

## BIBLIOGRAPHY OF TURKISH EVEN-TOED UNGULATES (MAMMALIA: ARTIODACTYLA)

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ABSTRACT: In this study, accessible publications on Turkish even-toed ungulates up to this date were compiled. The order Artiodactyla is represented by 13 species in Turkey, *Sus scrofa*, *Camelus ferus*, *Camelus dromedarius*, *Cervus elaphus*, *Dama dama*, *Capreolus capreolus*, *Gazella dorcas*, *Gazella subgutturosa*, *Bos taurus*, *Bubalus bubalis*, *Capra aegagrus*, *Ovis gmelini* and *Rupicapra rupicapra*. *Capra ibex* and *Gazella gazella* are now known to be extinct species.

KEY WORDS: Bibliography, Artiodactyla, Turkey

In Turkey, the Classis Mammalia is represented by Insectivora, Chiroptera, Carnivora, Cetacea, Perissodactyla, Artiodactyla, Rodentia and Lagomorpha orders.

A considerable amount of knowledge about the Turkish mammals is merely preserved on the library shelves of various governmental institutions because the results from investigations conducted by those bodies generally appear for public use only in their local publications which has no easy and academically accustomed access. The first bibliography of Turkish Fauna was published by The Scientific and Technical Research Council of Turkey (Aytuğ and Çakman, 1972). The other bibliographic study concerning the Turkish mammals was written by Kumerloeve (1975). The latests ones are The bibliographies of Turkish Carnivora, Insectivora and Chiroptera recently published by Albayrak et al. (1997, 1998, 2000).

The aim of this study is to contribute to the researches on the order Artiodactyla and the formation of the bibliography of Turkish Mammalian Fauna.

### MATERIALS AND METHOD

For the bibliography of the order Artiodactyla, data was gathered by collaborating with the libraries and archives of Kırıkkale University, Selçuk University, Ankara University; Faculty of Science, Faculty of Letters, Faculty of Agriculture, Faculty of Veterinary; İstanbul University, Faculty of Science; Gazi University Faculty of Sciences and Arts; The National Library; The Ministry of Environment and Forestry; The Ministry of Agriculture and Rural Affairs; The Scientific and Technical Research Council of Turkey; The Higher Education Council of

Turkey; The General Directory of Mineral Research and Exploration of Turkey; The Grand National Assembly of Turkey and their relevant institutions.

Distributions of actual species being feral or domestic were shown in the maps prepared based on the provincial unit. Systematic orders and names of the taxa were given according to Ellerman and Morrison-Scott (1951), Corbet (1978) and Wilson and Reeder (1993). The status of species and subspecies were firstly determined according to IUCN.

## RESULTS

The latest literary data obtained on the Turkish even-toed ungulates are given below. According to literature data, *Gazella gazella* (Pallas, 1776) lived in Southeastern Anatolia but is now an extinct species. Some species are represented by the domesticated species such as *Camelus ferus*, *Camelus dromedarius* and *Bos taurus*.

Order: Artiodactyla

Suborder: Suiformes

Family: Suidae Gray, 1821

Subfamily: Suinae Gray, 1821

Genus: *Sus* Linnaeus, 1758

Species: *Sus scrofa* Linnaeus, 1758

Type locality: Germany

Status: Vulnerable

Wild boar inhabits almost the whole Turkey (Fig. 1), but the population size decreases by over hunting.

Suborder: Tylopoda

Family: Camelidae

Genus: *Camelus* Linnaeus, 1758

Species: *Camelus ferus* Przewalski, 1883

Type locality: "Bactria" (=Uzbekistan, Bokhora)

Status: Lower risk (Conservation dependent, Extinct in the wild)

Domesticated form of two humped or Asian camel exists in the Western Anatolia though it is rare (Fig. 2).

