

1-1-2004

The Amphibian and Reptile Species of Bozdağ (Ödemiş)

YUSUF KUMLUTAŞ

ADEM ÖZDEMİR

ÇETİN ILGAZ

MURAT TOSUNOĞLU

Follow this and additional works at: <https://journals.tubitak.gov.tr/zoology>



Part of the [Zooology Commons](#)

Recommended Citation

KUMLUTAŞ, YUSUF; ÖZDEMİR, ADEM; ILGAZ, ÇETİN; and TOSUNOĞLU, MURAT (2004) "The Amphibian and Reptile Species of Bozdağ (Ödemiş)," *Turkish Journal of Zoology*. Vol. 28: No. 4, Article 6. Available at: <https://journals.tubitak.gov.tr/zoology/vol28/iss4/6>

This Article is brought to you for free and open access by TÜBİTAK Academic Journals. It has been accepted for inclusion in Turkish Journal of Zoology by an authorized editor of TÜBİTAK Academic Journals. For more information, please contact academic.publications@tubitak.gov.tr.

The Amphibian and Reptile Species of Bozdağ (Ödemiş)

Yusuf KUMLUTAŞ*, Adem ÖZDEMİR, Çetin ILGAZ

Dokuz Eylül University, Faculty of Education, Department of Biology, 35150 Buca, İzmir - TURKEY

Murat TOSUNOĞLU

Çanakkale 18 Mart University, Faculty of Science and Arts, Department of Biology, Çanakkale - TURKEY

Received: 16.06.2003

Abstract: The herpetofauna of Bozdağ in western Anatolia was investigated. In the study area, 152 samples belonging to 22 species from 14 amphibian and reptile families were described. One of these species is an urodelan, 5 are anurans, 1 is a tortoise, 10 are lizards and 5 are snakes.

A specimen of *Eumeces schneideri* was found at Bozdağ for the first time.

Key Words: Bozdağ, herpetofauna, *Eumeces schneideri*, new locality.

Bozdağ (Ödemiş)'in Kurbağa ve Sürüngen Türleri

Özet: Bu çalışmada, Batı Anadolu'da bulunan Bozdağ'ın herpetofaunası araştırılmıştır. Araştırma bölgesinde, 14 amfibi ve sürüngen familyasından 22 türe ait toplam 152 örnek tanımlanmıştır. Bunlardan 1 tanesi kuyruklu kurbağa, 5 tanesi kuyruksuz kurbağa, 1 tanesi kara kaplumbağası, 10 tanesi kertenkele ve 5 tanesi de yılan türlerine aittir.

İlk kez Bozdağ'dan *Eumeces schneideri*'ye ait bir örnek bulunmuştur.

Anahtar Sözcükler: Bozdağ, herpetofauna, *Eumeces schneideri*, yeni lokalite.

Introduction

Although some previous studies on the herpetofauna of western Anatolia have been published (Budak, 1976; Öz, 1982; Kumlutaş, 1993; Tok, 1996; Baran and Atatür, 1998; Türkozan et al., 2001), there is limited information on the herpetofauna of the high mountains of this region. Only mounts Honaz, Yamanlar, Spil and Murat from this area have been investigated in detail from a herpetological viewpoint (Doğaç, 1998; Kumlutaş et al., 2000; Kumlutaş et al., 2001; Özdemir and Baran, 2002). Bozdağ, which is one of the high mountains in the study area, has not been fully studied in terms of its herpetofauna except for in studies on mountain frogs carried out by Baran (1969) and Baran and Atatür (1986).

Bozdağ, lies in an east-west direction and is located within the borders of Manisa and İzmir vilayets. This area has the combined characteristics of the 2 Mediterranean climate types: subarid-mild and subhumid-cool (Ofilas and Bekat, 1988). The peak of the mountain is 2159 m and macchie (*Quercus coccifera*), forest (*Pinus brutia*, *P. nigra pallasiana*, *Castanea sativa*), Mediterranean mountain steppe (*Astragalus tmoleus* var. *tmoleus*, *Genista lydia* var. *lydia*) and subalpine vegetation (*Sideritis taurica*, *Euphorbia anacampseros* var. *tmolea*, *Minuartia juressi juressi*, *Campanula teuroides*) are commonly seen in the area (Bekat and Ofilas, 1990).

This study mainly aims to describe the amphibian and reptile species of Bozdağ and we hope the results will make a valuable contribution to the knowledge about western Anatolia's herpetofauna.

* Corresponding to: yusuf.kumlutas@deu.edu.tr

Materials and Methods

A total of 152 amphibian and reptile specimens were studied during our excursions in 1999, 2001 and 2002 (some specimens were examined and released). Specimens that were examined and released in the study area are shown with an asterisk in the list. Specimens are kept at Dokuz Eylül University, Buca Education Faculty, Department of Biology. The area where the specimens were studied is shown in the Figure.

