

The herpetofauna of the Island of Kythera (Attica, Greece) (Amphibia; Reptilia)

Die Herpetofauna der Insel Kythera (Attika, Griechenland)
(Amphibia; Reptilia)

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KURZFASSUNG

Die Insel Kythera ist Teil des südägäischen Inselbogens, der sich vor mehreren Millionen von Jahren bildete und von der Peloponnes-Halbinsel über Kreta, Karpathos und Rhodos nach Anatolien erstreckt. In seiner Pflanzen- und Tierwelt hat Kythera viel mit dem Peloponnes gemeinsam. Bislang wurden etwa sechzehn Amphibien- und Reptilienarten von der Insel beschrieben, die sich durch ihren Wasserreichtum, besonders im Norden, auszeichnet. Die vorliegende Arbeit trägt die verstreute Information zur Herpetofauna von Kythera zusammen und erweitert sie durch eigene Beobachtungen.

ABSTRACT

The Island of Kythera lies in the southern Aegean arc of islands, which formed millions of years ago and extends from the Peloponnes Peninsula, Crete, Karpathos and Rhodes to Anatolia. With regard to its flora and fauna, Kythera has much in common with the Peloponnes. To date, about sixteen species of amphibians and reptiles were reported to occur on the island, which has abundant water resources, in the north especially. In this paper, the scattered information on the island's herpetofauna is compiled and enriched by author's observations.

KEY WORDS

Amphibia; Reptilia; *Testudo marginata*, *Caretta caretta*, *Algyroides moreoticus*, new island record, faunistics, Island of Kythera, Greece

INTRODUCTION

The Ionian Island of Kythera forms a bridge between the Peloponnes Peninsula and the Island of Crete, thus delineating the south Aegean island arc to the west. The Aegean continental land mass is located in an active geological region where subduction of the African plate under the Eurasian plate is at work. The land mass started to break into islands about 13 million years ago. Crete became isolated from Anatolia some 10 million years ago and from the Peloponnes about 5.3 million years ago (KASAPIDIS et al. 2005).

Kythera lies no more than about eight kilometers south of the little south Peloponnesian offshore island of Elafonisos and not even 20 km from Cape Maleas, the tip of the easternmost peninsular promontory of the southern Peloponnes. In geological terms, Kythera is an extension of the Taygetos Mountain range. The north of the island

consists of acid metamorphosed rock, but for the most part, it is of calcareous origin. Kythera (Fig. 1) has an area of 280 km²; it is 29 km long and 16 km wide, most of its coasts are steep. The island's relief offers little variety, with a main basement forming a plateau at 300-400 m a.s.l. At 506 m a.s.l., Mermigaris is the highest point on the island. The 6-10 km long ravines and gullies in the north are a significant feature of the island's relief. A comprehensive natural history of the island was published as early as in 1837 by JAMESON. LEONHARD (1899) described the hydrology of Kythera as follows: "Individual streams are fed by major springs, like those at Mylopotamos and Karavas, and hence carry water throughout the year, although they do not reach the sea in the dry season, and they serve a flourishing milling industry.... The canyon-shaped streams give the monotonous plateau land-

scape of the interior a character of its own.” In spring, some of the streams around Potamos, the largest village in the north, carry water, which remains longest in the rocky pools and can support amphibian reproduction. Barrier beaches and lagoons at the mouth of the watercourses that are a typical feature of many Greek islands are less common on Kythera (BROGGI 1994) and present only on the east coast near Lagadi below Paleochora, and at Vythoulas near Paleopoli where they constitute the island’s only significant wetland structures, attractive to migrant birds in particular (Figs. 2-7).

The island’s current human population of about 3,500 inhabitants mirrors a strong decline compared with 15,000 reported for the period of the Second World War (HADJIDIMITRIOU 2013). Agriculture (olives) and apiculture are the dominant occupations. Domestic Greek tourism is becoming increasingly important, although it is largely restricted to the middle of summer. In Australia alone, the Kytheran diaspora is thought to be about 60,000 strong and has some influence on the island (returnees, tourists). Many peripheral villages were abandoned and the buildings left to decay or are now used as holiday homes. In the last few decades, the phrygana vegetation commonly found on the island has developed into macchia and is gradually being transformed into dense stands of oak in the north. In the deep valleys, where water is available for longer periods of the year, plane trees (*Platanus orientalis*) and oleander (*Nerium oleander*) grow.

