

## HERPETOLOGICAL NOTES FROM MAINLAND AND INSULAR GREECE

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### INTRODUCTION

Although the herpetofauna of Greece is well known (see for example, Werner, 1938; Wettstein, 1953, 1957; Ondrias, 1968; Chondropoulos, 1986, 1989), several distributional questions still remain unclear, mainly for the mainland but also for islands.

In this paper we present some chorological information from a field trip of one month (April 1990) to mainland and insular Greece (see Figs 1 and 2 and appendix I for a complete list of localities).

### RESULTS AND DISCUSSION

#### Amphibians

*Salamandra salamandra*. 07.04.90: 1 specimen from Loc. 4 and 1 specimen from Loc. 7 on 09.04.90.

*Triturus alpestris*. 07.04.90: 1 adult specimen from Loc. 4. First record for the Katara region. Observed on a grassland area at 1705 m.a.s.l.

*Bufo bufo*. 07.04.90: Several clutches at Loc. 3; 09.04.90: 42 specimens collected at Loc. 6; 09.04.90: 6 specimens from Loc. 7, and 2 specimens from Loc. 9; 10.04.90: 2 specimens from Loc. 10, and 7 specimens from Loc. 13. Also observed at Loc. 8.

*Bufo viridis*. 13.04.90: 4 specimens from Loc. 16; 18.04.90: 2 specimens collected at Loc. 39, and choruses from Loc. 40 and 41. Also observed at Loc. 18 on 13.04.90.

*Rana eppeirotica*. 08.04.90: 19 specimens and 09.04.90: 2 specimens from Loc. 5, and 4 specimens from Loc. 6.

The Lake frog present at Lake Ioannina was recorded by Tunner & Heppich (1982) as the "Corfú taxon". However, on Corfú island both species, *Rana eppeirotica* and *Rana ridibunda* coexist (Keymar, 1985, '86). Thus, *Rana eppeirotica* is a cryptic species formerly taken as *Rana ridibunda* (Keymar, 1986). For this reason, the assignment of our sample from Ioannina to this species seems to be difficult without an electrophoretical confirmation. In addition, a morphometrical comparison between these marsh frogs and those from other Greek locations could be helpful in this respect.

*Rana graeca*. 07.04.90: 7 specimens from Loc. 4; 09.04.90: 4 specimens from Loc. 6; 10.04.90: 1 specimen from Loc. 13. Also observed at Loc. 7 and Loc. 10.

*Rana ridibunda*; 07.04.90: 14 specimens from Loc. 13, and 1 specimen from Loc. 14; 11.04.90: choruses from Loc. 16; 15.04.90: 1 specimen observed at Loc. 24 and 25 respectively, 7 specimens collected at Loc. 29, 5 specimens collected at Loc. 30, and 2 specimens from Loc. 31; 18.04.90: 1 specimen collected at Loc. 39; 19.04.90: 12 specimens collected at Loc. 33, and 1 specimen from Loc. 36; 20.04.90: 9 specimens from Loc. 37; 26.04.90: 17 specimens collected at Loc. 17, also observed at Loc. 41.

*Hyla arborea*; 10.04.90: 39 specimens from Loc. 12, and 4 specimens from Loc. 13; 11.04.90: 4 specimens from Loc. 14; 11.04.90: choruses of several individuals at Loc. 15 and 16; 15.04.90: 4 specimens from Loc. 30; 18.04.90: choruses at Loc. 39 and 41; 26.04.90: choruses at Loc. 17.

## Reptiles

*Emys orbicularis*. 14.04.90: 1 specimen observed at Loc. 19; 15.04.90: 1 specimen observed at Loc. 30 (second record for Lesvos Island, the first was from Broggi, 1978); 26.04.90: 2 individuals observed at Loc. 17.

*Mauremys caspica*. 14.04.90: 1 specimen observed at Loc. 19, and 1 specimen observed at Loc. 20; 15.04.90: 1 specimen observed at Loc. 24; 19.04.90: 6 specimens observed at Loc. 34, and 1 specimen observed at Loc. 38; 20.04.90: several specimens observed, in both cases at Loc. 39, and 2 specimens observed at Loc. 37; 23.04.90: 1 specimen observed at Loc. 43; 24.04.90: 1 specimen from Loc. 45; 26.04.90: extremely common at Loc. 17.

