

## Short Communication

# Additional notes on the herpetofauna of Lefkada (Ionian Islands, Greece)

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**Abstract** - During two visits to the northeastern part of the Greek island of Lefkada, one in October 2022 and another in June 2023, 14 species of herpetofauna were recorded (two amphibian species, twelve reptile species), including one previously unrecorded species, the European cat snake *Telescopus fallax*. In addition, live specimens of Marginated tortoise *Testudo marginata* were found and location data for Dahl's whip snake *Platyceps najadum* has been recorded. The observation localities of four species, *Testudo hermanni*, *Testudo marginata*, *Platyceps najadum* and *Telescopus fallax* are shown in an overview map.

**Key words:** ionian herpetofauna, *Platyceps najadum*, reptiles, *Telescopus fallax*, *Testudo hermanni*, *Testudo marginata*.

**Riassunto** - Note addizionali sull'erpetofauna di Lefkada (Isole Ionie, Grecia).

Durante due visite nella parte nord-orientale dell'isola greca di Lefkada, una nell'ottobre 2022 e l'altra nel giugno 2023, sono state registrate 14 specie di erpetofauna (due specie di anfibi, dodici specie di rettili), tra cui una specie precedentemente non registrata, il serpente gatto europeo *Telescopus fallax*. Sono stati inoltre rinvenuti esemplari vivi di *Testudo marginata* e sono stati registrati i dati di localizzazione del colubro saetta *Platyceps najadum*. Le località di osservazione di quattro specie, *Testudo hermanni*, *Testudo marginata*, *Platyceps najadum* e *Telescopus fallax*, sono riportate in una mappa.

**Parole chiave:** erpetofauna ionica, *Platyceps najadum*, rettili, *Telescopus fallax*, *Testudo hermanni*, *Testudo marginata*.

In autumn 2022 (October 1 to 11) and again in summer 2023 (June 24 to July 1) a total of 18 days were spent investigating the herpetofauna on the Greek island of Lefkada (Fig. 1). Together with Corfu to the north and Ithaca, Kefhalonia and Zakynthos to the

south, it is one of the larger Ionian Islands off the west coast of Greece.

The herpetofauna of Lefkada is not as well-known and mapped as that of Corfu, which can be considered a “hotspot” of amphibian and reptile biodiversity in Europe (Toth *et al.*, 2002; Razzetti *et al.*, 2006; Stille & Stille 2017). Sindaco & Rossi (2020a) summarized the species of amphibians and reptiles documented from the island so far. The resulting checklist contains 28 species (six species of amphibians, 22 of reptiles), some of which have not been confirmed for a long time (e.g. *Lissotriton graecus*), others without known localities (e.g. *Testudo marginata*, *Platyceps najadum*) or only sparsely reported on the internet (e.g. *Testudo hermanni*). The wetlands in the north-east of the island (north of Kariotes), including the lagoons and salt pans near Lefkada Town and the area around the old Castle of Santa Maura, are part of the Natura 2000 site “Limnothalasses Stenon Lefkadas (Palionis - Avlimon) Kai Alykes Lefkadas” (<https://eunis.eea.europa.eu/sites/GR2240001>). As of 2022, four species of amphibians and 14 species of reptiles have been registered for this site. However, it remains unclear whether they have been confirmed on Lefkada or on the opposite mainland near Peratia.

Our investigation was conducted in the coastal area in the northeast of the island, south of the municipality of Nikiana (Fig 1). The area we searched was between Nydri and the Geni Peninsula in the south and Lefkada Town in the north, including the Santa Maura Castle (Agia Mavra) on the northeastern tip of the island. In a westerly direction, we searched the hills up to a line Kolyvata-Karya. The focus of our search was in the area south and west of Nikiana, that is, in the hill country at the foot of Mount Skaros.

During our visit we managed to confirm 14 species of herpetofauna (Tab. 1, Fig. 1). One, the European cat snake *Telescopus fallax* is new to the island (not listed by Sindaco & Rossi 2020a). We discovered two specimens during a nocturnal search (temperature >20 °C) on the loosely built-up edge of Nikiana (at the foot of Mount Skaros). The first was an adult individual, about 70 cm total length, in the short grass on the edge of a residential road (26/6/2023). The second was a juvenile, about 30 cm total length, on a wall barely one hundred metres away from the first site (30/6/2023; Fig. 1).

