(*A. flagellicauda*), Texas Spotted Whiptail (*A. gularis gularis*), Trans-Pecos Striped Whiptail (*A. inornata heptagramma*), Plateau Spotted Whiptail (*A. septemvittata septemvittata*), Colorado Checkered Whiptail (*Aspidoscelis tesselata*), Western Marbled Whiptail (*Aspidoscelis tigris marmorata*), Southwestern Earless Lizard (*Cophosaurus texanus scitulus*), Canyon Lizard (*Sceloporus merriami*), and Eastern Fence Lizard (*S. undulatus, sensu lato*) as well as previously mentioned *U. ornatus* (Goldberg et al. 1995. J. Helminthol. Soc. Washington 62:188–196; McAllister 1990a. J. Wildl. Dis. 26:139–142; McAllister 1990b. Texas J. Sci. 42:381–388; McAllister et al. 1991. Texas J. Sci. 43:309–314; McAllister 1992. Texas J. Sci. 44:233–239; McAllister et al. 1995. Texas J. Sci. 47:83–88; McAllister et al. 2003. Texas J. Sci. 55:307–314; Specian and Ubelaker, *op. cit.*; Walker and Matthias 1973. Proc. Helminthol. Soc. Washington 40:168–169).

In conclusion, the geographic range of *P. texanus* now includes Arizona, New Mexico, Texas, and Utah (new distributional record) and at least 12 species of lizard hosts within two families (Phrynosomatidae, Teiidae). We expect additional hosts and localities for *P. texanus* will be reported with future surveys of lizards.

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SQUAMATA — SNAKES

***ARIZONA ELEGANS ELEGANS* (Kansas Glossy Snake). DIET AND FEEDING BEHAVIOR.** *Arizona elegans elegans* is known to prey upon lizards and small mammals (McKinnney and Ballinger 1966. Southwest. Nat. 11:410–412). *Dipodomys ordii* (Ord's Kangaroo Rat) is a known prey species of *A. elegans* (Rodríguez-Robles 1999. J. Herpetol. 33:87–92). In a literature review of carrion foraging in snakes, Devault and Krochmal (2002. Herpetologica 58:429–236) did not identify *A. elegans* as a scavenger. Herein we report the first observation of *A. elegans* foraging on a road-killed *D. ordii*.

On 12 June 2010, at 2300 h, we observed an *A. elegans* (SVL = 585 mm; total length = 694 mm) consuming a road-killed *D. ordii* (Fig. 1) on Highway 249, Chavez Co., New Mexico, USA (33.0185°N, 103.8723°W, datum: WGS 34; elev. 1320 m). To prevent the snake from being killed by oncoming traffic, we gently moved it to the south shoulder of the highway. Rodrigues-Robles et al. (*op. cit.*) investigated the stomach contents of approximately 700 museum specimens of *A. elegans*. Of the 107 prey items recovered, 43.9% were mammals. However the design of their study did not allow them to determine the disposition of the prey prior to consumption. Devault and Krochmal's (2002, *op. cit.*) literature review suggests that carrion foraging in snakes should not be considered unusual, however it was unclear until this observation if *A. elegans* could be counted among the snakes known to consume carrion in the wild.

Fig. 1. *Arizona elegans elegans* consuming a road killed *Dipodomys ordii*. Note the rodent's viscera, confirming that it was a road kill.