The botany of Kythera is well researched (e.g., GREUTER & RECHINGER 1967; DELFORGE 2010). Kythera is the location of the Natura 2000 area GR 3000013 (Kythira Kai Gyro Nisides, Prasonisi, Dragonera, Antidragonera, Avgo, Kapello, Koufo Lai Fidonisi) covering areas of the northern and eastern coasts and seven rocky offshore islets. Kythera is of great importance for birdlife and a relevant migration path to Crete via Antikythera Island. There is little travel literature on Kythera but there is an excellent work by the landscape photographer Tzeli HADJIDIMITRIOU (2013). In spite of the island’s limited importance for tourism, numerous maps are available including the SKAI/TERRAIN map #346

Kythera 1:35,000 and ORAMA editions #339 Kythira 1:50,000, both of which are GPS-compatible.

Herpetological exploration of Kythera.- The earliest, although merely enumerative and unsupported information on the herpetofauna of Kythera was given by JAMESON (1837) in his ‘Notes on the natural history and statistics of the Island of Cerigo and its dependencies’ where he wrote at page 64: “Animals belonging to the class Reptilia, although not very abundant, yet still representatives of the following genera were observed: *Testudo graeca*, *Emys europaea*, *Chelonia caretta*, *Lacerta agilis*, *ocellata*, *viridis*, *Ascalabotes*, *Oligodon natrix*, *Viperium*, *Coluber berus*, *Vipera ammodytes*, *Rana esculenta*, *Hyla arborea*, *Bufo communis*. Every stream and marsh in spring teems with frogs which make a noise rather grating to the ear.” In succeeding herpetological papers this source was largely neglected except for a paper on tortoises on Aegean islands (WATSON 1962). No printed paper focused on the herpetofauna of Kythera alone has been published to date. In 1930, WERNER summarized the knowledge on the distribution of herpetological species on the Aegean and Ionian Islands and enumerated eight species known to occur on Kythera without indicating particular sources other than the collectors STORCH and REISER for the Cat Snake: *Gymnodactylus kotschyi*, *Hemidactylus turcicus*, *Lacerta viridis major*, *Ablepharus pannonicus*, *Typhlops vermicularis*, *Coluber gemonensis*, *Elaphe leopardina* and *Tarbophis fallax*. In fact, corresponding vouchers from that time are stored at the Natural History Museum in Vienna. In his 7th report on his expeditions to Greece, WERNER (1937) included a list of the animal species observed during a week spent on Kythera and found that the island fauna and flora has much in common with the southern Peloponnese, but little with the species on the islands of the southern Ionian Sea, with which Kythera for a long time formed an administrative unit. According to this author, Kythera represents part of a bridge from Maina (= Mani), the central southern peninsular promontory of the Peloponnese, to Crete. Kythera, however has none of the endemic reptile species of



Fig. 1: Map of the Ionian Island of Kythera (Greece).

Abb 1: Karte der Ionischen Insel Kythira (Griechenland).

the Peloponnese, which he says is because the southernmost part of the Peloponnese is completely barren and too dry even for xerophilous lizards. Apart from the Balkan Green Lizard, no lizards are reported from the island in his above work. Below, the names of the taxa follow the nomenclature used by the respective authors. WERNER (1937) listed the following species: *Gymnodactylus kotschyi*, *Hemidactylus turcicus*, *Lacerta viridis major*, *Ablepharus kitaibelii* ("not very common"), *Coluber gemonensis gemonensis* ("the commonest snake, with slightly more striking markings than on the mainland"), *Elaphe leopardina* ("apart from *gemonensis*, apparently the only snake on Kythera"), with the genus *Vipera* completely absent from the island. In his synopsis on the amphibians and reptiles of Greece (WERNER 1938: 94) he mentions *Tarbophis fallax* and in his descriptions of the species