*Testudo hermanni*. 07.04.90: 1 specimen observed at Loc. 3; 10.04.90: 2 adult specimens observed at Loc. 11.

*Testudo marginata*. 07.04.90: 1 adult male observed at Loc. 2.

Only recently recorded for some northern localities of mainland and insular Greece (Keymar & Weissinger, 1987).

*Anguis fragilis*. 08.04.90: 1 adult specimen from Loc. 6.

*Ophisaurus apodus*. 26.04.90: 1 specimen collected at Loc. 17.

*Ablepharus kitaibelli*. 06.04.90: 1 specimen from Loc. 1; 24.04.90: 1 specimen from Loc. 44.

*Chalcides ocellatus*. 19.04.90: 18 specimens from Loc. 36; 20.04.90: 3 specimens from Loc. 33, 1 specimen observed at Loc. 39, and 1 specimen observed from Loc. 42 and also observed at Loc. 38.

*Algyrodes nigropunctatus*. 08.04.90: Two specimens (ad. and subad.) in Loc. 6 and also observed at Loc. 7.

*Ophisops elegans ehrenbergii*. 14.04.90: 14 specimens from Loc. 19; 14.04.90: 1 specimen from Loc. 18, and 1 specimen from Loc. 20; 15.04.90: 1 specimen observed at Loc. 21, 18 specimens collected at Loc. 23, and several specimens observed at Loc. 25 and 26.

Very common. Recorded from at least in 12 aegean islands (Kühnelt, 1986).

*Lacerta trilineata*. 14.04.90: 1 specimen observed at Loc. 19; 14.04.90: 2 specimens collected at Loc. 18; 15.04.90: 2 specimens observed at Loc. 21 and 24; 19.04.90: 1 specimen observed at Loc. 34, 1 specimen observed at Loc. 35, 1 specimen observed at Loc. 36, and 1 from Loc. 38; 20.04.90: 2 specimens collected at Loc. 31, several specimens observed at Loc. 39, and 2 specimens collected at Loc. 42; 23.04.90: 1 specimen observed at Loc. 48; 24.04.90: 1 specimen from Loc. 49; 26.04.90: 2 specimens from Loc. 52 and 1 from Loc. 53.

*Lacerta vidiris*. 07.04.90: 4 specimens collected from Loc. 2; 1 specimen from Loc. 3; 08.04.90: 1 specimen from Loc. 5. and also observed at Loc. 7. 14.04.90: One adult specimen of *Lacerta*, was captured at Loc. 22 in area of Lesvos island with a quite wet environment. Its back pattern, coloration and pholidosis seems to match the species *L. viridis*, but, obviously, we can say nothing conclusive without a biochemical confirmation of its specific status (Mayer & Tiedemann 1981).

*Podarcis erhardii*. 21.04.90: 46 specimens collected at Loc. 50; 22.04.90: 9 specimens collected at Loc. 51; 26.04.90: 6 individuals observed at Loc. 52 and 53, both from Sifnos island where *Poddarcis erhardii* seems to be extremely scarce. Sifnos island is occupied by *P.e.erhardii* (Grillitsch & Tiedemann, 1984). The subspecies *P.e.myconensis* was recorded from Thira by Frör & Beutler (1978).

*Podarcis muralis*. 08.04.90: 39 specimens from Loc. 5.

*Podarcis taurica*. 08.04.90. 7 specimens from Loc. 6.

*Laudakia stellio*. 15.04.90: 1 specimen observed at Loc. 24, and 1 specimen in Loc. 25, 27 and 28 respectively. It was recorded at Lesvos Island by Werner (1938), Ondrias (1968) and Broggi (1978), but its presence was not mentioned by Xyda (1986) who considered that lizards from Samos, Hios and other neighbouring islands have to be included in a new subspecies not nominated in his work.

*Cyrtodactylus kotschi*. 23.04.90 and 24.04.90: several specimens observed at Loc. 43, 44, 46, 52 and 53. The species is recorded for the first time by Tiedemann & Haüpl (1982) from Thira (Santorini) and Thirassia.

