in marshes and lakes with floating vegetation in the study area (Gill and Donsker [eds.], 2017. IOC World Bird List, vol. 8.1; doi: 10.14344/IOC.ML.7.1). This note adds an additional species to the list of animals that prey on the eggs of *Podocnemis expansa* and also expands the list of food items known for the natural diet of *Porphyrio martinicus*.

JABSON FRANCO DA COSTA (e-mail: Jabson_biologia@hotmail.com), **ODEM ROCHA LOPES** (e-mail: odem.kottak@gmail.com), and **RICHARD C. VOGT**, Centro de Estudos dos Quelônios da Amazônia (CEQUA), Coordenacão de Biodiversidade, Instituto Nacional de Pesquisas da Amazônia (INPA), Av. André Araújo, 2936, Aleixo, Manaus, Amazonas, CEP 69060-001, Brazil (e-mail: vogt@inpa.gov.br).

***PODOCNEMIS UNIFILIS* (Yellow-spotted River Turtle). JUVENILE MOVEMENT.** *Podocnemis unifilis* plays key ecological roles in Amazonian aquatic ecosystems and has cultural and economic significance for indigenous peoples. This species is threatened by water pollution, subsistence hunting, and wildlife trafficking, and as a result, populations have been reduced significantly. Since 2008, the Wildlife Conservation Society in Ecuador, in partnership with nine indigenous communities, has implemented a management and conservation program for this species in the northern section of Yasuní National Park in Ecuador (0°31'14.70"S, 76°22'52.95"W). Program activities included headstarting and protection of nesting sites, analyses of movement patterns and population monitoring, and awareness building and education. Between August 2015 and June 2016, we radio-tracked 15 juvenile individuals in a 60-km section of the Napo River. Turtles were measured (mean straight-line carapace length ± SD = 107 ± 31.2 mm, and mean body mass ± SD = 272 ± 200 g) and fitted with a radio tracking transmitter (H467, Telenax, Mexico). Seven turtles were captive-reared for one year, and eight were wild-caught with the assistance of local community members. Turtles were released at their nesting beaches or capture locations in the Napo River. We radio-tracked the turtles on a daily basis, two weeks per month, using a handheld receiver (RX-RLNX, Telenax, Mexico) and a three-element Yagi antenna.

We recorded 59 locations from 15 individuals, and the tracking period ranged from 1 to 157 days. We were able to track captive-reared turtles from two to six months, whereas wild-caught turtles were tracked from two to three months. Mean linear range size was 5.9 km (N = 13, 95% CI = 2.82–9.15; range = 1–15.8), the mean traveled distance per individual was 23.3 km (N = 13, 95% CI = 9.36–37.38; range = 0.87–68.9); we estimated that the average distance traveled per individual per month was 7.8 km (N = 13, 95% CI = 3.7–12). Wild-caught turtles had a lower linear range (N = 6, χ^2 = 4.8 km, 95% CI = 0–10.5) and traveled less distance (N = 6, χ^2 = 4.9 km, 95% CI = 0–10.8) than captive-reared turtles (linear range: N = 7, χ^2 = 6.9 km, 95% CI = 2.1–11.8; traveled distance: N = 7, χ^2 = 39.1 km, 95% CI = 20–58). Nine out of 13 radiotracked turtles moved from the release site in the Napo River into tributaries.

Understanding the geographic distribution and movement behavior of freshwater turtles is crucial to ensure long-term conservation success. Unfortunately, the spatial ecology of *Podocnemis* turtles is poorly understood, and information on movement is only available for adult individuals of three species of the genus *(P. expansa*, Carneiro and Pezzuti 2015. Herpetol. Rev. 46:244–245; *P. erythrocephala*, Fachín-Terán et al. 2006. Chelon. Conserv. Biol. 5:18–24; and *P. unifilis*, Naveda-Rodríguez et al., in press. Chelon. Conserv. Biol. 17). Long distance movements and migration of juvenile *Podocnemis* turtles are expected; recently, a juvenile *P. expansa* was recorded to move 38 km from its release site in nine months (Silva et al. 2017. Herpetol. Rev. 48:622–623). To our knowledge, these are the first records of the movement and dispersal of juvenile *P. unifilis*. Because of the low sample size, we cannot make inferences or draw conclusions on the possible effects of captive management on the movement behavior observed here. Nonetheless, we suggest that the differences observed in linear range size and distance traveled might be influenced by familiarity with resource distribution and knowledge of the area that wild-caught turtles presumably have, whereas captive-reared turtles need to move more to get to know their new environment.