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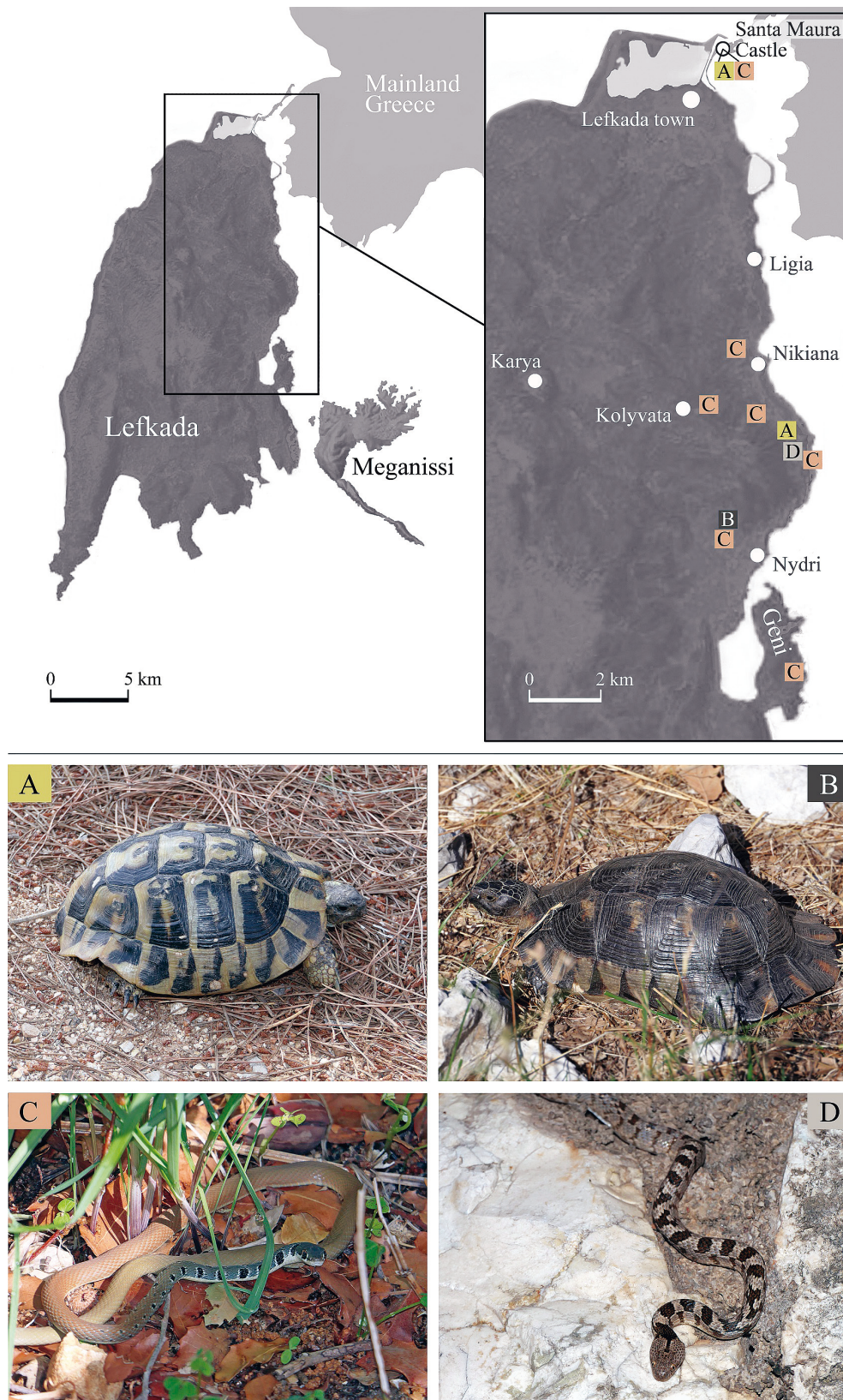


