

The Herpetofauna of the Ordu-Giresun Region

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Abstract: In this study, 17 reptile and amphibian species were recorded from 19 different localities in the Ordu-Giresun region. Of these, 3 belong to the urodelans species group, 6 belong to anurans, 4 belong to lizards and 4 belong to snakes.

Key Words: Ordu, Giresun, Herpetofauna, zoogeography

Ordu-Giresun Bölgesinin Herpetofaunası

Özet: Ordu-Giresun bölgesinde yapılan bu çalışmada 19 farklı lokaliteden amfibi ve reptillere ait 17 tür tespit edilmiştir. Bunlardan üçü kuyruklu kurbağa, altısı kuyruksuz kurbağa, dördü kertenkele ve dördü yılanlar grubuna dahildir.

Anahtar Sözcükler: Ordu, Giresun, Herpetofauna, zoocoğrafya

Introduction

Recent papers by foreign or Turkish researchers on the reptiles and amphibians of Turkey have been on a specific species or a group of species. However, in order to give the distribution of amphibian and reptilian fauna of Turkey in detail, research results on specific regions have also been published (1).

Our research area, the Ordu-Giresun region, is isolated from the southern regions by the Canik and Giresun mountains extending parallel to the Black Sea coast. The eastern coastal strip of Giresun is bordered by the high Zigana mountains which are perpendicular to the Black Sea coast. These high inland mountain barriers produce a more temperate climate in the region. Most of the amphibian and reptilian species of the region are derived from Transcaucasiana, whereas some species filter through from Europe. Due to the above-mentioned characteristics the Ordu-Giresun region is of great significance in terms of herpetofauna.

The investigations carried out in our research field until now have been related to either a specific species or a large scale herpetological study including the whole Black Sea region (2-9).

The Ordu-Giresun region has not yet been investigated in detail from a herpetological viewpoint. Furthermore, the region has zoogeographical significance (10). Therefore, the following study was carried out.

The material of this survey consists of a total of 314 previously and newly collected specimens and is deposited in ZDEU (Zoology Department, Ege University) collection. The specimens were collected using different methods during field studies in the region. Frog species living in the water were caught using a dip net, whereas the toads were caught by hand. Lizards were caught under stones, among bushes near streams, in stony habitats and generally in open fields. Some lizards which are very active and difficult to catch such as *Lacerta viridis* were shot. Water snakes were caught by hand either in the water or under stones near water. Poisonous snakes were caught by pressing the head of the snake to the ground with a stick and then picked up by hand. Plant species of our study area were either collected or photographed and then determined by botany experts at Ege University.

The systematics of the examined material were made using the current literature (11-15). Frog, lizard and snake specimens were determined at species level. However detailed systematic and biological studies on those specimens will be presented in future studies.

The ecological observations related to the collected material are as follows. The dominant plant of the coastal strip in our study area was cultivated hazelnut (*Corylus avellana*). Further higher regions were covered with beech (*Fagus orientalis*) forests and some groups of

trees, such as chestnut (*Castanea sativa*), hornbeam (*Carpinus betulus*) and some bushes such as *Rhododendron luteum* and *Rhododendron ponticum*. some trees, bushy and herbaceous plant species were found such as *Rubus idaeus*, *Picea orientalis*, *Salix villosa*, *Thamus communis*, *Rhus coriaria*, *Mentha aquatica*, *Holcus lanatus*, *Cistus creticus*, *Fraxinus ornus*, *Chrysanthemum sp.*, *Brachypodium pinnatum*, *Sonchus arvensis*, *Trifolium stellatum*, *Rumex acetocella*, *Rosa canina* and *Campanula sp.* Of the *Vipera ammodytes* specimens the bigger one was found among the nut gardens at 9.00 in the morning while it was resting. The weather was cloudy and the temperature was 26°C. *Lacerta viridis* specimens were found generally between 9.00 and 16.00, *Anguis fragilis* from Perşembe was caught among the dry herbs in the nut gardens while it was raining. *Lacerta rudis* specimens were seen between 11.00-16.00, the effective period of the sun, generally on the slopes and broken stones.

The Ordu-Giresun area is one of the wettest regions of Turkey. The amount of yearly precipitation ranges from 1000 mm to 1400 mm per square meter. The

relative humidity ranges from 70-80%. The annual mean temperature is 8°C at higher altitudes and it increases to 16°C at the coastal strip (16).

The collecting localities of the species are given next to the name of the species in Figure 1.

