NATURAL HISTORY RESEARCH REPORTS

Trophic Ecology of a Spiny-Tailed Iguana

Animals respond to changes in food quality, resource availability, and patterns of food dispersion by modifying foraging behaviors. In species such as the Cape Spiny-tailed Iguana (*Ctenosaura hemilopha*), predation pressure also may affect escape behavior, habitat use, and foraging behavior. **Blázquez et al.** (2007. *Biotropica* 39: 496–501) studied the diet of adult spiny-tailed iguanas in the desert of southern Baja California. Their goals were to determine if spiny-tailed iguanas behave as food generalists or specialists, to evaluate the role of iguanas in seed dispersion, and to evaluate whether iguanas modify their diets as a function of predation risk.

WILLIAM KATZ

Although Cape Spiny-tailed Iguanas (*Ctenosaura hemilopha*) can move around to feed, they rarely do.

Iguanas consumed mostly plants, consuming at least 22 of the 83 species occurring in the study area. The mainstay of their year-round diet consists of the leaves of three legumes, as well as flowers and fruit when available. Spiny-tailed Iguanas use leafy trees, such as *P. articulate* and *L. candida*, and the selection of those trees as habitat allows them to access food and refuges at the same location, reducing predation risk. Although iguanas could move around to feed, they rarely did. Intense predation by raptors and mammals may be the strongest factor influencing iguana foraging behavior.

Genetic Variation in Introduced Anolis Lizard Populations

Invasive species usually are established with a small number of founders, and therefore are expected to have relatively low genetic diversity. Even when numbers increase, reduced within-population genetic variation is expected when compared to the native range. The increased relatedness among individuals can cause inbreeding depression, limiting population growth and increasing the probability of extinction of a population. In contrast, some recent studies have shown that invasive populations can have higher genetic variation than native populations and experience rapid evolution because they are formed by multiple introductions from different portions of the species' native range.

Recently, **Kolbe et al.** (2007. *Conservation Biology* 21: 1612–1625) used mitochondrial DNA sequence data to examine the molecular genetics of ten introduced populations belonging to eight species of *Anolis* lizards. Evidence indicates that 80% of *Anolis* lizard introductions originated from multiple source populations. Seven of eight introduced species of *Anolis* in Florida were derived from multiple native-range sources, and one of two introductions to the Dominican Republic had multiple sources. The results suggest that multiple introductions from several sources, followed by admixture, is the norm rather than the exception in this genus.

KEVIN ENGE

Seven of eight introduced species of *Anolis* in Florida, including *A. distichus* (illustrated here), were derived from multiple native-range sources.

Gila Monsters in California

The Gila Monster (*Heloderma suspectum*), widely distributed in parts of the Mojave, Sonoran, and Chihuahuan deserts of the southwestern United States and northwestern Mexico, is rare in California. Habitat in which the species has been observed in California is characterized by rocky, deeply incised topography, in most cases associated with large and relatively high mountain ranges. Most localities are in riparian areas (including the lower Colorado River) and range from near sea level to over 1,200 m. All records except one (Mojave River) occur east of about 116° longitude. The distribution of the species in California suggests an invasion into the high mountain ranges of the northeastern Mojave during the last interglacial via the Colorado River corridor. **Lovich and Beaman** (2007. *Bulletin of the Southern California Academy of Sciences* 106: 39–58) explored the hypothesis that climate patterns shaped the current distribution of the Gila Monster in California. Warm season precipitation data from recording stations closest to Gila Monster localities are almost identical for those in western Arizona, where the species is more common. Summer precipitation may be important in the foraging ecology of the species. Gila Monsters were probably already rare in California long before the arrival of Europeans due to changes in climate and landforms that delimited the marginal location of California in the range of this species. Fortunately, most of the habitat for this species in California is protected or relatively free from human disturbance.

MARK SEWARD

Most Gila Monster (*Heloderma suspectum*) habitat in California is protected or relatively free from human disturbance.