Identification of the amphibian and reptile species collected from the areas of study was performed by utilizing the available published literature (Başoğlu and Baran, 1977; Leviton et al., 1992; Baran and Atatür, 1998).

Material List

Familia	Species	Material (N)
Salamandridae	<i>Triturus karelini</i> (Strauch, 1870)	8*
Ranidae	<i>Rana ridibunda</i> Pallas, 1771	10*
	<i>Rana macrocnemis</i> Boulenger, 1885	3*

Hylidae	<i>Hyla arborea</i> (Linnaeus, 1758)	10*
Bufonidae	<i>Bufo bufo</i> (Linnaeus, 1758)	8*
	<i>Bufo viridis</i> Laurenti, 1768	11*
Testudinidae	<i>Testudo graeca</i> Linnaeus, 1758	13*
Agamidae	<i>Laudakia stellio</i> (Linnaeus, 1758)	8+7*
Gekkonidae	<i>Hemidactylus turcicus</i> (Linnaeus, 1758)	1+1*
Anguidae	<i>Ophisaurus apodus</i> (Pallas, 1775)	2*
Lacertidae	<i>Lacerta trilineata</i> Bedriaga, 1886	6+3*
	<i>Lacerta danfordi</i> (Günther, 1876)	3*
	<i>Ophisops elegans</i> Ménétries, 1832	4
Scincidae	<i>Ablepharus kitaibelii</i> (Bibron-Bory, 1833)	1
	<i>Eumeces schneideri</i> (Daudin, 1802)	1+1*
	<i>Mabuya aurata</i> (Linnaeus, 1758)	3
Amphisbaenidae	<i>Blanus trauchi</i> (Bedriaga, 1884)	19
Typhlopidae	<i>Typhlops vermicularis</i> Merrem, 1820	12
Boidae	<i>Eryx jaculus</i> (Linnaeus, 1758)	3
Colubridae	<i>Coluber collaris</i> (Müller, 1878)	1
	<i>Coluber najadum</i> (Eichwald, 1831)	1
	<i>Eirenis modestus</i> (Martin, 1838)	12

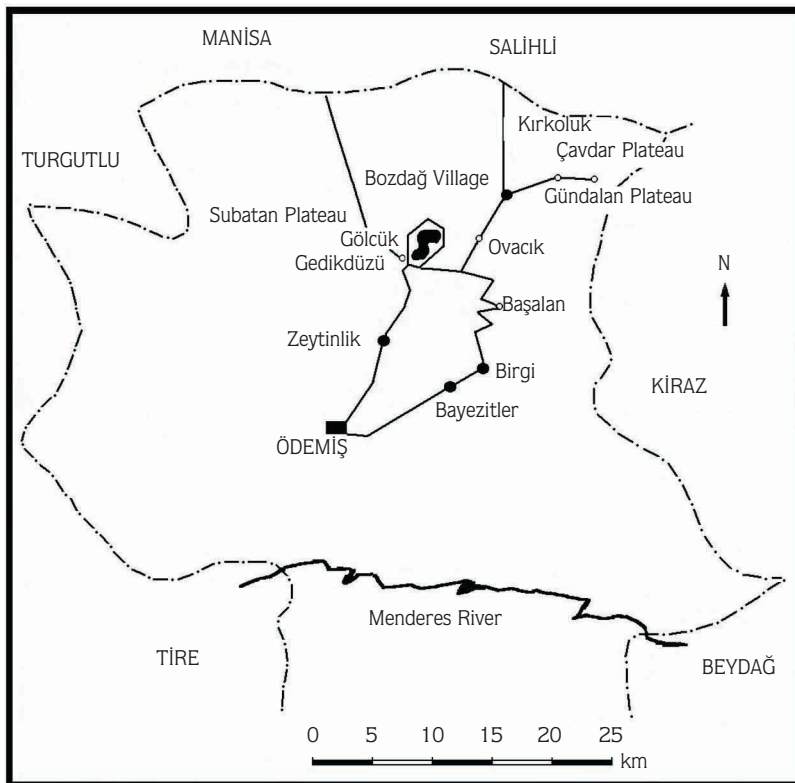


Figure. The research area in which specimens were studied.

Conclusion

In detailed excursions to the research area, 14 families from 18 genera including 22 species were identified to inhabit the region (1 is an urodelan, 5 are anurans, 1 is a tortoise, 10 are lizards and 5 are snakes). Thus, the lizard population in the research area has the densest distribution (N: 60), while anurans (N: 42), snakes (N: 29), tortoises (N: 13) and urodeles (N: 8) follow in descending order.