(1938: 75) *Typhlops vermicularis*, although the latter is absent from the summary of the individual islands. From the amphibians he referred to *Bufo viridis* (1938: 24). To the nine herpetological species reported by WERNER (1937, 1938) PIEPER (1970) added *Rana ridibunda* and *Ophiomorus punctatissimus* and speculated that *Hyla* or *Clemmys* might be present. CHONDROPOULOS (1986, 1989) did not contribute new species records, whereas, ARNOLD & BURTON (1978) added *Natrix tessellata* to the fauna of Kythera. VALAKOS et al. (2008) among others, followed ARNOLD & BURTON (1978) although the presence of *N. tessellata* was not confirmed since. BROGGI (1994) added the Grass Snake (*Natrix natrix persa*) to the list of species. GASC et al. (1997) mentioned *Coluber caspius* to occur on Kythera, which was adopted by KREINER (2007) and VALAKOS et al. (2008), although not shown on the distribution map. SILLERO et al. (2014) no longer included this record in their updated distribution atlas of amphibians and reptiles in Europe. The *caspius* report is also doubted by Augusto CATTANEO (in litt. 1.1.2015) and may be due to misidentification, since the juveniles of *Dolichophis caspius* and *Hierophis gemonensis* are very similar.

In the report on a field trip to Kythera undertaken from 28 May to 5 June 2011, SPEYBROECK (2011) refers to nine species observed: *Mediodactylus kotschyi*, *Ablepharus kitaibelii*, *Lacerta trilineata* and *Hierophis gemonensis* were frequently observed at almost all sites. *Pelophylax ridibundus kurtmuelleri* was seen in the streams of the north, *Natrix natrix persa* in brooks with stagnant water and *Bufo viridis* was thought to be detected for the first time. Further records comprised *Telescopus fallax* (five times, including two roadkills) whereas, *Ophiomorus punctatissimus*, *Typhlops vermicularis* and *Zamenis situla* were not seen. SPEYBROECK (2011) was sceptical about the claimed presence of *Rana graeca* (source of information unknown to the author of the present note) and *Natrix tessellata*, but did not exclude the presence of *Testudo* sp., *Eryx jaculus* or *Elaphe quatorlineata*.

Apart from a herpetological excursion to the Island of Elafonisos (BROGGI 2015), a

potential stepping stone connecting between the Peloponnese and Kythera, two visits were made to the Island of Kythera by the author and his companions thanked in the acknowledgments. On the first trip (24 April to 6 May, 1989), the weather was var-

ied, sunny and rainy, warm and cold. On the second trip (6-18 April 2015), the weather was always cool and windy, with maximum temperatures of 16 degrees Celsius, clouds and rain in the first week and continuous sunshine in the second.

SPECIES ACCOUNT

The following species were reliably reported from the island. Records of the author's 1989 and 2015 excursions to Kythera are presented under 'Observations'.

Bufo viridis (LAURENTI, 1768)

References: ? JAMESON (1837 - "*Bufo communis*"), WERNER (1938), SPEYBROECK (2011).

Observations: Tadpoles - trough near Stavli to the west of Potamos (1989); 1 semi-adult specimen, Agios Dimitrios near Gerakianika (1989); tadpoles - three expanses of surface water 1 km west of Stathlanika (April 8, 2015); 1 adult, 1 semi-adult, tadpoles, calls heard by day - 80 m x 40 m expanse of water south of Aroniadika near the main road to the north at the turning to Aloizianika at approx. 400 m a.s.l. (April 9, 2015); tadpoles - open cistern with waterlilies near the Kalamos cemetery at about 100 m a.s.l.

It is reasonable to assume that the species is common in the north of the island where it breeds in the numerous pools in the brooks.

Pelophylax kurtmuelleri (GAYDA, 1940)

References: JAMESON (1837 - as *Rana esculenta*), PIEPER (1970 - as *Rana ridibunda*), VALAKOS et al. (2008), SPEYBROECK (2011).

Observations: The Balkan Frog was mainly found in the north of the island where the watercourses are usually not yet dry at that time of the year. Frogs of different size - 1989: spring areas around Karavas, brooklets and cisterns near Agios Patrikia north of Agia Pelagia, south of Agia Pelagia in the Krini Ghalani spring area, Platani to the west of Potamos on the way to Lygia Bay, Kako Lagadi near Palaeochora, Koufogiou near Perlegianika east of Aroniadika, west of Kako Lagadi near Milopotamos, Mylon near Mitata, stream near Fatsadika in the south of the central plateau, approaching the mouth of the Staklalgado stream south of Moni Myrtidion. 2015: canyon brooklets around Karavas, near Lygies-Ocheles Beach to the west of Potamos at approx. 100-200 m a.s.l., west of Trifolianika on the path to Paleochora at approx. 100 m a.s.l., Platani Stream on the path to Likomondio Beach

