

**HEMIDACTYLUS TURCICUS (Mediterranean Gecko). COMMUNAL NESTING.** Communal nesting is a common reproductive strategy in reptiles and amphibians, though the function of this behavior remains unclear (Doody et al. 2009. Q. Rev. Biol. 84:229–252). Published records of communal nesting in *H. turcicus*, are mostly opportunistic sightings (Trauth 1985. Southwest. Nat. 30:309–310; Paulissen and Buchanan 1991. J. Arkansas Acad. Sci. 45:81–83; Wessels et al. 2018. J. Herpetol. 52:215–222). Here, we document long-term fidelity to communal nest sites in *H. turcicus* and quantify use of communal nest sites over one reproductive season.

In 2006, Locey and Stone (2007. Herpetol. Rev. 38:455–456) documented communal nest sites in three storm drains on the University of Central Oklahoma (UCO) campus (35.65503°N, 97.47302°W; WGS 84). Drains were at least 30 m from the nearest building (see Fig. 1 in Locey and Stone 2007, *op. cit.*). In 2017, we observed a clutch of two eggs in one of the same drains. This observation prompted us to survey storm drains for evidence of nesting during 2018. We conducted 28 surveys, two per week from 3 May 2018 to 3 October 2018. Each time we surveyed a group of six storm drains, including the three drains where *H. turcicus* eggs were observed in 2006 (Locey and Stone 2007, *op. cit.*). Surveys were conducted in late afternoon or evening. Using flashlights, we located eggs visually and by gently raking the top 10 cm of leaf litter with fingers. For each drain, we recorded the number and general location of gecko eggs, and whether gecko eggshells or geckos were present. Due to the structure of drains, the only area that could be adequately searched was the street-level shelf above the main drain. The depth and length of the drain prevented us from searching some suitable areas and likely caused us (and Locey and Stone 2007, *op. cit.*) to underestimate total egg number.

Three storm drains were used as nest sites, with maximum egg numbers of 6, 5, and 3. The same three storm drains were used for nesting in 2018 and 2006 (see Fig. 1 in Locey and Stone 2007, *op. cit.*). Eggs were concealed under foliage and debris, and typically observed in clutches of two, as characteristic for *H. turcicus* (Selcer 1986. Copeia 1986:956–962). Clutches were separated from other clutches by 5–15 cm. Unpaired eggs were observed later in the summer, likely as weather events dislodged eggs. We observed the first clutch in Drain 1 on 14 June 2018. Two additional clutches were observed in Drain 1 on 26 June 2018. On 29 June 2018, we found a clutch in Drain 2, and 4 d later we detected a second clutch. On 23 July 2018, we found three eggs in Drain 3, however eggs were not seen in this drain on subsequent visits. Total number of eggs peaked at 10 eggs on 3 July 2018 and began to decline by 23 July 2018. Eggs were absent after 26 July 2018. Egg shell fragments were first observed on 15 July 2018 and were absent after 1 August 2018. Geckos were occasionally observed ( $n = 8$ ) in drains, including two gravid females in Drain 1 on 10 May 2018.

Selcer (1986, *op. cit.*) suggested *H. turcicus* reused nesting sites for early and late clutches, and Punzo (2001. Florida Sci. 64:56–66) documented nest site fidelity over the course of two years. Our observations demonstrate nest site fidelity in *H. turcicus* across multiple generations.

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**LACERTA AGILIS (Sand Lizard). CANNIBALISM.** *Lacerta agilis* is one of the most common lacertid species in Europe. Due to its relatively high abundance it is widely used in ecological research and many aspects of its biology, including predator-prey relationships and diet composition, are well recognized (Blanke and Fearnley 2015. The Sand Lizard: Between Light and Shadow. Laurenti Verlag, Bielefeld, Germany. 192 pp.). Sand Lizards have been found to feed almost exclusively on invertebrates (Blanke and Fearnley 2015, *op. cit.*). Cannibalistic behaviors have also been indicated, but on very rare occasions (Eckhardt and Richter 1997. Die Eidechse 8:60–61). Here, we provide a detailed description of an observation of a successful cannibalistic attack on juvenile Sand Lizard.

In August 2007 in the Bolestraszyce Arboretum, southeastern Poland, a case of cannibalism in Sand Lizards was recorded. An adult female was observed basking on the edge of garden plot and 11 newborn Sand Lizards were observed around the female. The female remained sedentary, not actively moving towards juveniles, but each time when a juvenile came close, the female would move her head and increased her tongue flicking rate. One juvenile lizard that moved directly next to the female's head was bitten on the head (Fig. 1A, 1B). The juvenile tried to escape, but was swallowed in one piece, which took less than 5 min (Fig. 1C, 1D). The female was observed another for 30 min, but no further attempts of predation were reported, even when other juveniles came close. The predation even did not affect the behavior of other nearby juveniles.

Our observation clearly shows that cannibalistic behavior does occur in Sand Lizards. Such cannibalism has recently been proposed as a factor that regulates spatial structure of the population in another temperate squamate, the Smooth Snake (Drobenkov 2000. Russ. J. Herpetol. 7:135–138; Kolanek et al. 2019. Animals 9:995). However, in our report, cannibalism did not seem to affect the behaviors of nearby juveniles, and when taken together with its rare occurrence, suggests cannibalism may play a minor role in population regulation. This stands contrary to previous postulates (Berglind 2000. Ecol. Bull. 48:123–142), and thus requires further and more detailed studies.

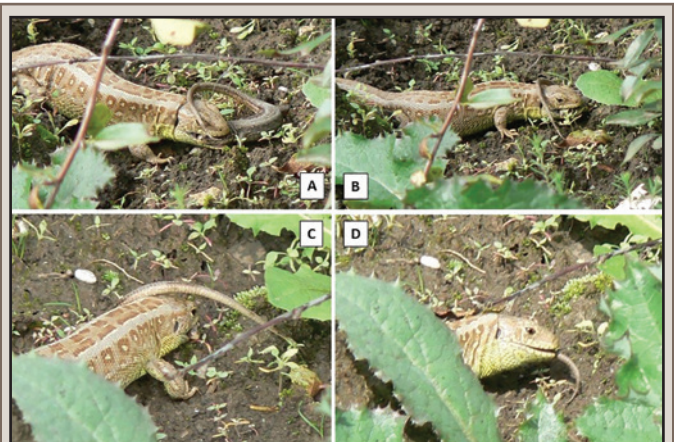


FIG. 1. Sequence of cannibalistic attack of an adult female *Lacerta agilis* on a juvenile.

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