The list of species

Family: Salamandridae

Mertensiella caucasica (Waga, 1876), Material (N): 47

Triturus karelinii (Laurenti, 1768), N: 11

Triturus vittatus (Gray, 1835), N: 27

Family: Bufonidae

Bufo bufo (Linnaeus, 1758), N: 3

Bufo viridis Laurenti, 1768, N: 2

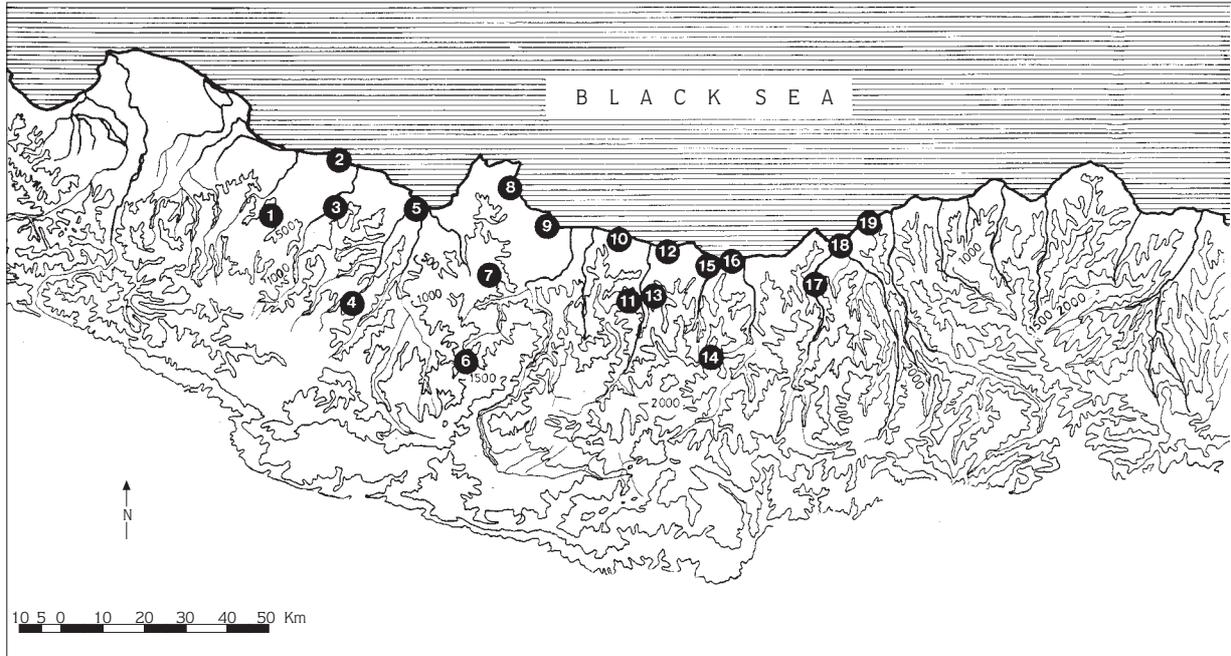
Family: Hylidae

Hyla arborea (Linnaeus, 1758), N: 13

Family: Ranidae

Rana ridibunda Pallas, 1771, N: 49

Figure 1. The material collecting localities in Ordu-Giresun region. 1. Çaybaşı, 2. Ünye, 3. Saraycık, 4. Korgan, 5. Fatsa, 6. Gölköy, 7. Ulubey, 8. Perşembe, 9. Ordu (merkez), 10. Turna suyu köyü, 11. Kurtuluş köyü, 12. Bulancak, 13. Kovanlık, 14. Yavuzkemaal, 15. Yolağzı köyü, 16. Giresun (kale içi), 17. Yağlıdere, 18. Espiye, 19. Tirebolu. The localities where the specimens were collected or seen (underlined) were given next to the species name. *Triturus karelinii* (4, 7), *Triturus vittatus* (2, 4, 7, 12), *Mertensiella caucasica* (13, 14), *Bufo bufo* (1, 6, 12, 13), *Bufo viridis* (4), *Hyla arborea* (1, 2, 5, 9), *Rana ridibunda* (1, 2, 4, 5, 7), *Rana dalmatina* (4), *Rana macrocnemis* (12), *Anguis fragilis* (8, 15, 18, 19), *Lacerta rudis* (1, 2, 6, 8, 10, 14, 15, 16), *Lacerta saxicola* (3, 14), *Lacerta viridis* (2, 5, 8, 10, 11, 12, 15, 17, 18), *Vipera ammodytes* (8), *Natrix natrix* (6), *Natrix tessellata* (8), *Coronella austriaca* (6, 8).



