



Observations of Southern Italian Wall Lizards (*Podarcis siculus siculus*) Scavenging Artificial Foods in the Province of Messina, Sicily, Italy

Matthew Mo and Elouise Mo

Sydney, New South Wales, Australia (matthew.sk.mo@gmail.com)

Photographs by the authors.

The Italian Wall Lizard or Ruin Lizard (*Podarcis siculus*) is a lacertid lizard naturally occurring on the Italian Peninsula, the island of Sicily and adjacent parts of southern Europe (Speybroeck et al. 2016). These opportunistic lizards, effectively habituated to urban situations (Putman et al. 2020), have successfully colonized areas far from their native range, including the United States of America (Kolbe et al. 2013) and Russia (Tuniyev et al. 2020). The spread of the species at least in part has been aided by its generalist diet, which consists mainly of invertebrates (Capula et al. 1993; Rugiero 1994; Bonacci et al. 2008), but can extend to

other reptiles, including conspecifics, small mammals (Capula and Aloise 2011; Zuffi and Giannelli 2013), and plant matter including seeds and fruit (Pérez-Mellado and Corti 1993; Mačát et al. 2015). Here, we report observations of the nominate subspecies scavenging artificial foods.

Italian Wall Lizards are common in the streets and public gardens of Taormina (37.850904°N, 15.289437°E), a seaside town in the Province of Messina in northeastern Sicily. On 10 May 2019, we observed lizards scavenging pieces of cheese that had fallen to the ground from a picnic table. Our first observation involved a rectangular piece of parmesan cheese



Fig. 1. An Italian Wall Lizard (*Podarcis siculus*) nips at a piece of parmesan cheese (top) before seeing off a conspecific (bottom).



Fig. 2. An Italian Wall Lizard (*Podarcis siculus*) watches picnickers from a rock wall (top) and snatches up a piece of cheese that fell to the ground (bottom).

approximately 1 x 4 cm. A lizard approached cautiously, paused next to the cheese, appeared vigilant for approximately 30 seconds, then lowered its snout as if to sniff the cheese before nipping at the side of it and dislodging a morsel with a brief shake (Fig. 1). A second lizard approached and was met by the first. After a brief standoff, the first lizard chased off the interloper and resumed nipping at the cheese. It was subsequently disturbed and driven into nearby vegetation by passing people. We remained in the area for a further 10 minutes but did not see the lizard reappear.

On the same day, we sighted another Italian Wall Lizard emerging from a rock wall showing interest in a group of picnickers. When a small morsel of cheese was dropped from the table, this lizard immediately descended to the ground, consumed the cheese (Fig. 2), and remained in place for a few seconds before scampering back to the wall.

We also encountered a population of Italian Wall Lizards inhabiting an agricultural area on the outskirts of Graniti, Sicily (37.878972°N, 15.213753°E). The lizards were associated with rockeries, rock walls, logs, or tree stumps, but particularly abundant near homesteads, where refugia were readily available. On 11 May 2019, we spilled a few pieces of freshly cooked pastina where lizards sometimes basked. After two hours, a lizard approached one of the pieces (Fig. 3), spent approximately 2 minutes sizing it up before mouthing it repeatedly and finally shaking off a morsel. The lizard held the morsel in its mouth for some time but eventually swallowed it. After several minutes this lizard again nipped at the

pastina. After swallowing a second morsel, it lost interest and scampered away. We left the remaining pieces for the rest of the day, but they did not appear to attract any further interest from lizards.

That Italian Wall Lizards sought artificial food, even when humans were present, matched descriptions of them being active foragers (Vervust et al. 2010; Capula and Aloise 2011) that sometimes are drawn to motionless food items (e.g., carrion and plant matter; Capula and Aloise 2011; Mačát et al. 2015). Scavenging food scraps from humans has been reported for a range of lizard taxa (e.g., Uyeda 2009; Mo and Mo 2021). Such reports demonstrate an ecological adaptability of species that enhances their ability to colonize human settlements.

