Short communication

Predation of Philippine paradise flying snake *Chrysopelea paradisi variabilis* Mertens 1968 on Philippine emerald tree skink *Lamprolepis smaragdina philippinica* (Mertens 1928) on Negros Island, Philippines

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Abstract - Here we present an observation of an adult Philippine paradise flying snake *Chrysopelea paradisi variabilis* preying on an emerald tree skink *Lamprolepis smaragdina* in Valencia, Negros Oriental, on 2 March 2025. The event occurred on a solitary tree at 296 m a.s.l. and lasted 20 minutes, with 15 minutes devoted to swallowing the prey. The snake displayed the diagnostic slender body, flattened head with yellow-orange bands, and dark dorsum with yellow-green spotting characteristic of the subspecies. The prey was identified by its lime-green colouration, black-edged scales, and pointed head. Both species occur in secondary forest-edge to disturbed habitats. This observation is consistent with previous reports of *C. p. variabilis* preying on small vertebrates, including a similar record involving *L. smaragdina* documented near Dumaguete. Our record, which includes a video documentation of the entire predation sequence, reinforces the species' role as an arboreal predator and contributes to ongoing documentation of predator-prey relationships in Philippine colubrids.

Key words: arboreal snake, effective swallowing, predation behaviour, predator-prey dynamics, rapid prey capture.

Riassunto - Predazione del serpente volante del paradiso delle Filippine *Chrysopelea paradisi variabilis* Mertens, 1968 ai danni dello scinco arboricolo smeraldino delle Filippine *Lamprolepis smaragdina philippinica* (Mertens, 1928), sull'isola di Negros, Filippine.

Presentiamo l'osservazione di un esemplare adulto di serpente volante del paradiso delle Filippine *Chrysopelea paradisi variabilis* che preda uno scinco arboricolo smeraldino delle Filippine *Lamprolepis smaragdina philippinica*, a Valencia, nella provincia di Negros Oriental, il 2 marzo 2025. L'evento è avvenuto su un albero isolato a 296 m s.l.m., protraendosi per complessivi 20 minuti, 15 dei quali impiegati nell'ingestione della preda. L'esemplare di *C. p. variabilis* presentava i caratteri diagnostici tipici della sottospecie, tra cui il corpo slanciato, il capo appiattito con bande giallo-arancioni e il dorso scuro ornato da una punteggiatura giallo-verde. La preda è stata identificata sulla base della caratteristica colorazione verde lime, delle squame con margini neri e del capo appuntito. Entrambe le specie frequentano ambienti margini di foreste secondarie e aree alterate dall'uomo. L'osservazione è coerente con precedenti segnalazioni di *C. p. variabilis* quale predatore di piccoli vertebrati, tra cui un caso analogo di predazione ai danni di *L. smaragdina* nei pressi di Dumaguete. La presente osservazione, corredata dalla documentazione video dell'intera sequenza predatoria, fornisce un ulteriore contributo alla conoscenza delle abitudini trofiche della specie e ne conferma il ruolo di predatore arboricolo. Essa contribuisce inoltre alla crescente documentazione delle interazioni predatore-preda tra i colubridi delle Filippine.

Parole chiave: comportamento di predazione, dinamiche preda-predatore, ingestione completa, rapida cattura della preda, serpente arboricolo.

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On 2 March 2025, 11:36 h, we observed an adult Philippine paradise flying snake *Chrysopelea paradisi variabilis* stalking, incapacitating, and eventually consuming an emerald tree skink *Lamprolepis smaragdina philippinica* (Fig. 1). The predation lasted 20 minutes, with a total of 15 minutes spent swallowing the skink. Both individuals were found on a solitary tree (Family: Euphorbiaceae), 0.30 m from the ground, at Forest Camp Resort, Taft Street, Valencia, Negros Oriental (N 09.28732°, E 123.12100°) at 296 m a.s.l. The area, located within Cuernos de Negros Key Biodiversity Area, is situated next to a wide stream where we observed other reptiles and amphibians, such as *Dendrelaphis marenae*, *Hydrosaurus pustulatus, Eutropis multifasciata*, and *Limnonectes visayanus*.

We distinguished *C. p. variabilis* by its (1) slender, cylindrical body, (2) relatively flattened head with five yellow-orange bands, (3) dark dorsal coloration with yellow-green spots, and (4) yellowish-green ventral coloration with keeled scalation. Lighter morphs may display reddish-brown coloration with black-bordered keeled scales and interspersed light reddish dorsal bands. The species is sympatric with other tree-dwelling snake species found in the Negros-Panay Islands, such as *D. marenae*, *Ahaetulla prasina preocularis*, and

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Fig. 1 - *Chrysopelea paradisi variabilis* securing an incapacitated *Lamprolepis smaragdina philippinica* (above) and consuming it (below). / *Chrysopelea paradisi variabilis* che immobilizza un esemplare incapacitato di *Lamprolepis smaragdina philippinica* (sopra) e lo ingerisce (sotto).

Tropidolaemus subannulatus (Brown & Alcala, 1961; Ferner *et al*., 2001; Alcala *et al*., 2004). This arboreal species, known for its ability to glide between tree canopies by extending its ribs (Socha, 2002; 2005; 2011), is typically encountered in tropical and subtropical forests but can also be observed along forest edges. The subspecies *C. p. variabilis* is a Philippine endemic.