*Hemidactylus turcicus*. 20.04.90: 1 specimen collected at Loc. 37.

*Tarentola mauritanica*. 18.04.90: 1 specimen observed at Loc. 32; 19.04.90: 1 specimen collected at Loc. 34.

*Typhlops vermicularis*. 10.04.90: 2 specimens from Loc. 11. It is considered as a common species in mainland Greece (Dimitropoulos, 1986).

*Coluber gemonensis*. 06.04.90: 1 subadult individual from Loc. 1; 20.04.90: 1 specimen collected at Loc. 33. A relatively invariable species of Colubridae, common in mainland Greece (Dimitropoulos, 1986).

*Natrix natrix*. 08.04.90: 1 specimen from Loc. 5 and 1 specimen from Loc. 6.

*Natrix tessellata*. 08.04.90: 2 specimens collected at Loc. 5; 09.04.90: 1 specimen from Loc. 10; 10.04.90: 1 specimen from Loc. 13; 26.04.90: 2 individuals observed at Loc. 17.

*Vipera lebetina schweizeri*. 23.04.90: Observed at Loc. 44. Recorded in the Milos archipelago (Kühnelt, 1986) where it seems to be extremely common but threatened by the persecution from scientific collectors (Dimitropoulos, 1986).

## **Appendix I. Localities cited in the text (see Figures 1 and 2)**

### **Mainland (Figure 1)**

1. Kaza  $38^{\circ} 25'$  N,  $23^{\circ} 30'$  E
2. Meteora  $39^{\circ} 50'$  N,  $21^{\circ} 20'$  E
3. Meteora (Pinios river)  
 $39^{\circ} 40'$  N,  $21^{\circ} 20'$  E
4. Katara  $39^{\circ} 50'$  N,  $21^{\circ} 10'$  E
5. Ioannina (Lake Pamvotida)  
 $38^{\circ} 25'$  N,  $23^{\circ} 30'$  E
6. Ioannina (Lake Pamvotida near to the islet)  $39^{\circ} 40'$  N,  $20^{\circ} 40'$  E
7. Kipi (Zagori)  $39^{\circ} 50'$  N,  $20^{\circ} 40'$  E
8. Kopani (Louros river)  
 $39^{\circ} 20'$  N,  $20^{\circ} 40'$  E
9. Fillipiada  $39^{\circ} 20'$  N,  $20^{\circ} 40'$  E
10. Trichonida lake  $38^{\circ} 40'$  N,  $21^{\circ} 20'$  E
11. Pleuron  $38^{\circ} 20'$  N,  $21^{\circ} 20'$  E
12. Souli  $38^{\circ} 00'$  N,  $22^{\circ} 30'$  E
13. Stifalos  $37^{\circ} 50'$  N,  $22^{\circ} 30'$  E
14. Kastania  $37^{\circ} 40'$  N,  $22^{\circ} 20'$  E
15. Argos  $37^{\circ} 40'$  N,  $22^{\circ} 40'$  E
16. Road Argos-Isthmia  
 $37^{\circ} 40'$  N,  $22^{\circ} 50'$  E
17. Shinias (Marathonas)  
 $38^{\circ} 10'$  N,  $24^{\circ} 00'$  E

### **Lesvos Island (A, Figure 2)**

18. Moria  $39^{\circ} 20'$  N,  $26^{\circ} 30'$  E
19. Moria  $39^{\circ} 15'$  N,  $26^{\circ} 30'$  E
20. Alykes Kallonis (Arisvi)  
 $39^{\circ} 10'$  N,  $26^{\circ} 20'$  E
21. Arisvi  $39^{\circ} 10'$  N,  $26^{\circ} 15'$  E
22. Road Mithimna-Vafios  
 $39^{\circ} 50'$  N,  $26^{\circ} 10'$  E
23. Mistegna  $39^{\circ} 20'$  N,  $26^{\circ} 20'$  E
24. Mantamados  $39^{\circ} 30'$  N,  $26^{\circ} 20'$  E
25. Road Pelopi-Ypsilometopo  
 $39^{\circ} 20'$  N,  $26^{\circ} 20'$  E
26. Road Rodotichos-Kastreli  
 $39^{\circ} 10'$  N,  $26^{\circ} 10'$  E
27. Agra  $39^{\circ} 10'$  N,  $26^{\circ} 00'$  E
28. North of Asropotamos river  
 $39^{\circ} 15'$  N,  $26^{\circ} 30'$  E
29. Mylopotamos river  
 $39^{\circ} 20'$  N,  $26^{\circ} 20'$  E
30. Moni Myrtiotissas-Filia  
 $39^{\circ} 20'$  N,  $26^{\circ} 10'$  E
31. Moria  $39^{\circ} 10'$  N,  $26^{\circ} 25'$  E