Fig. 1 - The islands of Lefkada and Meganissi in western Greece. Four notable reptile species are illustrated whose occurrence locations are marked on the map A) *Testudo hermanni* (near Nikiana, 24/6/2023), B) *T. marginata* (near Rachi/Perigiali, 5/10/2022), C) *Platyceps najadum* (Nikiana, hotel grounds, 11/10/2022), D) *Telescopus fallax*, young specimen (near Nikiana, 30/6/2023). / Le isole di Lefkada e Meganissi, nella Grecia occidentale. Sono illustrate quattro specie rilevanti di rettili, le cui località di ritrovamento sono indicate sulla mappa A) *Testudo hermanni* (vicino a Nikiana, 24/6/2023), B) *T. marginata* (vicino a Rachi/Perigiali, 5/10/2022), C) *Platyceps najadum* (Nikiana, terreno dell'hotel, 11/10/2022), D) *Telescopus fallax*, giovane esemplare (vicino a Nikiana, 30/6/2023). (Photo / Foto: M. Schmitt).

Tab. 1 - Alphabetical list of amphibians and reptiles found on Lefkada in autumn 2022 (October 1 to 11) and summer 2023 (June 24 to July 1). Subspecies are only indicated if they have been clearly identified morphologically. / Elenco alfabetico degli anfibi e dei rettili rinvenuti a Lefkada nell'autunno 2022 (1-11 ottobre) e nell'estate 2023 (24 giugno-1 luglio). Le sottospecie sono indicate solo se sono state chiaramente identificate morfologicamente.

	<b>Amphibia</b>	<b>Autumn 22 / Summer 23</b>
1	<i>Bufo viridis</i> (Laurenti 1768)	+ / +
2	<i>Pelophylax kurtmuelleri</i> (Gayda 1940)	+ / +
	<b>Reptilia</b>	<b>Autumn 22 / Summer 23</b>
1	<i>Ablepharus kitaibelii</i> (Bibron and Bory de Saint-Vincent 1833)	+ / -
2	<i>Algyroides nigropunctatus kephallithacius</i> Keymar 1986	+ / +
3	<i>Hemidactylus turcicus</i> (Linnaeus 1758)	+ / +
4	<i>Hierophis gemonensis</i> (Laurenti 1768)	+ / +
5	<i>Lacerta trilineata</i> Bedriaga 1886	+ / +
6	<i>Malpolon insignitus</i> (Geoffroy de Saint-Hilaire 1827)	- / +
7	<i>Natrix natrix persa</i> (Pallas 1814)	- / +
8	<i>Platyceps najadum</i> (Eichwald 1831)	+ / +
9	<i>Pseudopus apodus</i> (Pallas 1775)	+ / +
10	<i>Testudo fallax</i> Fleischmann 1831	- / +
11	<i>Testudo hermanni</i> Gmelin 1789	+ / +
12	<i>Testudo marginata</i> Schoepff 1792	+ / +
	<b>TOTAL</b>	<b>14</b>

We can also confirm the presence of the marginated tortoise *Testudo marginata* (Fig. 1), of which we were able to detect three different specimens (two on 5/10/2022, one on 25/6/2023). All of them were in the same area, the wasteland on the south side of Mount Skaros above Rachi (the inland part of the village of Nydri), not far from the viewpoint “The Balcony”, located on the road between Perigiali and Platistoma. A second testudine species, the Greek tortoise *T. hermanni*, was found on the edge of the settlement near Nikiana (juvenile on October 10, 2022, adult on June 24, 2023) and in the Santa Maura Castle (a partially mummified dead specimen, 26/6/2023).

Dahl's whip snake *Platyceps najadum* was one of the more commonly encountered species (Fig. 1). We observed some specimens in different places and habitats (individual finds in each case): ruin of Neromylos Water Mill near Nikiana (2/10/2022), Nikiana, on hotel grounds (6/10/2022, 11/10/2022), hill country between Nikiana and Kolyvata (4/10/2022, 24/6/2023, 27/6/2023), hills above Rachi/Perigiali (5/10/2022), Geni peninsula (7/10/2022), Santa Maura Castle (28/6/2023). Our impression is that Dahl's whip snake, together with the Balkan whip snake *Hierophis gemonensis*, is the most common (or easiest to detect) snake species in the studied area. The locations of the four species mentioned above are shown in Fig. 1. Below we provide the locations and dates of other species we encountered, which are also listed in Tab. 1. Unless otherwise noted, these are single finds of subadult/adult specimens.

