

A Flat-tailed House Gecko (Hemidactylus platyurus) Preying on a Lesser Brown Scorpion (Isometrus maculatus)

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Plat-tailed House Geckos (*Hemidactylus platyurus*) generally are thought to be insectivorous but actually are opportunistic omnivores (Weterings 2017). Like other house geckos, this species often lives in close association with humans and is known to forage for insects attracted to artificial lights (e.g., Perry et al. 2008). Flat-tailed House Geckos in particular take mostly soft-bodied insects, possibly due to their ease of digestion and energy efficiency, and apparently avoid harder-bodied prey like Coleoptera and Heteroptera (Tkaczenko et al. 2014).

At 2050 h on 18 August 2024, we observed a *Hemidactylus platyurus* preying on a Lesser Brown Scorpion (*Isometrus maculatus*) in the Geetanagar area of Guwahati, Assam, India (26.174242, 91.800523) (Fig. 1). Scorpions are not part of the documented diet of *H. platyurus*, reinforcing the notion that these geckos are opportunistic predators capable of exploiting a wide range of prey types.

Although predation of scorpions by geckos has not been widely reported, instances of geckos preying on scorpions or other potentially dangerous arthropods have been documented for species of similar size. For example, *Geckolepis*

maculata (Glaw et al. 2002), Hemidactylus mabouia (de Albuquerque 2012), and Aristelliger georgeensis (White et al. 2017) are known to prey on scorpions. Additionally, geckos such as Ptyodactylus spp. demonstrate tolerance to scorpion venom and predatory behavior toward scorpions (Zlotkin et al. 2003), suggesting that geckos, possibly including H. platyurus, could possess behavioral or physiological adaptations that allow them to prey on scorpions. Interestingly, geckos are not only predators of scorpions but can also be their prey (Bauer 1990; Nicolau et al. 2022), indicative of a complex predator-prey dynamic.

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Literature Cited

Bauer, A.M. 1990. Gekkonid lizards as prey of invertebrates and predators of vertebrates. *Herpetological Review* 21: 83–87.

de Albuquerque, S. 2012. *Hemidactylus mabouia* (Wood Slave). Predation. *Herpetological Review* 43: 646–647.

Glaw, F., M. Vences, and W.R. Lourenço. 2002. Geckolepis maculata (Spotted



Figure 1. A Flat-tailed House Gecko (*Hemidactylus platyurus*) feeding on a Lesser Brown Scorpion (*Isometrus maculatus*) in Guwahati, Assam, India. Photograph by Pranjal Swargiary.

- Fishscale Gecko). Predation. Herpetological Review 33: 135.
- Nicolau, G.K., N. Evens, and R. van Hyssteen. 2022. *Afroedura pondolia* (Pondo Flat Gecko) and *Afroedura pienaari* (Pienaar's Flat Gecko). Predation. *Herpetological Review* 53: 675–676.
- Perry, G., B.W. Buchanan, R.N. Fisher, M. Salmon, and S.E. Wise. 2008. Effects of artificial night lighting on amphibians and reptiles in urban environments, pp. 239–256. In: J.C. Mitchell, R.E. Jung Brown, and B. Bartholomew (eds.), *Urban Herpetology*. Herpetological Conservation 3, Society for the Study of Amphibians and Reptiles, Salt Lake City, Utah, USA.
- Tkaczenko, G.K., A.C. Fischer, and R. Weterings. 2014. Prey preference of the Common House Geckos *Hemidactylus frenatus* and *Hemidactylus platyurus*.

- Herpetology Notes 7: 483–488.
- Weterings, R. 2017. Observations of an opportunistic feeding strategy in flat-tailed house geckos (*Hemidactylus platyurus*) living in buildings. *Herpetology Notes* 10: 133–135.
- White, B.A., L.N. Gray, C.J. Pavón-Vázquez, U.O. García-Vázquez, and A.S. Harrison. 2017. *Aristelliger georgeensis* (Saint George Island Gecko). Diet. *Herpetological Review* 48: 637.
- Zlotkin, E., T. Milman, G. Sion, and Y.L. Werner. 2003. Predatory behavior of gekkonid lizards, *Ptyodactylus* spp., towards the scorpion *Leiurus quinquestriatus hebraeus*, and their tolerance of its venom. *Journal of Natural History* 37: 641–646.