Short Note

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First record of predation by the Algerian Hedgehog (*Atelerix algirus*) on the Horseshoe Whip Snake (*Hemorrhois hippocrepis*) in Mallorca (Balearic Islands, Spain)

Primer registro de depredación de erizo moruno (*Atelerix algirus*) sobre culebra de herradura (*Hemorrhois hippocrepis*) en Mallorca (Islas Baleares, España)

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The Algerian Hedgehog *Atelerix algirus* (Lereboullet, 1842) is a species whose native distribution extends from Mauritania to Libya, and its non-native range is restricted to the Balearic and Canary Islands, and eastern and southern Iberian Peninsula (Ortiz-Jiménez 2021). This species was likely established in Spain centuries ago, following an ancient human-mediated introduction. It typically inhabits lowlands characterized by open shrubland, dry grasslands, and agricultural mosaics, often associated with anthropogenic structures (Alcover 2007).

Ecologically, *A. algirus* is classified as a generalist insectivore. Its natural trophic niche is dominated by terrestrial invertebrates, primarily formicids and, to a lesser extent, coleopterans, lepidopteran larvae, and orthopterans (Ortiz-Jiménez 2021). However, despite its long-lasting presence in the Balearic Islands, the diet of *A. algirus* has never been formally studied in the archipelago, and current knowledge relies exclusively on studies from its native range. Although small vertebrates may occasionally be consumed, they constitute a marginal dietary component representing <0.05% of items in quantitative analyses (Mouhoub-Sayah *et al.* 2018). Furthermore, direct observations of predation on vertebrates are exceptionally rare, and records involving snakes are extremely scarce in literature (Di Nicola *et al.* 2022). Consequently, documentation of such interactions provides critical insight into the plasticity of this species trophic ecology.

Here, we report the first record of *A. algirus* actively preying upon Horseshoe Whip Snake *Hemorrhois hippocrepis* (Linnaeus, 1758) in Mallorca. On 22 October 2025, at 18:30 h (UTC+2), an adult *A. algirus* was observed and video-recorded ingesting a juvenile *H. hippocrepis* in a private garden within Es Trenc - Es Salobrar Natural Park, Campos, Mallorca (39°22'15"N, 3°00'16"E; 0.81 m a.s.l.) (see video in https://youtube.com/shorts/vfCa0eGHQRA?feature=share). Although the event took place on gravel substrate within the garden, the surrounding landscape consists of extensive dryland crops interspersed with typical patches of Mediterranean scrub.

Upon detection, the hedgehog was in the process of ingesting the snake head-first. Approximately half of the posterior body of the prey remained protruding from the oral cavity. The video began when hedgehog was already consuming the snake, and therefore the initial predation event was not observed. The hedgehog exhibited a firm grasp, utilizing its forelimbs to stabilize the prey during ingestion (Fig. 1). Notably, the lack of tissue desiccation, the absence of necrotic smell, and the presence of residual reflex movements in the tail strongly indicated that the prey had been killed immediately prior to the observation. Taken together, these observations strongly support active predation over scavenging.

The behaviour described herein suggests a departure from the insectivorous dietary patterns commonly described for the species. The head-first ingestion is consistent with adaptive behaviours to neutralize prey struggles (Mukherjee & Heithaus 2013), further suggesting a predatory event. Moreover, this record is particularly relevant in the

Figure 1. Partial sequence showing *A. algirus* ingesting a juvenile *H. hippocrepis*. **A)** General view of the hedgehog holding approximately half of the snake's body in its mouth; **B)** close-up showing the hedgehog grasping the snake with its right foreleg; **C)** stretching the snake prior to ingestion; **D)** mastication of soft tissues. Original frames extracted from a video recorded by Corrado Bigi.

context of biological invasions. *H. hippocrepis* is an introduced colubrid in the Balearic Islands, first detected in 2003 (Pinya & Carretero 2011), that has undergone rapid demographic expansion, with severe impacts on endemic lizard species (Hinckley *et al*. 2017). While predation on this snake by native species such as *Ardea cinerea* Linnaeus, 1758 (Solà *et al.* 2015) and naturalized introduced species such as *Macroprotodon mauritanicus* (Guichenot, 1850) has been documented (Pantoja & Pinya 2025), this note identifies *A. algirus* as an additional potential native predator. Consequently, this observation highlights the capacity of *A. algirus* for opportunistic exploitation of novel vertebrate prey and sheds light into the trophic integration of *H. hippocrepis* into the insular food web.

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