### **Crete Island (E, Figure 2)**

32. Knossos  $35^{\circ} 20'$  N,  $25^{\circ} 50'$  E
33. Fodele  $35^{\circ} 20'$  N,  $24^{\circ} 50'$  E
34. Road Rizinia-Festos  
 $35^{\circ} 10'$  N,  $24^{\circ} 50'$  E
35. Pano Moulia  $35^{\circ} 00'$  N,  $24^{\circ} 50'$  E
36. Gortina  $35^{\circ} 00'$  N,  $24^{\circ} 50'$  E
37. Vori  $35^{\circ} 50'$  N,  $24^{\circ} 40'$  E
38. Kamilari  $35^{\circ} 00'$  N,  $24^{\circ} 40'$  E
39. Lavris (Geropotamos river)  
 $35^{\circ} 20'$  N,  $24^{\circ} 50'$  E
40. Moyri  $35^{\circ} 15'$  N,  $24^{\circ} 10'$  E
41. Dramia  $35^{\circ} 20'$  N,  $24^{\circ} 30'$  E
42. Rethimno  $35^{\circ} 20'$  N,  $24^{\circ} 30'$  E

### **Milos Island (B, Figure 2)**

43. Adamas  $36^{\circ} 40'$  N,  $24^{\circ} 20'$  E
44. Filakopi  $36^{\circ} 40'$  N,  $24^{\circ} 20'$  E
45. Alykes  $36^{\circ} 40'$  N,  $24^{\circ} 20'$  E
46. Provatas  $36^{\circ} 35'$  N,  $24^{\circ} 20'$  E
47. Sakoula  $36^{\circ} 35'$  N,  $24^{\circ} 20'$  E
48. Sakoula  $36^{\circ} 35'$  N,  $24^{\circ} 20'$  E
49. Kimolos (Kimolos Island)  
 $36^{\circ} 45'$  N,  $24^{\circ} 20'$  E

