distributed in South America from Perú to Tierra del Fuego, Argentina, showing a great variety in habitat preferences, reproductive strategies, and feeding habits. Here we analyze the form and structure of the headbob display of *L. ramirezae* in its natural environment.

Liolaemus ramirezae is a diurnal, oviparous (Lobo and Espinoza 1999. Copeia 1999:122–140), and insectivorous lizard (Halloy et al. 2006. Rev. Esp. Herpetol. 20:47–56). This species lacks sexual dichromatism and dimorphism (mean SVL = 51.5 mm ± 2.8 mm SD; Lobo and Espinoza 1999, *op. cit.*). It is found in northwestern Argentina, in the Salta, Tucuman and Catamarca provinces (Lobo 2005. Acta Zool. Lill. 49:65–87). The study site is located at "Los Cardones" (26.6670°S, 65.8180°W, WGS 84; 2725 m elev.), Tucuman Province, Argentina. Seven adults were filmed with a digital camcorder (Sony HDR-Cx290), as part of a study of headbob displays of the sympatric lizard, *Liolaemus pacha*. Active lizards were filmed between 1000 h and 1700 h, during sunny or partially cloudy days. The observer was located at approximately 4 m from the focal subject to minimize interference. The observer never sampled the same area twice to avoid filming the same lizard multiple times. Headbob displays were analyzed using the software Tracker (www.cabrillo.edu/~dbrown/tracker/), following the same procedures used in previous studies (Vicente and Halloy 2015, *op. cit.*). Graphs were obtained marking the position of the snout, frame by frame, through time. Videos were calibrated using the mean snout–vent length. We defined a lizard headbob display as a succession of ups and downs of the head, each one called units. We obtained the form of the headbob display and we measured the amplitude and duration of each unit. We followed the convention that display units with a coefficient of variation (CV) < 35% can be considered highly stereotyped (Barlow 1977. *In* Sebeok [ed.], How Animals Communicate, pp. 98–134. Indiana University Press, Bloomington, Indiana).

Liolaemus ramirezae headbob displays were characterized by one long up and down motion (called unit 1), followed by a pause and a quick up and down movement of approximately the same amplitude (unit 2, Fig. 1). This form was similar among the seven individuals, possibly corresponding to the signature bob for this species (Carpenter and Ferguson 1977, *op. cit.*). The amplitude of both units was highly variable, which may be signaling differences among individuals, sexes or social contexts. On the other hand, the duration of units and pause were more conservative (CV < 35%, see Table 1). This could be part of the identity of the species. More studies are needed in the field and in the laboratory to understand better the observed variations.

We are grateful to CONICET (National Scientific and Technical Research Council) for a scholarship to NV and Natural Resources and Soils of the Tucuman province for permission to work in the field (Res: 169-13, Expte. n° 936-330-2012).

NATALIN S. VICENTE, UEL, Unidad Ejecutora Lillo (CONICET-FML), Miguel Lillo 251, 4000, Tucumán, Argentina (e-mail: natalinvic@gmail.com); **MONIQUE HALLOY**, ICA, Instituto de Comportamiento Animal, Fundación Miguel Lillo, Miguel Lillo 251, Tucumán, Argentina (e-mail: moniquehalloy@gmail.com.ar).

***NEPHRURUS SHEAI* (Northern Knob-tailed Gecko). DIET.** Little is known about the ecology of *Nephrurus sheai*, a recently described knob-tail gecko from north-western Australia (Couper and Gregson 1994. Mem. Queensland Mus. 37:53–67). The only reported dietary items for this species are lepidopteran larvae and isopterans (*ibid.*), although a wide range of arthropod prey (including spiders, scorpions, centipedes, and many insect