The prey, *L. smaragdina philippinica*, on the other hand, is distinguished by its (1) typically vibrant lime-green coloration, although some individuals exhibit paler or light brown hues along the lower half of the body, (2) black-edged dorsal and lateral scales, and (3) pointed, tapering head. The Emerald Green Skink is a moderate-sized arboreal skink commonly found in secondary forests and disturbed habitats, including agricultural lands, gardens, and urban areas. Similar arboreal lizards that may co-occur with this species in the same habitats, include *Lipinia pulchella*, *H. pustulatus*, and *Draco spilopterus* (Brown & Alcala, 1961; Ferner *et al*., 2000; Alcala *et al*., 2004). Both the predator and the prey species are frequently encountered in human-modified landscapes, particularly along the margins of secondary forests. *C. p. variabilis* is a known predator of small vertebrates and invertebrates, with documented predation on *Bronchocela cristatella* (Lim & Peral, 1959), *Gekko horsefieldi* (Mačat *et al*., 2016), *Gekko monarchus* (Quah & Grismer, 2024) and *Lepidodactylus herrei* (Maglangit *et al*., 2021). The current observation represents an additional instance of predation by *C. p. variabilis* on *L. smaragdina*, consistent with previous reports. Gaulke (1986) documented a similar interaction in a mangrove-bamboo forest near Dumaguete.

In the present case, the snake required approximately 20 minutes to consume the skink (3 minutes to incapacitate, 18 minutes to swallow, and 2 minutes of post-ingestion recovery). The event was documented through video recording and photographs (Fig. 1). The similarity of this observation with Gaulke's report suggests that *C. p. variabilis* employs a consistent predation strategy, characterized by swift incapacitation of prey followed by efficient ingestion and subsequent retreat to arboreal cover for digestion.

The predation behavior of *C. p. variabilis* on *L. smaragdina* reinforces the species' ecological role as a versatile arboreal predator capable of subduing and consuming a range of small vertebrates. The observed predation record corresponds with the known feeding behavior of arboreal snakes, which typically involves rapid prey capture, effective swallowing, and retreat to foliage for post-ingestion protection. These findings contribute to the growing body of knowledge on the feeding ecology and behavioral strategies of arboreal colubrids in tropical ecosystems. Continued documentation of such interactions will provide further insight into predator-prey dynamics and the ecological adaptations of arboreal snake species.

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REFERENCES

Alcala E.L., Alcala A.C., & Dolino C.N., 2004 – Amphibians and reptiles in tropical rainforest fragments on Negros Island, the Philippines. *Environmental Conservation,* 31 (3): 254-261. <https://doi.org/10.1017/S0376892904001407>

Brown W.C. & Alcala A.C., 1961 – Populations of amphibians and reptiles in the submontane and montane forests of Cuernos de Negros, Philippine Islands. *Ecology,* 42 (4): 628-636. <https://doi.org/10.2307/1933494>

Ferner J.W., Brown R.M., Sison R.V. & Kennedy R.S., 2001 – The amphibians and reptiles of Panay Island, Philippines. *Asiatic Herpetological Research*, 9: 34-70. <https://doi.org/10.5962/bhl.part.15561>

Gaulke M., 1986 – The prey-capturing behavior of *Chrysopelea paradisi*. *Salamandra*, 22 (2-3): 211-212.

Lim B.L. & Bin Peral H., 1959 – Paradise tree snake versus green crested lizard. *Malayan Nature Journal*, 14 (1): 33-34.

Mačat Z., Ahmad Sah H.H. & Grafe U.T., 2016 – Attempted predation of *Ptychozoon horsefieldi* (Squamata: Gekkonidae) by *Chrysopelea paradisi* (Serpentes: Colubridae) in Borneo. *Phyllomedusa*, 15 (1): 65-67. <https://doi.org/10.11606/issn.2316-9079.v15i1p65-67>

Maglangit E.P.T., Medija R.B. Jr., Tapdasan R.J.C., De Alba M.F.P., Adamat L.A., Amparado O.A., Nuñeza O.M., Diesmos M.L.L. & Diesmos A.C., 2021 – Range extension of the White-lined Smooth-scaled Gecko (*Lepidodactylus herrei*) and predation by the Paradise Tree Snake (*Chrysopelea paradisi variabilis*), Unib Island, Philippines. *Sonoran Herpetologist*, 34 (1): 18-20.

Quah E.S. & Grismer L.L., 2024 – One last meal before hitting the road: a Spotted House Gecko, *Gekko monarchus* (Schlegel, 1836), as prey of a road-killed Paradise Flying Snake, *Chrysopelea paradisi* Boie, 1827, with a review of prey reported for the species. *Herpetology Notes*, 17: 339-345.

Socha J.J., 2002 – Gliding flight in the paradise tree snake. *Nature*, 418: 603-604. <https://doi.org/10.1038/418603a>

Socha J.J., 2005 – A 3-D kinematic analysis of gliding in a flying snake, *Chrysopelea paradisi*. *Journal of Experimental Biology*, 208 (10): 1817-1833. <https://doi.org/10.1242/jeb.01579>

Socha J.J., 2011 – Gliding flight in *Chrysopelea:* Turning a snake into a wing. *Integrative and Comparative Biology*, 51 (6): 969-982. <https://doi.org/10.1093/icb/icr092>