Moving forward, the conservation of *Podocnemis* turtles needs to take into account space use of individuals of all age classes. Sixty-nine percent of the individuals dispersed into tributaries where streamflow is lower than in the Napo River and outboard motor boat traffic does not occur. At present, efforts to protect *P. unifilis* in Ecuador are focused on protecting nesting beaches in the Napo River with less attention to possible human impacts in adjacent water bodies.

This work was made possible thanks to the financial support provided by The Overbrook Foundation, The Jeniam Foundation, and The Gordon and Betty Moore Foundation. The animal handling procedures used in this work were approved by the animal care and use committee of the National Office of Biodiversity of the Ministry of Environment of Ecuador through the research permits No. 021-2015-FAU-MAE-DPAO-PNY and 019-2016-IC-FAU-FLO-DPAO-PNY.

RUBÉN CUEVA, ADRIÁN NAVEDA-RODRÍGUEZ (e-mail: anaveda@wcs.org) and **GALO ZAPATA-RÍOS**, Wildlife Conservation Society, Ecuador Program, Quito, Ecuador.

***PSEUDEMYS GORZUGI* (Rio Grande Cooter). ATTRACTION TO TRAP BAITS.** *Pseudemys gorzugi* is a relatively large riverine turtle native to the lower Rio Grande River and its tributaries. It is a species of conservation concern and is currently listed as threatened in New Mexico, concurrent to its review for federal listing by the United States Fish and Wildlife Service. Overall, relatively little is known about this species' ecology and natural history (Ernst and Lovich 2009. Turtles of the United States and Canada, 2nd edition. Johns Hopkins Univ. Press, Baltimore, Maryland. 827 pp.). Therefore, it is important to evaluate the best techniques for maximizing capture success during surveys. Baited hoop net trapping is one of the oldest and most common techniques used to capture freshwater turtles; however, research has shown that biases can exist among turtle species and their bait preferences (Mali et al. 2014. Wildl. Soc. Bull. 38:580–585). Despite extensive research, no one has tested bait preferences or successful hoop net trapping methodologies for *P. gorzugi*. In general, riverine cooter species are predominantly herbivorous as adults (Lindeman 2007. Southwest. Nat. 52:586–594), and thus baited hoop net traps may not be the most appropriate survey method. For example, snorkel surveys yielded higher River Cooter (*Pseudemys concinna*) counts than baited hoop nets (Sterrett et al. 2010. Herpetol. Conserv. Biol. 5:490–497), and ongoing research on *P. gorzugi* in Texas has been the most successful through snorkeling (M.R.J. Forstner, pers. comm.).

In 2016, we began surveys of *P. gorzugi* along the Black River in Eddy County, New Mexico, USA, using baited hoop net

traps. Hoop nets were single-opening, single-throated, wide-mouthed with a 76.2 cm diameter, and a mesh size of 2.54 cm with four hoops per net (Memphis Net and Twine Co. Memphis, Tennessee, USA). To stretch the traps, two wooden posts connected the first and last hoop. Hoop net mouth openings faced downstream, and the trap consisted of one bait cup with multiple perforations to allow scent to disperse without bait consumption; a pool noodle was used as a floatation device. During the first four days of the survey in 2016, we alternated between fruit/vegetable (fresh mangoes and romaine lettuce) and fish (canned sardine) based baits. After the first 100 trap days, capture per unit effort (CPUE) for sardine-baited traps was over three times more successful than captures with mango and lettuce-based baits. Our higher success with sardines prompted us to use sardine and shrimp baits throughout the rest of the season, resulting in a total of 208 captures over 1368 trap days. During the 2017 field season, we sought to specifically test sardine and shrimp-based baits to fine tune our trapping methodology. Moreover, we sought to determine whether turtle size affected bait preferences, especially given a possible ontogenetic diet shift (i.e., more carnivorous to more herbivorous) previously reported in emydid turtles (Clark and Gibbons 1969. Copeia 1969:704–706). In 2017, we set the traps along six stretches of river for 4–6 days. River stretches ranged from 350 to 700 m in length with 20–50 hoop nets. We alternated the traps with either raw shrimp or sardines canned with canola oil. Traps were checked every day and bait replaced every other day.

For each captured *P. gorzugi*, we recorded trap location and bait type. We took standard measurements (carapace and plastron length and width, body depth, and mass) and determined sex. Turtles were also marked by either passive integrated transponders (subadults), toe clips (juveniles/hatchlings), or by notching marginal scutes (adults). To correlate capture success to bait type (sardine vs. shrimp), we used Generalized Linear Mixed Effects Model (GLMM) and treated each individual turtle as a random effect since multiple captures of the same turtle may not be considered independent captures. For each bait type, we recorded a response variable as 1 or 0 if an individual turtle was captured or not, respectively. The model included turtle size (straight-line carapace length) and bait type (sardine or shrimp) as fixed effects.