Species: *Camelus dromedarius* Linnaeus, 1758

Type locality: Africa

Status: Lower risk (Conservation dependent, Extinct in the wild)

Domesticated form of single humped desert camels or “hacin camel” exists in the Southwestern Anatolia (Fig. 3).

Suborder: Ruminantia

Family: Cervidae

Subfamily: Cervinae

Genus: *Cervus* Linnaeus, 1758

Species: *Cervus elaphus* Linnaeus, 1758

Type locality: Europe

Subspecies: *Cervus elaphus maral* Gray, 1850

Type locality: Persia (Iran)

Status: Endangered

Deer is also called as red deer or great deer. It exists in various parts of Turkey (Fig. 4).

Subfamily: Cervinae

Genus: *Dama* Frisch, 1775

Species: *Dama dama* (Linnaeus, 1758)

Type locality: Europa (Sweden)

Subspecies: *Dama dama dama* (Linnaeus, 1775)

Type locality: Europe (Sweden)

Status: Critically endangered

It is called red deer or ‘yağmurca’. It was formerly seen in some part of the Mediterranean Region of Turkey. It is also taken under protection in Düzlerçamı near Antalya and in Gökova near Marmaris today. It is also rarely found in Çatalan near Adana and the Manavgat Mountains (Fig. 5).

Subspecies: *Dama dama mesopotamica* Brooke, 1875

Type locality: Luristan, Iran.

Status: Critically endangered

It is also called as 'siğın'. It was formerly reported to live in the Hakkari Province (Fig. 6). However, present status is not known.

Subfamily: Capreolinae

Genus: *Capreolus* Gray, 1821

Species: *Capreolus capreolus* Linnaeus, 1758

Type locality: Europe (Sweden)

Status: Endangered

It is also called karaca, elik or black deer. It formerly lived in the following regions: the Blacksea region, the Marmara region, the Northern Aegean Region, the provinces of İzmir, Antalya, Adana, Osmaniye, Hatay, Hakkari, Erzurum and Kars. It is rarely seen in the Turkish Thrace, the Central Blacksea Region and the Northwestern and Northeastern Anatolia today (Fig. 7).

Family: Bovidae

Subfamily: Antilopinae Gray, 1821

Genus: *Gazella* Blainville, 1816

Species: *Gazella dorcas* (Linnaeus, 1758)

Type locality: Africa (Lower Egypt)

Status: Critically endangered

It is also called "dorkas gazella" and "beatiful eyed gazella". It was formerly found in the Eastern Mediterranean and the Southeastern Anatolia (Fig. 8).

Species: *Gazella subgutturosa* Gldenstaedt, 1780

Type locality: Azerbaijan, Steppes of East Transcaucasia

Subspecies: *Gazella subgutturosa subgutturosa* Gldenstaedt, 1780

Type locality: North-Western Persia

Status: Critically endangered

It is also called "ahu", "ceren," "acem gzeli", "common gazella",

“mountain gazella”. It is now under protection in Ceylanpınar near the Urfa province, but some escapers could rarely be seen in the mountains of Urfa (Fig. 9). Its wild population does not exist.

Subfamily: Bovinae

Genus: *Bos* Linnaeus, 1758

Species: *Bos taurus* Linnaeus, 1758

Type locality: Upsala, Sweden

Status: Lower risk (Conservation dependent, Extinct in the wild)

Domestic form of *Bos taurus* exists throughout Turkey (Fig. 10). *Bos taurus* formerly existed in central Anatolia, the western parts of Eastern Anatolia and the central and western part of Southeastern Anatolia till I. B.C. Horn and bone remains are present at Konya Archaeology Museum. Fossils belonging to this species were encountered at the excavations in Elazığ and Kahramanmaraş provinces.

Genus: *Bubalus* Smith, 1827

Species: *Bubalus bubalis* (Linnaeus, 1758)

Type locality: “Asia”? (Habitat in Asia, cultus in Italy)

Status: Lower risk (Conservation dependent, Extinct in the wild)

Domestic water buffalo, mandate or “camız” exists throughout Turkey (Fig. 11). *Bubalus bubalis* formerly lived in the central and western parts of the Eastern Mediterranean, and the Southeastern and Central Anatolia.