at approx. 200 m a.s.l., Sideronero Spring leading to Platani Stream northwest of Potamos at approx. 160 m a.s.l., near Agios Mamas in a side stream with spring, Milous Stream in the gorge area near Mitata at approx. 100 m a.s.l., south of Viaradika in the stream at Agios Vasiliou on the road to Paleopoli with frequent calls heard in the whole network of streams in the valley, around Mylopotamos in the area of the waterfall and the 23 ruined watermills at approx. 250-100 m a.s.l. Calls - Mitata, from spring pools immediately below the church at 360 m a.s.l.

Testudo marginata (SCHOEPPF, 1795)

References: JAMESON (1837), WATSON (1962), MANTZIOU et al. (2004).

No reports exist of tortoise sightings on Kythera except a first mention by JAMESON (1837) cited by WATSON (1962). Evidence is provided, however, by a mitochondrial DNA study into the Aegean *Mauremys rivulata* (VALENCIENNES, 1833) by MANTZIOU et al. (2004). The authors compared these *Mauremys* populations with, among others, a Marginated Tortoise from Kythera (National History Museum of Crete, NHMC 80.3.22.6). No further commentary is provided, however.

On 8 April, 2015, the author of the present contribution visited Paleopoli and its well known Skandeia Restaurant. The proprietors run a small tortoise enclosure with some twenty specimens of the Marginated Tortoise, which also breeds there. According to the proprietress, the animals are partly from the island, some of them rescued after road accidents, and partly from the Peloponnese. Their son also confirmed observations of specimens living in the wild of the island.

Observations: A sighting was made on 12 April, 2015, by Christian BURRI and Wilfried KAUFMANN, members of this year's travel party, who saw a big Marginated Tortoise on a road south of Dhrymonas (36°11'5.989" N, 22°57'22.355" E) at 352 m a.s.l.

Caretta caretta
(LINNAEUS, 1758)

References: JAMESON (1837), SPEYBROECK (2011).

JAMESON (1837) referred to *Chelonia caretta* for Kythera in general and SPEYBROECK (2011) to two specimens of the Loggerhead Turtle coming to Kapsali Bay to lay their eggs every year. A biologist from Kythera, who runs a regional produce shop in Chora, said turtles lay eggs in the sandy bays of Diakofti, in Limni Bay near Paleopoli and in Kapsali (Stavros Emmanuel, verbal comm.). The proprietor of the Lemoni Restaurant in Kapsali, reported that in Kapsali Bay the last ovipositions and hatchlings were observed in 2013 (Kostas Belbas, verbal comm., 17.4.2015).

Mauremys rivulata
(VALENCIENNES, 1833)

References: ? JAMESON (1837 - as *Emys europaea*).

The Balkan Terrapin is common on the Peloponnese Peninsula and found on Crete. Kythera offers potential terrapin habitats in those stream sections of the north that do not run dry in summer, and in the barrier beach lagoon at Kikia Lagada south of Agia Pelagia. The author's searches conducted in those areas were in vain although the local biologist Stavros Emmanuel reported the author that a friend had told him he had seen terrapins in the Karavas area in the north of the island. The Balkan Terrapin therefore is not unlikely to be present on Kythera whereas the occurrence of *Emys orbicularis* (LINNAEUS, 1758) is. This terrapin species is found on the Peloponnese, but almost certainly absent from Kythera which lacks the ample backwaters and wetlands that are essential for *Emys*.

Mediodactylus kotschy
(STEINDACHNER, 1870)

References: ? JAMESON (1837 - *Ascalabotes*), WERNER (1930, 1937, 1938), WETTSTEIN (1953), BEUTLER (1975), VALAKOS et al. (2008), SPEYBROECK (2011).

On warm days this most common reptile on the island was seen by the author on many dry walls. It was generally a frequent find beneath stones and in ruins.

Hemidactylus turcicus
(LINNAEUS, 1758)

References: ? JAMESON (1837 - *Ascalabotes*), WERNER (1930, 1937, 1938), WETTSTEIN (1953), VALAKOS et al. (2008), SPEYBROECK (2011 - photograph, but not mentioned in text).