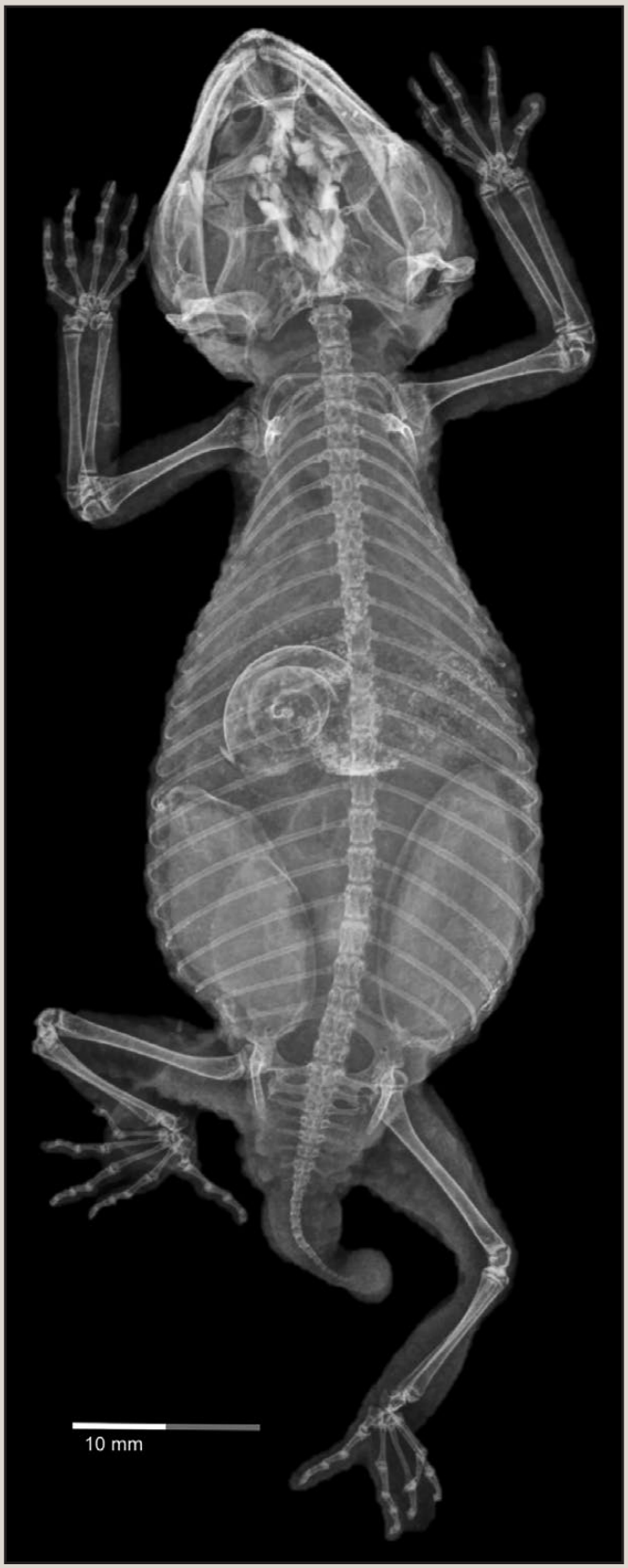

FIG. 1. Radiograph of *Nephrurus sheai* (WAM R174053) showing ingested camaenid gastropod.

groups), lizards, and even plant material have been recorded for other carphodactylid geckos (Pianka and Pianka 1976. Copeia 1976:125–142; McPhee 1979. The Observer's Book of Snakes and Lizards of Australia. Methuen, Australia. 157 pp.; Harvey 1983. Trans. Roy. Soc. South. Aust. 107:231–235; Bauer 1990. Herpetol. Rev. 21:83–87; How et al. 1990. Rec. West. Aust. Mus. 14:449–459; Couper et al. 1993. Queensland Geogr. J., Ser. 4, 8:261–265; Couper and Gregson 1994, *op. cit.*; Doughty and Shine 1995. Herpetologica 51:193–201). Herein we report a new and unusual prey item for *N. sheai* from Western Australia.

An adult female *Nephrurus sheai* (WAM R174053; 118 mm SVL), collected from Johnson Creek, Drysdale River National Park, Western Australia (14.7814°S, 127.0997°E; WGS 84), was X-rayed using a Thermo Kevex PXS5-927EA Microfocus source with a LTX-1717 Digital Flat Panel Detector (settings: 40 kV, 80 µA, 3.2 W) at the Western Australian Museum and found to have a camaenid gastropod (likely *Amplirhagada drysdaleana*, 16 mm shell diameter) in its stomach (Fig. 1). This is not only the first record of *Nephrurus sheai* preying on a gastropod, but also the first documentation of molluscivory in the family Carphodactylidae. At least 15 species of other gekkotans have been reported to feed on gastropods, however, including diplodactylid, sphaerodactylid, gekkonid, and phyllodactylid taxa (Daza et al. 2009. Biol. J. Linn. Soc. 97:677–707).

DANIEL J. PALUH (e-mail: dpaluh@villanova.edu), and **AARON M. BAUER**, Department of Biology, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085, USA (e-mail: aaron.bauer@villanova.edu).