Subfamily: Caprinae Gray, 1821

Genus: *Capra* Linnaeus, 1758

Species: *Capra aegagrus* Erxleben, 1777

Type locality: Daghestan, East Caucasus

Subspecies: *Capra aegagrus aegagrus* Erxleben, 1777

Type locality: Daghestan, East Caucasus

Status: Critically endangered

It is also called wild goat, red mountain goat, mountain goat, red goat, yellow goat, rocky goat, big horned goat and bezoar goat. Generally it lives in the Eastern Anatolia and Taurus Mountains of Southern Turkey (Fig. 12).

Family: Bovidae Gray, 1821

Subfamily: Caprinae Gray, 1821

Genus: *Ovis* Linnaeus, 1758

Species: *Ovis gmelini* Blyth, 1840

Type locality: Erzurum, Asia minor

Subspecies: *Ovis gmelini anatolica* Valenciennes, 1856

Type locality: Bulgar Dagh Mountains, Cilician Taurus, Asia minor

Status: Critically endangered

It is called wild sheep, mountain sheep, rocky sheep, Anatolian wild sheep. It was formerly seen in the provinces of Eskişehir, Afyon, Konya and Karaman, and in the Central Taurus mountains. It is under protection only in Bozdağ near the Konya province today (Fig. 13).

Subspecies: *Ovis gmelini gmelini* Blyth, 1841

Type locality: Erzurum, Asia minor

Status: Critically endangered

It is also called the mountain sheep and rocky sheep. It lives in the mountains between the provinces of Iğdır, Van and Hakkari (Fig. 14).

Family: Bovidae

Subfamily: Caprinae Gray, 1821

Genus: *Rupicapra* DeBlainville, 1816

Species: *Rupicapra rupicapra* Linnaeus, 1758

Type locality: Helveticis (Switzerland)

Status: Endangered

Subspecies: *Rupicapra rupicapra asiatica* Lydekker, 1908

Type locality: Trebizond, Asia Minor

Status: Critically endangered

It is also called the steppe goat, black goat, hook horned wild goat. It lives in some parts of Northeastern and Eastern Anatolia (Fig.15).

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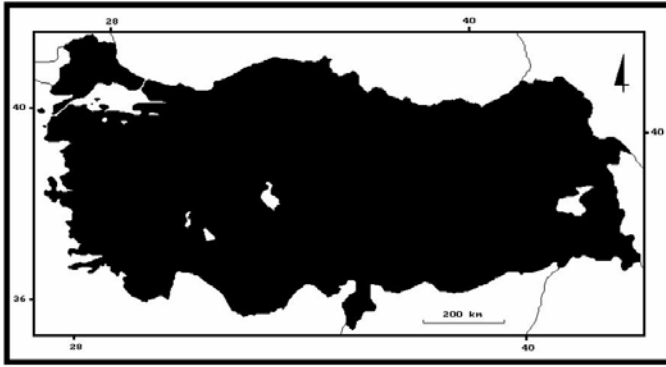