### **Santorini Island (C, Figure 2)**

50. Thira  $36^{\circ} 25'$  N,  $25^{\circ} 20'$  E
51. Nea Kamenni  $36^{\circ} 25'$  N,  $25^{\circ} 15'$  E

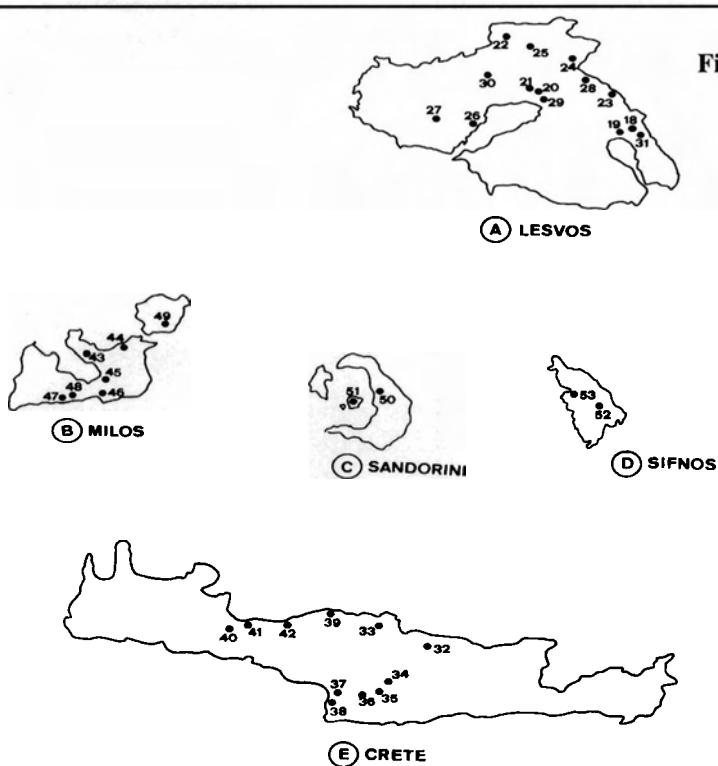
### **Sifnos Island (D, Figure 2)**

52. Apollonia  $36^{\circ} 35'$  N,  $24^{\circ} 40'$  E
53. Kamares  $37^{\circ} 00'$  N,  $24^{\circ} 30'$  E

**Figure 1:**



**Figure 2:**



## REFERENCES

- Broggi, M. (1978). Herpetologische Beobachtungen auf der Inseln Lesbos (Griechenland). *Salamandra* **14**(4): 161-171.
- Chondropoulos, B.P. (1986). A checklist of the Greek reptiles. I. The lizards. *Amphibia-Reptilia* **7**: 217-235.
- Chondropoulos, B.P. (1989). A checklist of the Greek reptiles. II. The snakes. *Herpetozoa* **2** (1/2): 3-36.
- Dimitropoulos, A. (1986). Some notes on the colour and pattern variation of the Greek snake fauna in relation to geographic distribution. *Biologia Gallo-hellenica* **12**: 463-471.
- Frör, E. & Beutler, A. (1978). The herpetofauna of the oceanic island in the Santorini-archipelago, Greece. *Spixiana* **1**: 301-308.
- Grillitsch, H. and Tiedemann (1984). zur Herpetofauna der griechischen Inseln Kea, Spanopoula, Kithnos, Sifnos, Kitriani (Cycladen), Alonnisos und Piperi (Nördliche Sporaden). *Ann. Naturhist. Mus. Wien* **86**: 7-28.
- Keymar, P.F. (1985). Additional remarks on: "Some amphibians and reptiles of Corfu with a special note on the occurrence of the nose-horned viper (*Vipera ammodytes*)" (Stafford P. Herptile 9(3) Sep. 1984 pp. 105-108). *Herptile* **10**(1): 25.
- Keymar, P.F. (1986). Die Amphibien und Reptilien der Ionischen Region (Griechenland) – Analyse ihrer rezenten Verbreitungsmuster und Überlegungen zu ihrer Ausbreitungsgechichte. *ÖGH-Nachrichten* **1986** (6/7): 3-26.
- Keymar, P.F. and Weissinger, H. (1987). Distribution, morphological variation and status of *Testudo marginata* in Greece. In: *Proc. Fourth Ord. Gen. Meet. S.E.H.* J.J. van Gelder, H. Strijbosch & P.J.M. Bergers (eds.) Nijmegen 1987 pp. 219-222.
- Kühnelt, W. (1986). Contributions to the knowledge of historical biogeography of Balkan peninsula, especially of Greece. *Biologia Gallo-hellenica* **12**: 71-84.
- Mayer, W. and Tiedemann, F. (1982). Chemotaxonomical investigation in the collective genus *Lacerta* (Lacertidae, Sauria) by means of protein electroforesis. *Amphibia-Reptilia* **2**: 346-356.
- Ondrias, J. C. (1968). Liste des Amphibiens et des Reptiles de Gréce. *Biologia Gallo-hellenica* **1**: 111-135.
- Tiedemann, F. and Häupl, M. (1982). *Cyrtodactylus kotschy* (Steindachner, 1870) in the Santorin archipelago. *Amphibia-Reptilia* **3**: 377-381.
- Tunner, H.G. and Heppich, S. (1982). A genetic analysis of water frogs from Greece: evidence for the existence of a cryptic species. *Z. zool. Syst. Evolut.-forsch.* **20**: 209-233.
- Werner, F. (1938). Die Amphibien und Reptilien Griechenlands. *Zoologica* **35**: 1-117.
- Wettstein, O. (1953). Herpetologia aegaea. *Sitz.-ber. Östeer. Akad. Wiss., Math.-naturwiss. Kl.* **166**: 123-164.
- Xyda, A. (1986). Supplementary evidence on the biometry and ecology of the lizard *Stellio stellio* of Greece and Cyprus. *Biologia Gallo-hellenica* **12**: 451-458.