Observations: Single specimens - illuminated stone wall at Hotel Marou in Agia Pelagia (May 2, 1989), well north of Dhrymonas at approx. 360 m a.s.l. (April 10, 2015), cistern at the roof-top of the church at Trifilianika (April 13, 2015).

Lacerta trilineata
(BEDRIAGA, 1886)

References: JAMESON (1837 - *Lacerta viridis*; his *Lacerta agilis*, and [*L.*] *ocellata* could be related to juvenile *L. trilineata*), WERNER (1930, 1937, 1938), WETTSTEIN (1952, 1953), VALAKOS et al. (2008), SPEYBROECK (2011).

The Balkan Green Lizard is common on the island and was observed frequently. On the second trip most of the specimens seen were juveniles.

Ablepharus kitaibelii
(BIBRON & BORY DE ST. VINCENT, 1833)

References: WERNER (1930, 1937, 1938), WETTSTEIN (1953), PIEPER (1970), GRUBER (1974), VALAKOS et al. (2008), SPEYBROECK (2011).

The Snake-eyed Skink was frequently found throughout the island.

Observations: In 2015 large numbers were seen near Arei to the east of Mylopotamos.

Ophiomorus punctatissimus
(BIBRON & BORY DE ST. VINCENT, 1833)

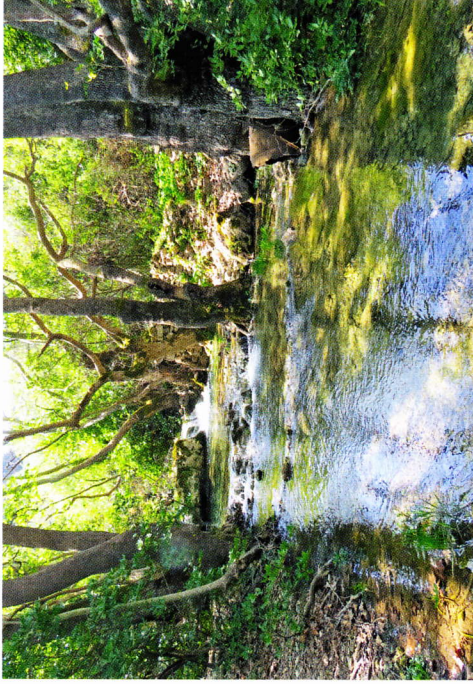
References: PIEPER (1970), BROGGI (1994), VALAKOS et al. (2008). Known from the neighboring Island of Elafonisos (BROGGI 2015).

Observations: A single specimen - south of Dokana (east of Mylopotamos) in a ditch near the main road (May 4, 1989).

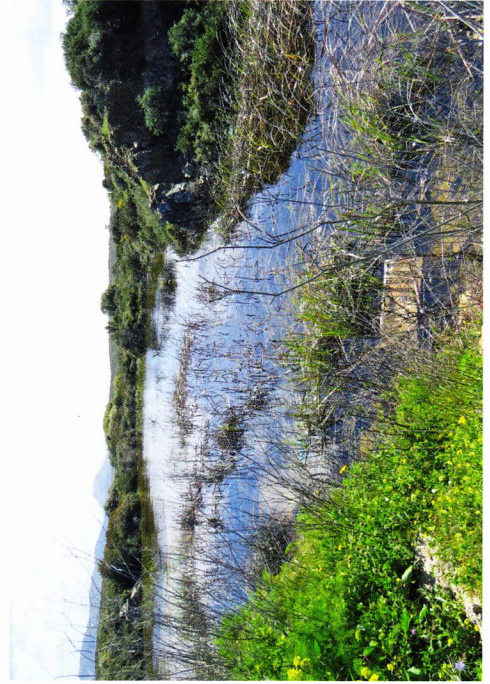
Xerotyphlops vermicularis
(MERREM, 1820)

References: WERNER (1921, 1930, 1938), GRILLITSCH & GRILLITSCH (1993).

Its presence on the island as reported by WERNER (1921, 1930, 1938) refers to a specimen collected by O. STORCH in 1912 along with *B. viridis*, *M. kotschy* and *T. fallax*. The specimen is stored at the Natural History Museum in Vienna under inventory number 15406: 27 (GRILLITSCH & GRIL-



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Fig. 2: Kapsali Bay S Kythera, with the nesting beach of *Caretta caretta*.
 Abb. 2: Die Bucht von Kapsali, S-Kythera, mit Niststrand von *Caretta caretta*.