In 2017, after 1280 trap days, we caught a total of 302 *P. gorzugi*, including 76 recaptures; 194 were adults and 108 were unsexed juveniles or hatchlings. There was no significant bait preference among all turtles (P = 0.76) and we were not more likely to capture smaller turtles (P = 0.80). Furthermore, there was no significant interaction between the bait type and turtle size (P = 0.79). Overall, our results show no significant preference for either shrimp or sardine bait for *P. gorzugi* along the Black River, New Mexico. Moreover, the lack of a relationship between capture success and turtle size shows that baited hoop nets can capture a variety of size classes of this species. Presumed ontogenetic diet shifts in *Pseudemys* turtles did not seem to affect captures of *P. gorzugi* and our results suggest that baited hoop net traps, using fish or shrimp-based baits, can successfully be employed to capture *P. gorzugi* in New Mexico.

JAZMIN MIRABAL, **ANDREW W. LETTER**, **KORRY J. WALDON**, and **IVANA MALI**, Eastern New Mexico University, Department of Biology, Station 33, 1500 S Ave K, Portales, New Mexico 88130, USA (e-mail: ivana.mali@enmu.edu).

***STERNOTHERUS ODORATUS* (Eastern Musk Turtle). PREDATION.** Red-shouldered Hawks (*Buteo lineatus*) are known to consume a wide range of reptilian prey (Ross 1991. Amphibians and Reptiles in the Diets of North American Raptors. Wisconsin Endangered Resources Report 59:1–33). *Sternotherus odoratus* is among the turtle species documented as prey of *B. lineatus* (Walsh and Heinrich 2015. Florida Field Nat. 43:79–85). Herein we report an occurrence of predation of several *S. odoratus* by a nesting *B. lineatus*.

In the spring of 2011, a female *B. lineatus* was observed by local residents nesting in a pecan tree ca. 10 m above the ground and within 15 m of the edge of the San Saba River (near Dunagan Road) in Menard County, Texas, USA. In June 2011 at 1315 h, CJF was searching for turtles in the shallow sections of this river within 100 m of the previously mentioned hawk's nest when he encountered an adult *B. lineatus* walking in the water and looking down. The lower half of the bird's body was in the water, but the wings were held slightly elevated and above the surface. Upon noticing my presence, the hawk took flight. This particular section of the San Saba River is shallow, flows over a limestone bottom, and the water is clear with good visibility. In July 2012, CJF was informed by a local resident that he had gathered Eastern Musk Turtle shells from under the nest and filled two five-gallon buckets which he subsequently gave away to children. Twenty complete shells, six carapace fragments, and one plastron representing 27 individual specimens were subsequently found at the base of the tree. The shells were collected and deposited at the Amphibian and Reptile Diversity Research Center at the University of Texas at Arlington (UTA R- 64336–64353 and 64656–64664). Shell measurements were taken with digital calipers to the nearest millimeter. Only intact shells were measured. Mean shell dimensions were carapace length 77.71 mm, carapace width 53.89 mm, shell height 30.92 mm, N = 20. Given the mean dimensions of the shells and their volumetric occupancy in a one-gallon jar we can estimate that the two buckets contained as many as 200 shells prior to collection of the UTA R- series.

Observations made from April 2000 to November 2016 indicate that several *S. odoratus* were often seen openly patrolling the shallows at dawn and dusk from April to August. This section of the river is bordered by private property and contains a robust turtle population consisting of *S. odoratus*, *Pseudemys texana*, *Graptemys versa*, *Trachemys scripta*, *Apalone spinifera*, and *Chelydra serpentina*. It is likely that the overlapping activity periods of hawks and Eastern Musk Turtles, as well as the small size of the turtles that are active in clear, shallow water favored their selection as prey items to the exclusion of other potential chelonian fare.

CARL J. FRANKLIN. Amphibian and Reptile Diversity Research Center at the University of Texas at Arlington, Department of Biology, 501 East Nedderman Drive. Arlington, Texas 76010, USA (e-mail: Franklin@uta.edu); **VIVIANA RICARDEZ**, 326 Choctaw Trail Waxahachie, Texas 75165, USA (e-mail: Vricardez@gmail.com).

SQUAMATA — LIZARDS

***ACANTHODACTYLUS AEGYPTIUS* (Egyptian Fringed-fingered Lizard). TAIL BIFURCATION.** *Acanthodactylus aegyptius* is a small, diurnal, sand dwelling, insectivorous lizard. It prefers loose sandy areas on top of dunes with some vegetation cover (Baha El Din 2007. Zool. Mid. East 40:21–32). This species is distributed in eastern Egypt, across Northern Sinai, along the western periphery of the Nile Valley, to the sands of the north-western