduction. Once an energy investment is made, females commit to completing the cycle.

LIZARDS DETECT PREDATOR CHEMICAL CUES

R. Van Damme and K. Quick [2001, J. Herpetology 35(1): 27-36] report that three species of lacertid lizards (*Lacerta bedriagae*, *Podarcis tiliguerta* and *Podarcis sicula*) are able to detect the former presence of the saurophagous snake *Coluber viridiflavus* by tongue flicking. Lizards tongue flicked more in cages previously inhabited by the predatory snake than in clean cages or in cages treated with eau-de-cologne. They also exhibited behavioral acts typically associated with stressful situations (foot shakes, tail vibrations, starts) more frequently when predator chemicals are present. Individuals from the two *Podarcis* species that came from populations syntopic with *C. viridiflavus* were also able to distinguish between chemical cues from this saurophagous predator and a nonsaurophagous snake (*Natrix maura*). In these lizards, the former presence of *N. maura* did not elicit higher tongue-flick rates or stress-indicating behaviors. In contrast, individuals of *Lacerta bedriagae* collected from a snake-free area increased tongue-flick rate and frequency of stress-related behavior in response to chemicals of both snakes, suggesting that prior contact is not required for chemosensory recognition of snakes in this species but may facilitate the distinction between different species of snakes. The presence of predator (*C. viridiflavus*) chemical cues induces a shift in the microhabitat use of the lizard species studied. In a large terrarium containing various substrates, lizards chose different types of microhabitats when chemical cues of *C. viridiflavus* were present than when absent and avoided the side of the terrarium labeled with the chemicals.

SYMPATRIC MILKSNAKE POPULATIONS

M. P. Armstrong et al. [2001, J. Herpetology 35(4):688-693] note that the sympatric occurrence of *Lampropeltis triangulum elapsoides* over much of its peripheral range with *L. t. triangulum*, and the presence of zones of intergradation in other areas, along with presumed intergradation with *L. t. syspila* and *L. t. amaura* in the central and western portions of its range pose questions regarding the taxonomic status of *L. t. elapsoides*. Such questions can best be resolved when confusion is eliminated about areas of population overlap. The authors present an in-depth analysis of a previously reported intergrade zone in western Kentucky and adjacent Tennessee between *L. t. syspila* and *L. t. elapsoides*. Data was taken from reference samples of *L. t. syspila* (N = 16) from Missouri and Kansas, and *L. t. elapsoides* (N = 23) from South Carolina , Georgia, Florida and Mississippi. Canonical discriminant function analysis was then used to compare western Kentucky/Tennessee *L. triangulum* specimens (N = 63) with the two reference samples. The authors conclude that in western Kentucky *L. t. elapsoides* and *L. t. syspila* exist in sympatry, with minimal, if any, gene flow between these populations.

SALAMANDER AGE, GROWTH AND SITE FIDELITY

G. A. Marvin [2001, Copeia (1):108-117], based on mark–recapture data collected over seven years on the Cumberland Plateau salamander, *Plethodon kentucki*, examined: (1) longevity and long-term site fidelity, (2) growth curves for each sex derived from both cross-sectional and longitudinal data on body size, (3) whether growth curves generated from the two kinds of data were comparable, and (4) how the relationship between adult body size and age in this species compares to that in other plethodontid salamanders. Recapture rates indicate that about 86% of males and 82% of females survived and remained in the study area from one year to the next. Most individuals recaptured at the end of the study period were within, or less than 2 m from, the home range they occupied at the beginning. Maximum age estimates were 13 yr for males and 16 yr for females. Growth curves derived from cross-sectional and longitudinal data were very similar. For both sexes, there is rapid growth up to the time of first reproduction (about 4 and 5 yr for males and females, respectively) and continued growth for 2 to 4 yr afterward but relatively little growth after 9 yr of age. Males may have a greater rate of growth prior to sexual maturity, but females grow for a longer period and attain a greater body size. There is much variance in adult body size within a given age class for both sexes. The correlation between body size and age was slightly greater in males than in females, and the correlation was significant for the combined data. Similarly, the size–age correlation in other plethodontid species is stronger for males than for females, which may be because of a greater variability in growth after sexual maturity in females than in males.