***PHRYNOSOMA HERNANDESI* (Greater Short-Horned Lizard). COMMENSALISM.** Commensalism is a relationship between two organisms whereby one benefits without negatively affecting the other. Like other horned lizards, *Phrynosoma hernandesi* feeds primarily on ants, but will take other insects (Powell and Russell 1983. Can. J. Zool. 62:428–440). Here we describe apparent commensalism between *P. hernandesi* and Lark Buntings (*Calamospiza melanocorys*).

Between 27–30 June 2001 a *P. hernandesi* was observed inside a *C. melanocorys* nest on the Pawnee National Grassland (Weld Co, Colorado, USA; 40.69034°N, 104.35785°W, WGS 84; 1513 m elev.). The lizard was first observed in the ground nest at 1554 h on 27 June 2001, along with four nestlings that were two days old and spontaneously begging for food. The parents were in the vicinity with food (e.g., grasshoppers). During the subsequent nest check, two days later, at 0844 h on 29 June the lizard was again observed in the nest. On this particular occasion, the lizard moved to the rim of the nest while we weighed the three remaining four-day old nestlings (Fig. 1). When we returned the nestlings to the nest, the lizard repositioned itself into the nest cup. The last day that we observed the lizard in the nest was on 30 June during a routine nest check at 1039 h. The female Lark Bunting flushed from the nest when we approached, and in the nest was the lizard alongside the three nestlings. Nestlings were now six days old, sleeping, and occupying most of the nest cup. The last day with young in the nest (three nestlings) was 1 July; the lizard was not seen and was not found during a 1-m radius search of the nest area.

The nest association we observed occurred over four days, and it was unclear if the lizard gained any thermoregulatory or dietary benefit from the association. While in our presence, neither Lark Bunting parent reacted adversely to the presence of the lizard. *P. hernandesi* is known to feed on a variety of ant and beetle species, ground-dwelling bees, true bugs, and other similar ground-dwelling arthropods in Weld County (D. Martin, unpubl. data). Ants were often associated with our Lark Bunting nests and on many occasions were seen removing dried droppings of older nestlings (just prior to and after fledgling). Thus, the lizard may have benefitted from the association by feeding on ants that were attracted to the bird droppings. We suspect that such lizard-bird nest associations are quite rare because it was not observed in the other 810 Lark Bunting nests monitored over seven years in this region.

FIG. 1. *Phrynosoma hernandesi* (Greater Short-Horned Lizard) in the nest of a Lark Bunting (*Calamospiza melanocorys*).

AMY A. YACKEL ADAMS, U.S. Geological Survey, 2150 Centre Ave Building C, Fort Collins, Colorado 80526, USA (e-mail: yackel@usgs.gov); **ROD D. ADAMS**, Front Range Community College, 4616 S Shields St., Fort Collins, Colorado 80526, USA; **SUSAN K. SKAGEN**, U.S. Geological Survey, 2150 Centre Ave Building C, Fort Collins, Colorado 80526, USA; **DANIEL J. MARTIN,** Natural Resource Ecology Laboratory, Colorado State University, 1499 Campus Delivery, Fort Collins, Colorado 80523, USA.

***PODARCIS SICULUS* (Italian Wall Lizard). HABITAT AND SUBURBAN INVASION.** *Podarcis siculus* has invaded multiple regions of North America (Burke and Ner 2005. Northeast. Nat. 12:349–360). In New York state, multiple populations have been documented on Long Island in urban and suburban environments (Gossweiler 1975. Copeia 1975:584–585; Burke and Ner, *op. cit.*). Recently, *P. siculus* was documented invading nearby suburban Greenwich, Connecticut (Donihue et al. 2015 Herpetol. Rev. 46:260–261). We recently documented the first populations of *P. siculus* in Westchester Co., New York (Goldfarb et al. 2016. Herpetol. Rev. 47:82), and herein describe their habitat use and discuss a possible movement pathway.

On 29 August 2015 between 1100 h and 1700 h, in response to a previous sighting of *P. siculus* by BAG, we surveyed a 3500 m^2 area incorporating three households, a church, and a small office building in Hastings-on-Hudson, Westchester Co., New York. Following 4 h of searching we (BAG, MRL, CMD) found one adult male and one adult female, four sub-adults or adults of unknown sex, and three young-of-the-year (~3 cm snout–vent length) *P. siculus*. One individual, the adult female, was collected as a voucher specimen (YPM HERR.019476; Fig. 1A). The two adults were found at the base of a tree in the front yard of a private home (Fig. 1b). Nearby habitat included a 1.3 m tall rock wall, in most places covered with dense ivy. An additional sub-adult was found in this ivy on this wall, 15 m from the two adults. The other three sub-adults were found in landscaped vegetation and upon a concrete curb separating another