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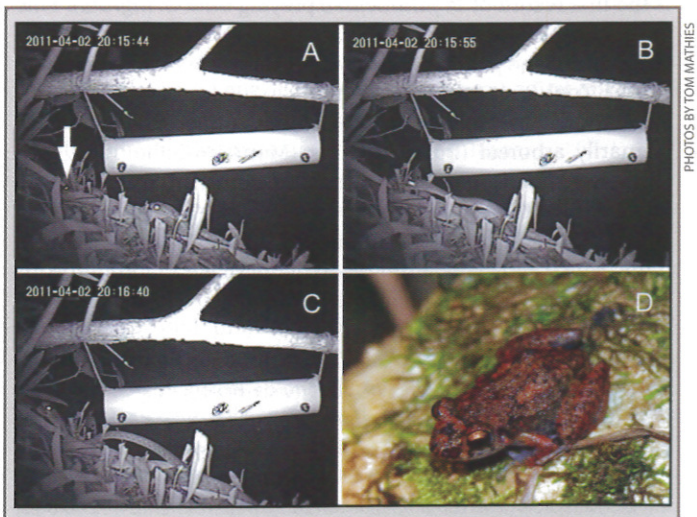
***BOIGA IRREGULARIS* (Brown Treesnake). DIET.** The invasive *Boiga irregularis*, having decimated most of the native species it preyed on in Guam, now preys heavily on other invasive vertebrates. *Eleutherodactylus planirostris* (Greenhouse Frog), which has recently become established on Guam (Christy et al. 2007. Pac. Sci. 61:469–483), may provide the snake with an additional food source because the frogs are active nocturnally and can attain high densities (12,500 frogs ha^{-1} in Hawaii; Olson 2011. Unpubl. dissertation. Utah State University, Logan. 116 pp.). *Boiga irregularis* consume *E. planirostris* in captivity (unpubl. data in Christy et al. 2007. Pac. Sci. 61:469–483), but it is unknown whether they take them in the field. Others have suggested that *B. irregularis* are unlikely to prey upon anurans because of learned avoidance after attempting to take a poisonous species, *Bufo marinus*, which is also introduced and common throughout Guam.

On 2 April 2011, during the course of video recording of nocturnal snake activity in roadside vegetation at U.S. Naval Computer and Telecommunications Station Guam (13.574758°N, 144.834967°E; datum WGS84), we observed two *E. planirostris* moving about on a moss and fern-covered log approximately 1 m above the forest floor. This location is approximately 7.7 km north of the discovery site for this recently-arrived species (Christy et al., *op. cit.*) At 2015 h, a juvenile Brown Treesnake (ca. 600 mm SVL) appeared on the side of the log approximately 10 cm from one of the frogs, which quickly leapt off of the log. The snake



PHOTOS BY TOM MATHIES

Fig. 1. *Boiga irregularis* feeding sequence on an *Eleutherodactylus planirostris*, northern Guam, USA. A. Snake approaches frog (arrow indicates eye-shine of frog); B. Snake lunging toward frog. C. Snake swallowing frog; D. *Eleutherodactylus planirostris* at study site.

rapidly swung around to face the direction of the departed frog, but did not follow. Soon after, the second frog emerged from cover and took a few steps toward the snake (Fig. 1A). The snake then moved toward the frog, paused, and then lunged at the frog (Fig. 1B), catching it in its mouth and consuming it immediately thereafter (Fig. 1C). To verify whether the frogs on our video recording were *E. planirostris*, we returned to the site the following night. A cursory visual search of a 1.5 × 4.5 m strip of forest floor beneath the log revealed approximately 15 small *E. planirostris* (Fig. 1D). If juvenile *B. irregularis* are taking substantial numbers of frogs as prey, the snake may become more difficult to control than at present. Moreover, large populations of *E. planirostris* (both on Guam and elsewhere) may facilitate the establishment of *B. irregularis* in new areas, such as Hawaii or other Pacific Islands.