GARTERSNAKE FORAGING BEHAVIOR

M. A. Krause and G. M. Burghardt [2001, Herpetological Monographs 15:100-123] note that the widely distributed common gartersnake (*Thamnophis sirtalis*) thrives in a variety of environments and preys upon a diversity of species. Phenotypic plasticity (including learning), as well as genetic diversity, may underlie the success of this species. The authors examined how different types of feeding experience influence the ontogeny of foraging behavior in garter snakes from two populations with different adult diets (earthworm or amphibian/worm/mammal diets) living on Beaver Island in Lake Michigan. Times to approach, capture, handle, and swallow prey were recorded in controlled laboratory settings. In Experiment I, neonatal snakes reared on fish, earthworms, or a mixed diet were tested for feeding skills at their first feeding, and at 5 subsequent intervals after feeding experience and diet-switching over a period of nearly 8 months. Snakes in all three groups decreased their latencies to consume prey after feeding experience and there were some litter, but no site or sex, differences. Snakes fed initially on worms were slow at consuming fish upon diet switching, whereas snakes that initially fed on fish rapidly consumed worms upon their first feeding. Feeding skills for initial prey were retained following the diet-switching phase. Experiment II determined the effects of long-term feeding experience on the abilities of field-caught adult snakes to detect, capture, and consume frogs, fish, and worms. Most foraging measures differed for all three prey, but there were few site differences and no sex differences. The effects of prior feeding experience appear to be less evident for adults than for neonates, which may be due to the effects of changing predator-prey body size relationships, changes in prey availability, or to constraints of the captive testing environment. Although populations on the island eat different prey, there is little evidence for genetic differentiation in foraging behavior during the several thousand years that the island has existed.

CHINESE ALLIGATOR REPRODUCTION

J. Thorbjarnarson et al. [2001, J. Herpetology 35(4):553-558] note that the Chinese alligator is one of the world's most critically endangered reptiles. Although there is a relatively large captive population, in the wild small groups of alligators are limited to a few small ponds in an agricultural landscape in southeastern Anhui Province. As part of an effort to develop plans for the conservation of Chinese alligators in the wild, the authors investigated aspects of the reproductive ecology of wild alligators during a survey of the last remaining groups. They also compiled published and unpublished information on the reproduction of alligators in captivity and in the wild. Nesting was only reported from four sites in 1999, and they describe two of these areas. Because of the intense human use of the landscape, alligators seek small patches of relatively undisturbed vegetation for nesting, and these fall into two main categories: vegetated hillsides, usually covered with pine trees, and small islands in agricultural ponds. Observations of one nest on a pine hillside suggest that pine needles may make a poor nest substrate leading to lethally low temperatures for developing embryos. Site selection for the reintroduction of alligators should take potential nesting habitat into consideration.

VALIDITY OF *SANZINIA* AND *ACRANTOPHIS*

M. Vences et al. [2001, Copeia (4):1151-1154] analyzed a total of 1981 bp of the mitochondrial 16S rRNA, 12S rRNA and cytochrome *b* genes in five boine and one pythonine snake species to determine phylogenetic relationships between Malagasy and Neotropical taxa included in the genus *Boa*. The obtained cladograms significantly grouped *Boa constrictor* with the Neotropical genera *Eunectes* and *Epicrates*, whereas the Malagasy species were the sister group of the clade of the three Neotropical taxa. Based on these results, *Sanzinia* and *Acrantophis* should be considered as valid generic names for the Malagasy boas. Their origin may be a result of a Cenozoic dispersal from Africa or Asia.

NIGHT LIZARD PHYLOGENY

R. Lovich [2001, Herpetologica 57(4):470-487] analyzed intraspecific relationships, biogeography, and taxonomy of *Xantusia henshawi* occurring in southern California by constructing a gene tree phylogeny using mitochondrial DNA (mtDNA) sequence data from the cytochrome *b* region. Three well-supported haploclades show high degrees of sequence divergence in contrast to a generally conservative morphology. Fault zones and their associated habitat features in the form of fault valleys, canyons, and arroyos geographically separate the different gene tree haploclades. This suggests that the evolution of *X. henshawi* is tied to the occurrence of stable exfoliating granitic features that are lacking in riparian and flood plain corridors. Sequence data indicate that *X. h. gracilis* evolved from within one of the three haploclades of *X. henshawi* and represents an exclusive lineage. *Xantusia henshawi* remains non-exclusive. Under the evolutionary species concept, results of this study in combination with those of previous studies warrant the elevation of *X. h. gracilis* to full species. This study has assisted in hypothesizing previously unknown barriers to gene flow that have contributed to the evolution of *X. henshawi* and *X. gracilis*.

BOG TURTLE HABITAT

J. L. Morrow et al. [2001, J. Herpetology 35(4):545-552] studied habitat selection of 50 bog turtles (*Clemmys muhlenbergii*) at two sites in Harford County, Maryland, from April 1996 to August 1997. These sites differ in size, amount of grazing, and stage of vegetative succession. One of the sites was studied intensively 20 years ago. Turtle movements were monitored using radiotelemetry: Individuals were located twice a week during the active season and once a month during hibernation to assess habitat selection and seasonal changes in habitat use. Vegetative, soil, and water characteristics were recorded in 0.25-m^2 quadrats placed at turtle locations and stratified random locations throughout the study areas. Turtles selected sedges and rushes and other low-lying herbaceous plants. They avoided some woody plants (alders, grapes, and berries) and an exotic plant (Japanese honeysuckle, *Lonicera japonica*) that may gradually eliminate typical wetland vegetation and produce a closed canopy. Management practices, such as moderate animal grazing and winter burns, will help retard plant succession and provide more open habitat.