Fig. 3: In N Kythera, numerous perennial streams provide breeding grounds for *Pelophylax kurtmuelleri* and *Bufoles viridis*.

Abb. 3: Zahlreiche beständige Bäche in N-Kythera bieten Laichplätze für *Pelophylax kurtmuelleri* und *Bufoles viridis*.

Fig. 4: The rocky pools in N Kythera do not dry out before the summer begins.
 Abb. 4: Die Felsstümpel von N Kythera vertrocknen erst im Sommer.

Fig. 5: The upland plateau of Kythera has expanses of standing water, which serve as spawning sites for *Bufoles viridis*.

Abb. 5: Wasserbedeckte Flächen im Hochland von Kythera sind Laichbiotope für *Bufoles viridis*.

Fig. 6: The stream at Mylopotamos, still carrying plenty of water in April 2015.
 Abb. 6: 2015 führte der Bach Mylopotamos noch im April reichlich Wasser.

Fig. 7: Mouth of the Kakia Lagada canyon south of Agia Pelagia in NW Kythera, with a small backwater pool in 1989 and completely flooded in 2015.

Abb. 7: Mündung der Schlucht von Kakia Lagada südlich Agia Pelagia in NW-Kythera mit kleinem Rückstau im Jahr 1989 und 2015 völlig geflutet.

LITSCH 1993). *Xerotyphlops* records were never reported from that island since.

Hierophis gemonensis
(LAURENTI, 1768)

References: WERNER (1930, 1937, 1938), WETTSTEIN (1953), VALAKOS et al. (2008), SPEYBROECK (2011).

Both WERNER (1930) upon first mention from the island and SPEYBROECK (2011) consider the Balkan Whip Snake the commonest snake species on the island, a finding that is confirmed by the author's observations.

Observations: Dead specimen about 55 cm long - mule track near the Platani Stream west of Stavli (May 28, 1989); specimen about 60 cm long - side of the road at Agios Kosmas (May 29, 1989); single specimens - near the shore at Agios Patrikia (May 2, 1989), Agios Dimitrios (May 4, 1989), extensive farmland near Perlegianika west of Potamos (May 4, 1989), west of Potamos towards the Lygies-Ocheles Bay (April 4, 2015), under a wooden door lying on the ground in Likodimou Bay (April 9, 2015), on the road near the hamlet of Proσιο north of Karavas (April 16, 2015), a juvenile in a wall north of Kapsali (by Peter GOOP, April 16, 2015).

Natrix natrix persa
(PALLAS, 1814)

References: ? JAMESON (1837 - as *Oligodon natrix*), BROGGI (1994), SPEYBROECK (2011).

Observations: A juvenile between Trifylianika and Paleochora in the water of a side stream of the Kako Lagadi (April 3, 1989), a juvenile on a flooded path by the Platani Stream west of Potamos at 200 m a. s. l. on the way to the Lygies-Ocheles Bay (April 4, 1989). Dr. Alexander KOCYAN (University of Potsdam) showed the author a photograph of a Grass Snake taken on 13 April, 2008 in the irrigation system of the uppermost watermill at the Mylopotamos stream.

It can be assumed that most streams in the north of the island that carry water for an extended period of the year are home to populations of the Grass Snake.

Natrix tessellata
(LAURENTI, 1768)

References: ? JAMESON (1837 - as *Viperium*, maybe a typographic error in place of [*Oligodon*] *viperinum*), ARNOLD & BURTON (1979), GRUSCHWITZ et al. (1999), VALAKOS et al. (2008).

Without indicating the source of information ARNOLD & BURTON (1979) reported this snake on the Island of Kythera. This view was followed by GRUSCHWITZ et al. (1999) and VALAKOS et al. (2008). To the author's knowledge, however, the snake's

formal addition to the herpetofauna of Kythera lacks subsequent confirmation, and SPEYBROECK (2011) doubted the statement at all. But there are good reasons not to go as far because the watercourse system of north Kythera (no fish, but water frogs and freshwater crabs) represents an appropriate habitat. Also, *N. tessellata* populations hunting in saline coastal waters as observed in various places (e.g., Corfu, Crete - GRUSCHWITZ et al. 1999: 618; Caspian Sea in Azerbaijan - BROGGI unpublished) may exist on the island. Besides, Kythera would constitute a natural link between the *N. tessellata* populations of the Peloponnese and Crete.