Literature Cited

- Bonacci, T., G. Aloise, P. Brandmayr, T. Zetto Brandmayr, and M. Capula. 2008. Testing the predatory behavior of *Podarcis sicula* (Reptilia: Lacertidae) towards aposematic and non-aposematic prey. *Amphibia-Reptilia* 29: 449–453.
- Capula, M. and G. Aloise. 2011. Extreme feeding behaviours in the Italian Wall Lizard, *Podarcis siculus*. *Acta Herpetologica* 6: 11–14. https://doi.org/10.13128/Acta_Herpetol-9573.
- Capula, M., L. Luiselli, and L. Rugiero. 1993. Comparative ecology in sympatric *Podarcis muralis* and *P. sicula* (Reptilia: Lacertidae) from the historical centre of Rome: what about competition and niche segregation in an urban habitat? *Bollettino di Zoologia* 60: 287–291. <https://doi.org/10.1080/11250009309355825>.
- Kolbe, J.J., B.R. Lavin, R.L. Burke, L. Rugiero, M. Capula, and L. Luiselli. 2013. The desire for variety: Italian Wall Lizard (*Podarcis siculus*) populations introduced to the United States via the pet trade are derived from multiple native-range sources. *Biological Invasions* 15: 775–783. <https://doi.org/10.1007/s10530-012-0325-7>.



Fig. 3. An Italian Wall Lizard (*Podarcis siculus*) negotiates morsels from a piece of pasta.

Mačát, Z., M. Veselý, and D. Jablonski. 2015. New case of fruit eating observation in *Podarcis siculus* (Rafinesque-Schmaltz, 1810) (Lacertidae) from Croatia. *Biharean Biologist* 9: 158–159.

Mo, M., and Mo, E. 2021. Six nights in Bali: Wildlife on our holiday in the Gianyar Regency, Indonesia. *Reptiles & Amphibians* 28: 165–181.

Pérez-Mellado, V. and C. Corti. 1993. Dietary adaptations and herbivory in lacertid lizards of the genus *Podarcis* from western Mediterranean islands (Reptilia: Sauria). *Bonner Zoologische Beiträge* 44: 193–220.

Putman, B.J., G.B. Pauly, and D.T. Blumstein. 2020. Urban invaders are not bold risk-takers: a study of three invasive lizards in Southern California. *Current Zoology* 66: 657–665. <https://doi.org/10.1093/cz/zoaa015>.

Rugiero, L. 1994. Food habits of the Ruin Lizard, *Podarcis sicula* (Rafinesque-Schmaltz, 1810), from a coastal dune in Central Italy. *Herpetozoa* 7: 71–73.

Speybroeck, J., W. Beukema, B. Bok, and J. van der Voort. 2016. *Field Guide to the Amphibians and Reptiles of Britain and Europe*. Bloomsbury Publishing

Plc, London, UK.

Tuniyev, B.S., L.M. Shagarov, and O.J. Arribas. 2020. *Podarcis siculus* (Reptilia: Sauria: Lacertidae), a new alien species for Russian fauna. *Proceedings of the Zoological Institute RAS* 324: 364–370. <https://doi.org/10.31610/trudyzin/2020.324.3.364>.

Uyeda, L. 2009. Garbage appeal: Relative abundance of water monitor lizards (*Varanus salvator*) correlates with presence of human food leftovers on Tinjil Island, Indonesia. *Biwak* 3: 9–17.

Vervust, B., P. Pafilis, E.D. Valakos, and R.V. Damme. 2010. Anatomical and physiological changes associated with a recent dietary shift in the lizard *Podarcis sicula*. *Physiological and Biochemical Zoology* 83: 632–642. <https://doi.org/10.1086/651704>.

Zuffi, M.A.L. and C. Giannelli. 2013. Trophic niche and feeding biology of the Italian Wall Lizard, *Podarcis sicula campestris* (De Betta, 1857) along western Mediterranean coast. *Acta Herpetologica* 8: 35–39. https://doi.org/10.13128/Acta_Herpetol-11577.