Rana dalmatina Bonaparte, 1840, N: 2
Rana macrocnemis Boulenger, 1885, N: 1
 Family: Anguidae
Anguis fragilis (Linnaeus, 1758), N: 7
 Family: Lacertidae
Lacerta rudis Bedriaga, 1886, N: 61
Lacerta saxicola Eversmann, 1834, N: 37
Lacerta viridis (Laurenti, 1768), N: 47
 Family: Colubridae
Coronella austriaca Laurenti, 1768, N: 1
Natrix natrix (Linnaeus, 1758), N: 2
Natrix tessellata (Laurenti, 1758), N: 1

Family: Viperidae

Vipera ammodytes (Linnaeus, 1758), N:3

The herpetofauna of the Ordu-Giresun region has not been examined in detail. This region is of great significance in terms of amphibian and reptilian fauna because of geographical and zoogeographical features (10). In this study, it was established that 3 species belong to the Salamandridae family, 2 belong to Bufonidae, 3 belong to Ranidae, 1 belongs to Anguidae, 3 belong to Lacertidae, 3 belong to Colubridae, and 1 belong to Viperidae. It is remarkable that no land tortoises were encountered in the region. We believe that long term field studies will fill some of the gaps and the taxonomic status of the species in this region will be further clarified.

References

1. Baran, I., Bibliographie der Amphibien und Reptilien der Türkei. Zoologische Bibliographie der Türkei Pisces, Amphibia, Reptilia. Max Kasperek Verlag Heilderberg, 79-118, 1986.
2. Kumlutaş, Y., Karadeniz Bölgesi *Lacerta viridis* (Sauria: Lacertidae) Populasyonları Üzerinde Taksonomik Araştırmalar. Tr. J. of Zoology, 20: 223-247, 1996.
3. Baran, I., Kuzey Ege Denizi, Marmara Denizi ve Karadeniz'deki Adalarımızın Herpetofaunasının Taksonomik ve Ekolojik Araştırılması. TÜBİTAK, Doğa Bilim Dergisi, 5: 155-1162, 1981.
4. Yılmaz, I., Anadolu Amfibilerinin Yayılışı Üzerine Bir Çalışma (Amphibia: Urodela, Anura). TÜBİTAK, Doğa Bilim Dergisi, 13: 130-140, 1989.
5. Baran, I., Yılmaz, I., Kete, R., Kumlutaş, Y., Durmuş, H., Batı ve Orta Karadeniz Bölgesi'nin Herpetofaunası. TÜBİTAK, Doğa Dergisi, 3: 275-288, 1992.
6. Yılmaz, I., Kumlutaş, Y., Türkiye'de Yaşayan *Bufo bufo* (Linnaeus, 1758)'nin Dağılışı ve Taksonomik Durumu Hakkında Bir İnceleme. Tr. J. of Zoology, 19, 3: 277-284, 1995.
7. Tok, C.V., Kumlutaş, Y., On *Vipera ammodytes transcaucasiana* (Viperidae) from Perşembe, Black Sea region of Turkey. Zoology in the Middle East 13, 47-50, 1996.
8. Yılmaz, I., Uğurtaş, I., H., Kuzey Anadolu ve Traky Bölgesi *Bufo viridis* (Bufonidae, Anura) Populasyonlarının Taksonomik Bir Araştırması. TÜBİTAK, Doğa Bilim Dergisi, 14: 1-13, 1990.
9. Schmidtler, J.F., Orientalische Samaragdeidechsen: 1 Zur Systematik und Verbreitung von *Lacerta viridis* in der Türkei (Sauria: Lacertidae). Salamandra, 22: 29-46, 1986.
10. Clark, E.D., Report on a Collection of Amphibians and Reptiles from Turkey. Calif. Acad. San Francisco No. 104, 1-62, 1973.
11. Baran, I., Türkiye Yılanlarının Taksonomik Revizyonu ve Coğrafi Dağılımları. TÜBİTAK yayınları, Seri No. 9, 1-77, 1976.
12. Başoğlu, M., Baran, I., Türkiye Sürüngenleri. Kısım I. Kaplumbağa ve Kertenkeleler. Ege Üniv. Fen Fak. Kitaplar Ser. No. 76, Bornova, 1-272, 1977.
13. Başoğlu, M., Baran, I., Türkiye Sürüngenleri. Kısım II. Yılanlar. Ege Üniv. Fen Fak. Kitaplar Ser. No. 80, Bornova, 1-218, 1980.
14. Başoğlu, M., Özeti, N., Yılmaz, I., Türkiye Amfibileri. Ege Üniv. Fen Fak. Kitaplar Ser. No. 151, Bornova, 1-221, 1994.
15. Leviton, A.E., Anderson, C., Adler, K., Minton, S.A., Handbook to Middle East Amphibians and Reptiles. Society for the study of Amphibians and Reptiles. 1-252, 1992.
16. Atalay, I., The Ecology of Beech (*Fagus Orientalis* Lipsky) Forests and Their Regioning in Terms of Seed Transfer. Orman Bakanlığı Orman Ağaçları ve Tohumları İslah Araştırma Müdürlüğü, Ankara, No. 5, 1-209, 1992.