Fig. 1. Distribution of *Sus scrofa* in Turkey

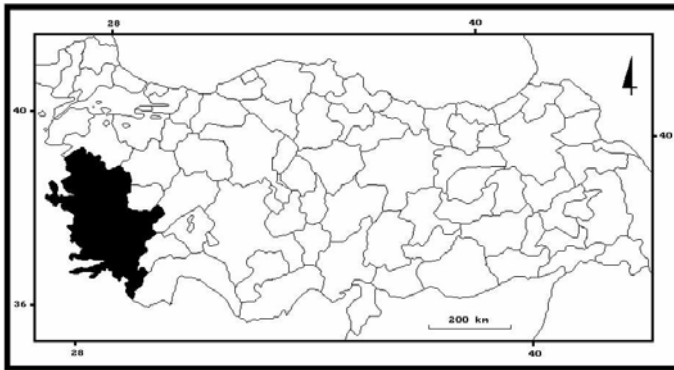


Fig. 2. Distribution of the domesticated form of *Camelus ferus* in Turkey

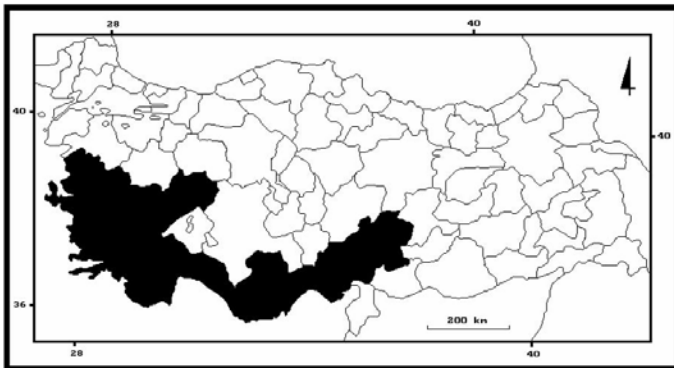


Fig. 3. Distribution of the domesticated form of *Camelus dromedarius* in Turkey



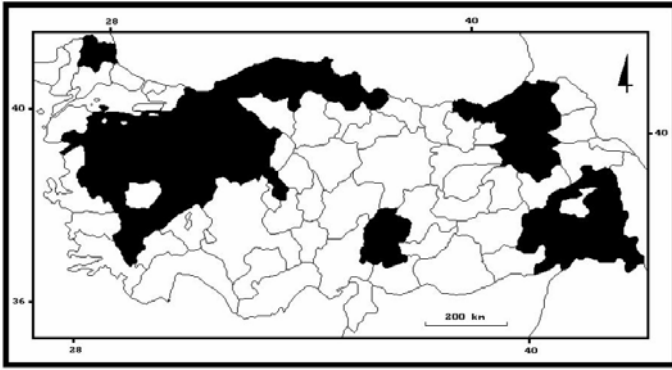


Fig. 4. Distribution of *Cervus elaphus maral* in Turkey

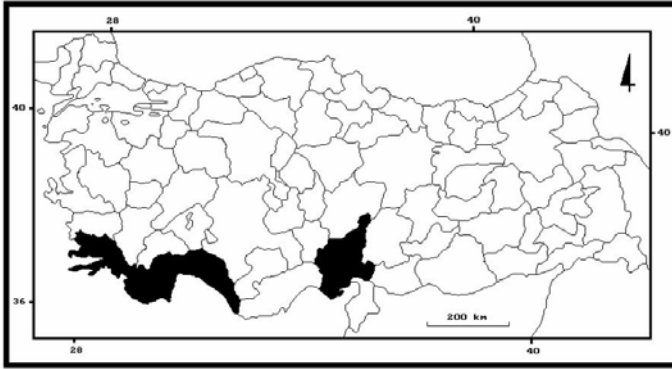


Fig. 5. Distribution of *Dama dama dama* in Turkey