Zamenis situla
(LINNAEUS, 1758)

References: WERNER (1930, 1933: 127, 1937, 1938), WETTSTEIN (1953), VALAKOS et al. (2008).

The Leopard Snake was first reported by WERNER (1930). The voucher is kept under 24164 at the Natural History Museum in Vienna. Alexander KOCYAN (University of Potsdam) showed the author a photograph (taken in 2012 at Ekklesia Agios Panteleimonas near Fratsia) of a roadkill specimen as a recent confirmation of the presence of the Leopard Snake on the island.

Telescopus fallax
(FLEISCHMANN, 1831)

References: WERNER (1912, 1930, 1937, 1938), WETTSTEIN (1953), PIEPER (1970), GRUBER (1974), VALAKOS et al. (2008), SPEYBROECK (2011).

This species is known from the island through WERNER by a specimen at the Natural History Museum in Vienna (NHMW 20113: 3). SPEYBROECK (2011) observed five European Cat Snakes on the island.

Observations: The single sighting made on 30 April, 1989 refers to a roadkill specimen about 80 cm long, without any visible signs of injury, found beneath a rock on the road leading south to Viaradika from Mitata.

Data deficient species

Algyroides moreoticus
(BIBRON & BORY DE SAINT VINCENT, 1833)

Apart from the Balkan Green Lizard, no other lacertid species were ever found on

Kythera (CHONDROPOULOS 1986; VALAKOS 2008). On several occasions during the authors' visit to the island in 2015, however, lizards were seen which resembled neither the Balkan Green Lizard nor wall lizards (*Podarcis*). A sighting made at approx. 340 m a.s.l. on a track at Agios Dimitrios near Pourko, to the south of Dhrymonas, on 12 April 2015, can be described as follows: a slim, smallish, flat-lying specimen, grey, no markings, with uniform keeled scales and a very long tail. This description fits the Greek *Algyroides*. The lizards were extremely shy and no photographs could be taken. This sighting requires confirmation.

JAMESON (1837) included the European Treefrog, *Hyla arborea* (LINNAEUS, 1758), and two species of viper under the names *Coluber berus* and *Vipera ammodytes* in his list of herpetological species occurring on Kythera. Neither treefrogs nor vipers were ever reported from the island since. From its ecology, the cool-adapted species *Vipera berus* (LINNEUS, 1758) is not at all a Mediterranean island dweller and was certainly added here erroneously whereas, the Nose-horned Viper, *V. ammodytes* (LINNEUS, 1758), is widespread among the Ionian and Cyclades Islands. Its potential occurrence on Kythera should not be

ruled out since it is found in close vicinity on the Peloponnese Peninsula. Suitable habitats for *H. arborea* are certainly available on Kythera and its presence on the island would easily bridge the distribution gap between the Peloponnesian and Cretan populations.

Final Remarks.- The inhabitants of many Greek islands have a strong aversion to and fear of anything that slithers along without legs. Surprisingly, discussions with some of the residents of Kythera revealed a more positive attitude towards snakes there. The son of the owners of the Skandeia Restaurant in Paleopoli, for example, said that snakes were a welcome sight because they brought good luck and people were in any case aware of the absence of poisonous snakes on the island. This view was frequently confirmed insofar as the defensive attitude usually encountered when enquiring about snakes was not displayed on Kythera. According to the native biologist Stavros Emmanuel, few roadkill snakes are seen on the island, because drivers usually swerve to avoid them. During two visits to Kythera only one roadkill (Cat Snake in 1989) was detected, compared with the author's usual observations of many run over snakes on other islands.

ACKNOWLEDGMENTS

The author is grateful for communications received from his longstanding travel companions, Dr. Christian Burri, Dr. Peter Goop, Wilfried Kaufmann and Mag. Günther Stadler. Sincere thanks also go to the local expert and biologist Stavros Emmanuel of Chora (Kythnos, Greece) for his tips and work in sup-

port of nature protection on Kythera. Kostas Belbas provided specific information on the turtles in the sands of Kapsali Bay. Also, the author is grateful for valuable information received from Dr. Alexander Kocyan (Potsdam University, Germany).

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DATE OF SUBMISSION: June 19, 2015

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