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***BOTHROPS JARARACUSSU* (Jararacussu). DIET.** The South American pitviper *Bothrops jararacussu* is a large viperid, reaching up to 1.8 m in length, and is known to feed on small mammals, amphibians, and reptiles (Martins et al. 2002. *In* Schuett et al. [eds.] Biology of Vipers, pp. 307–328. Eagle Mountain Publ., Eagle Mountain, Utah). On 1 January 2011, we found a Brazilian squirrel, *Guerlinguetus ingrami* (33 cm; 150 g) in the process of being ingested by a female *B. jararacussu* (total length = 110 cm). The snake was found in the afternoon (1700 h) in the middle of a dirt road, near a secondary forest fragment in the municipality of Cascavel, Paraná, south Brazil. This location is part of Araucarian Forest (Atlantic Forest; Castella and Britez 2004. A Floresta com Araucária no Paraná. MMA Publ., Brasília. 233 pp.) and is in close proximity to a river. When approached the snake regurgitated the squirrel and tried to escape. To our knowledge, this is the first record of *B. jararacussu* preying on a *G. ingrami*. This observation is particularly interesting, given that *B. jararacussu* is terrestrial and primarily feeds on terrestrial prey (Martins et al. 2001. J. Zool. 254:529–538; Martins et al. 2002, *op. cit.*; Hartmann et al. 2009. Pap. Avul. Zool. 49:343–360), whereas *G. ingrami* is primarily arboreal (Bordignon and Monteiro-Filho 1997. Rev. Bras. Zool. 14:707–722; Bordignon and Monteiro-Filho 2000. Can. J. Zool. 78:1732–1739).

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***CHRYSOPELEA PARADISI* (Garden Flying Snake). DIET.** *Chrysopelea paradisi* is a common lowland snake in Southeast Asia (Inger and Stuebing 1999. A Field Guide to the Snakes of Borneo. Natural History Publications, Sdn Bhd, Kota Kinabalu. viii + 254 pp.), and a known predator of gekkonid lizards (Das 2010. A Field Guide to the Reptiles of Southeast Asia. New Holland Publishers Ltd., London. 376 pp.), the agamid *Bronchocela cristatella* (Lim and bin Peral 1959. Malayan Nat. J. 14:33–34), the scincid *Lamprolepis smaragdina philippinica* (Gaulke 1986. Salamandra 22:211–212), and the bamboo bat, *Tylonycteris* sp. (Leong and Foo 2009. Nature in Singapore 2:311–316).

On 30 December 2009, at ca. 1200 h, a *C. paradisi* was observed on a concrete walking path at the Piasau Boat Club (04.436541°N, 113.996485°E, datum: WGS84), Miri, Sarawak, East Malaysia. It was tightly coiled around a small struggling arboreal scincid lizard, *Apterygodon* [*Dasia*] *vittatum*, recognizable by the robust body shape and distinctive stripes along the head. This particular specimen had a truncated tail, presumably lost in a prior (near) predation event.

Over a period of ca. 10–15 min, the snake remained almost stationary, apparently constricting the skink, whose movements gradually became more erratic and less frequent. When the movements had almost ceased altogether, the snake changed position, and maneuvered the skink to begin consuming the skink head-first (Fig. 1). Once consumption started, less than a minute elapsed before the entire skink was swallowed.

FIG. 1. *Chrysopelea paradisi* ingesting an *Apterygodon vittatum* in Sarawak, East Malaysia.

COLOR REPRODUCTION SUPPORTED BY THE THOMAS BEAUVAIS FUND

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***CROTALUS CERBERUS* (Arizona Black Rattlesnake). DIET.** *Crotalus cerberus* is a denizen of mesic environments in higher-elevation regions of Arizona and western New Mexico (Brennan and Holycross 2006. A Field Guide to Amphibians and Reptiles in Arizona. Arizona Game and Fish Dept., Phoenix. 150 pp.). Prior to being recognized as a separate species from *C. viridis* [*oreganus*], it was presumed that *C. cerberus* was an opportunistic predator, taking a variety of prey taxa (Degenhardt et al. 1996. Amphibians and Reptiles of New Mexico. Univ. New Mexico Press, Albuquerque, New Mexico. 433 pp.; Ernst and Ernst 2003. Snakes of the United States and Canada. Smithsonian Inst. Press, Washington, DC. 668 pp.). Since being distinguished from *C. viridis*, its