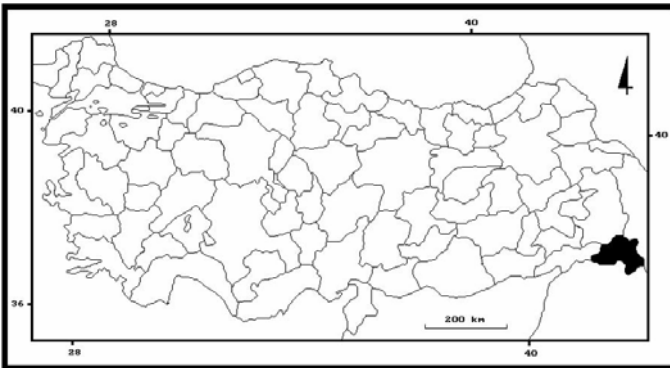


Fig. 6. Distribution of *Dama dama mesopotamica* in Turkey

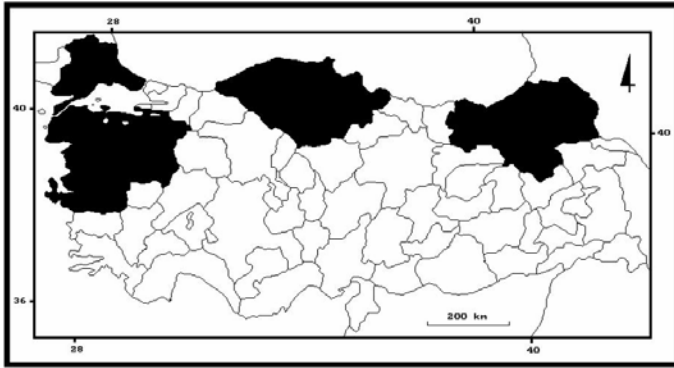


Fig. 7. Distribution of *Capreolus capreolus* in Turkey

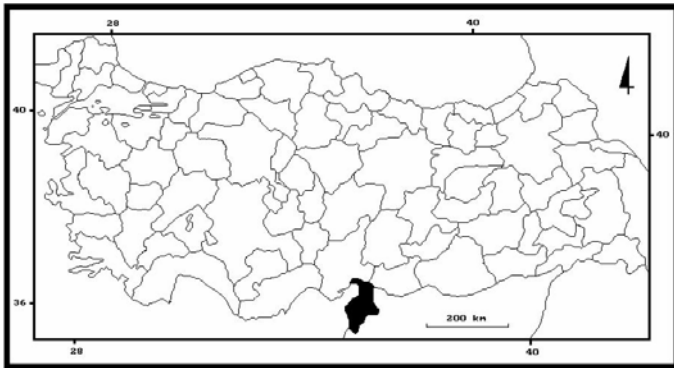


Fig. 8. Distribution of *Gazella dorcas* in Turkey



Fig. 9. Distribution of *Gazella subgutturosa subgutturosa* in Turkey

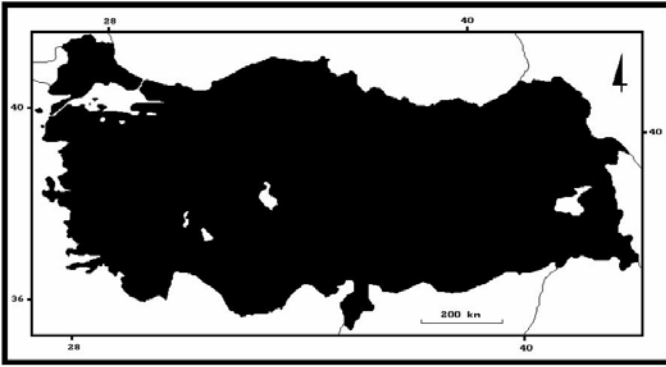


Fig. 10. Distribution of the domesticated form of *Bos taurus* in Turkey

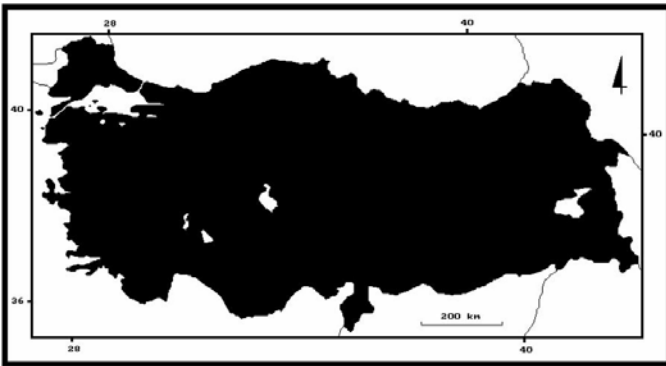