The importance of this study lies in the discovery of *Eumeces schneideri* in the area of research. The first record of *Eumeces schneideri* from Western Anatolia (Denizli) was given by Kumlutaş et al. (2004). The record

given in this study is the second locality for *Eumeces schneideri* in Western Anatolia. Denizli, the previously known westernmost distribution point of *E. schneideri*, is about 125 km east of the study area. Regarding scalation, particularly the midbody scale count (26), the Bozdağ specimen agrees with the values published for *E. s. princeps* rather than with those of *pavimentatus*; however, as regards the colour pattern, it resembles the latter taxon much more (Eiselt, 1940; Baran, 1977; Darevsky, 1981). Therefore, by gathering more specimens related to this species, a more accurate conclusion will be reached about the status of the subspecies.

References

- Baran, İ. 1969. Anadolu dağ kurbağaları üzerinde sistematik araştırma. Ege Üniv. Fen Fak. İlimi Rap. Ser. No: 80. 1-78.
- Baran, İ. 1977. Türkiye'de Scincidae familyası türlerinin taksonomisi (The Taxonomy of the Members of the Family Scincidae in Turkey). Doğa, 1: 217-223.
- Baran, İ. and Atatür, M.K. 1986. A taxonomical survey of the mountain frogs of Anatolia. Amphibia-Reptilia, 7: 115-133.
- Baran, İ. and Atatür, M.K. 1998. The Herpetofauna of Turkey (Amphibians and Reptiles). T.C. Çevre Bakanlığı, Ankara.
- Başoğlu, M. and Baran, İ. 1977. Türkiye Sürüngenleri Kısım I. Kaplumbağa ve Kertenkeleler. Ege Üniversitesi Fen Fakültesi Kitaplar Serisi No:76, 1-272.
- Bekat, L. and Oflas, S. 1990. Bozdağ (Ödemiş) vejetasyonu. X. Ulusal Biyoloji Kongresi, 18-20 Temmuz, Erzurum, 257-270.
- Budak, A. 1976. Anadolu'da yaşayan *Lacerta laevis*, *L. danfordi*, *L. anatolica*'nın taksonomik durumları ve coğrafi dağılışı üzerinde araştırmalar. Ege Üniv. Fen Fak. İlimi Rap. Ser. Bornova-İzmir, No. 214, 1-59.
- Darevsky, I.S. 1981. *Eumeces schneideri* (Daudin 1802) - Tüpfelskink. Pp. 355-365 in: Böhme, W. (ed.), Handbuch der Reptilien und Amphibien Europas, Aula Verl., Wiesbaden, vol. 1, 520 pp.
- Doğaç, M. 1998. A study on the herpetofauna of Honaz Mountain (Denizli). MSc Thesis, DEÜ, İzmir, 61pp.
- Eiselt, J. 1940. Der rassenkreis *Eumeces schneideri* Daudin. Zool. Anz., Leipzig, 131: 209-228,
- Kumlutaş, Y. 1993. Anadolu'da *Ablepharus kitaibelii* (Sauria: Scincidae)'nin bireysel ve coğrafi varyasyonu üzerinde araştırmalar. Tr. J. of Zoology. 17: 103-115.
- Kumlutaş, Y., Durmuş, S.H. and Ilgaz, Ç. 2000. Yamanlar Dağı ve Karagöl civarındaki kurbağa ve sürüngenlerin taksonomisi ve ekolojisi. Ekoloji Çevre Dergisi. 10(37): 12-16.
- Kumlutaş, Y., Ilgaz, Ç. and Durmuş, S.H. 2001. Herpetofauna of Spil Mountain (Manisa) and its vicinity: Results of field surveys. Anadolu University Journal of Science and Technology. 2: 63-66.
- Kumlutaş, Y., Kaska, Y., Ilgaz, Ç. and Böhme, W. 2004: First record of *Eumeces schneideri* (Daudin, 1802) (SAURIA: Scincidae) from Western Anatolia. Zoology in the Middle East. 32: 111-113.
- Leviton, A.E., Anderson, S.C., Adler, K. and Minton, S.A. 1992. Handbook to Middle East Amphibians and Reptiles. Oxford, Ohio, 252 pp.
- Oflas, S. and Bekat, L. 1988. Bozdağ (Ödemiş) florası. IX Ulusal Biyoloji Kongresi, 21-23 Eylül, Sivas. Cilt 3, 363-368.
- Öz, M. 1982. Ege Bölgesinde *Ophisaurus apodus* (Lacertilia-Anguidae)'un taksonomik durumu ve dağılışı. E.U. Faculty of Science Journal. Ser. B, Vol. V. NR. 1, 47-56.
- Özdemir, A. and Baran, İ. 2002. Research on the herpetofauna of Murat Mountain (Kütahya-Uşak). Tr. J. of Zoology 26: 189-195.
- Tok, C.V. 1996. Güneybatı Anadolu'dan toplanan *Ophisops elegans* (Sauria: Lacertidae) örnekleri hakkında. Tr. J. of Zoology. 20: 285-291.
- Türkozan, O., Kumlutaş, Y. and Ilgaz, Ç. 2001. On the possible occurrence of the Marginated Tortoise, *Testudo marginata*, in Turkey. Chelonian Conservation and Biology. 4: 208-210.