We found the European green toad *Bufo viridis* in Nydri (1/10/2022 and 5/10/2022, both roadkills), in the hills near Kolyvata (29/6/2023, three young individuals), and near Nikiana (30/6/2023, one young specimen). *Pelophylax kurtmuelleri*, the Balkan frog, was recognised not only from sightings but also by its calls (sometimes heard in autumn, frequently in June), which are similar to those of the marsh frog *P. ridibundus* (cf., e.g., Speybroeck et al. 2016). Locations: brook near the ruins of Neromylos water mill, not far from Nikiana, 2/10/2022 and 24/6/2023), area of Nydri/Rachi Waterfalls (5/10/2022), Nydri (remains of Dimosaris stream, 25/6/2023), hills near Nikiana (in road puddles, 26/6/2023), near Karya (irrigation reservoir, 29/6/2023).

*Ablepharus kitaibelii*, the European snake-eyed skink, one of the smallest reptiles in Europe, was found near Kalligoni, next to the ruined chapel of Ag. Georgios and in the nearby marshland of Kariotes (both 6/10/2022), on the Geni peninsula (7/10/2022) and in the surroundings of Neromylos water mill near Nikiana (8/10/2022, two specimens).

The Dalmatian *Algyroides* or blue-throated keeled lizard *Algyroides nigropunctatus* was practically “omnipresent” and encountered on every excursion day, e.g. in gardens, olive groves and ruins (including the Castle of Santa Maura). In Lefkada it is represented by the subspecies *A. nigropunctatus kephallithacius* where the males normally lack the blue throat shown by the nominate form but are green on the ventral side of the body (Speybroeck et al., 2016; Strachinis et al., 2021).

The Mediterranean house gecko *Hemidactylus turcicus* was frequently encountered, found almost every day under stones and at night on stony banks and walls, often several individuals at once. Habitats were located in Nydri and in and around Nikiana (e.g. 2/10/2022, 26/6/2023), including the hotel site.

The Balkan whip snake *Hierophis gemonensis* seems to be a common species. We found it near Perigiali (1/10/2022), near Nikiana (7 & 8/10/2022; 27/6/2023), and especially in the Santa Maura Castle, although only in Summer (26/6/2023, three specimens, 30/6/2023, at least five different specimens).

We observed *Lacerta trilineata*, the Balkan green lizard, at Cape Girapetra, the north-western tip of Agios Ioannis beach and Lefkada as a whole (3/10/2022, two specimens), in the hill country between Nikiana and Kolyvata (4/10/2022, two young and two adult specimens), in the area of Neromylos water mill near Nikiana (24/6/2023, pair), in an olive grove between Nikiana and Perigiali (28/6/2023, two juvenile and two adult specimens), and near Alexandros/Kolyvata (29/6/2023).

Unfortunately, we did not manage to find a live eastern Montpellier snake *Malpolon insignitus*, but we found two shed skins of this impressive species, one in an olive grove between Nikiana and Perigiali (28/6/2023, freshly shed skin, 135 cm total length), and a second one near Alexandros/Kolyvata (29/6/2023, juvenile specimen).

The Balkan grass snake *Natrix natrix persa* was observed in an irrigation reservoir near Karya (29/6/2023), one living specimen, two dead (dried up) ones trapped in old pond foil, all of them juveniles.

*Pseudopus apodus*, the glass lizard, was found in the hills near Nikiana (2/10/2022, roadkill; 24/6/2023, two specimens) and the hills above Rachi/Perigiali (5/10/2022; three specimens on 25/6/2023).

For Lefkada's much smaller neighbouring island of Meganissi (Fig. 1), Sindaco & Rossi (2020b) we were able to confirm one amphibian, *Bufo viridis*, and five reptile species. On 9 October 2022 we spent several hours on Meganissi (Fig. 1). There we encountered three species already listed by the above authors. These were two individuals of the European green toad *B. viridis*, both roadkills: one in Spartochori and a second one on a dirt road above the coastline in the western part of the island. Furthermore, we found two specimens of *P. naja*, one in Spartochori (fresh roadkill) and another one on a road bank near the chapel of Agios Ioannis on the west coast. Again, *A. nigropunctatus kephallithacius* was common.

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