Fig. 11. Distribution of the domesticated form of *Bubalus bubalis* in Turkey

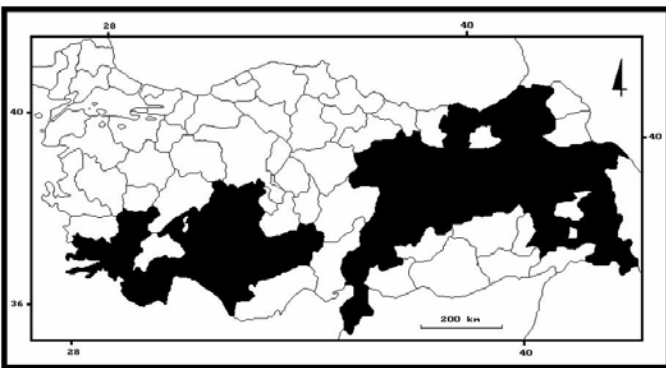


Fig. 12. Distribution of *Capra aegagrus aegagrus* in Turkey

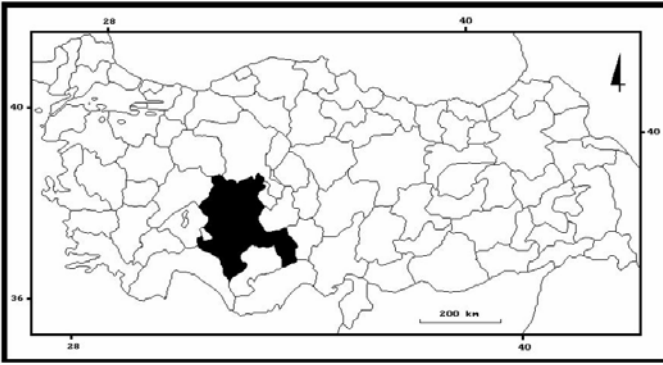


Fig. 13. Distribution of *Ovis gmelini anatolica* in Turkey

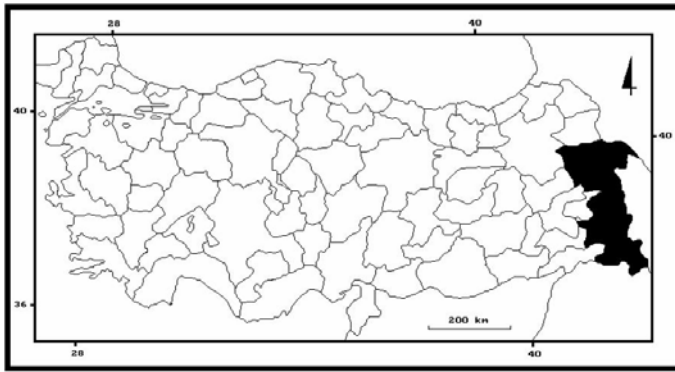


Fig. 14. Distribution of *Ovis gmelini gmelini* in Turkey

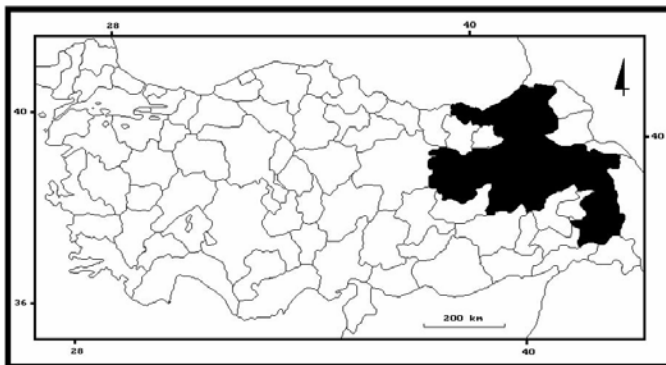


Fig. 15. Distribution of *Rupicapra rupicapra asiatica* in Turkey