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Note on a Near-Eastern relic population of roe deer, *Capreolus capreolus* (L., 1758) (Mammalia, Artiodactyla)

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SUMMARY

Roe deer from south-eastern Anatolia, Upper Mesopotamia, and the northern Levant are referred to the Kurdish subspecies, *Capreolus capreolus coxi* (Cheesman and Hinton, 1923). This paper confirms the persistence of roe deer in the mountainous territories along the extant border between south-eastern Turkey and north-western Syria.

Since antiquity, the Amanus mountains and all the forested region that lies along the present political border between south-eastern Turkey and north-western Syria were well known as the land of deer. The occurrence of these ungulates has also been documented by classical authors, such as Aelian who observed that: "...deer live on the highest mountains, the Amanus, Lebanon, and Carmel." (*De Natura Animalium*, V: 56). Certain taxa, such as the Mesopotamian fallow deer, *Dama dama mesopotamica* (Brooke, 1875), and the red deer, *Cervus elaphus* L., 1758, probably survived there until comparatively recent historical times (Tristram, 1888; Mouterde, 1966; Harrison, 1968 and 1972; Harrison and Bates, 1991). Today the roe deer, *Capreolus capreolus* (L., 1758) is the only representative of the Cervidae family which is reputed to survive in these territories (cf. Harrison, 1968; Harrison and Bates, 1991). Its occurrence was already reported by Carruthers (1909), Talbot (1960), and others. Most specifically, Danford and Alston (1880) reported the occurrence of the species from Giaour Dagh, near Osmanieh. As already observed by Banoglu (1958), the mountains of Osmanieh extend down to the Lebanon. So these roe deer are not specifically Turkish, and might represent one of the last population still dispersed in the Levant.

Between the end of April and the beginning of May 1994, a survey was carried out to supplement current knowledge on the Near-Eastern distribution of roe deer

in the Jabal Sloenfeh (35°37'N 36°06'E), located in north-eastern Syria about 20 km south of the Turkish border, on the western slopes of the Jibal al-Nusayriyah range. This is a mountainous woodland area dominated by *Abies* sp. and *Cedrus* sp., and densely populated with small human settlements. The site is comprised within a State Forest Protection Zone administered by the Directorate of Forests and Afforestation of the Ministry of Agriculture and Agrarian Reform of the Syrian Arab Republic (Evans, 1994). The study consisted of the review of all previous knowledge of the Anatolian and Levantine roe deer and their history, as well as of the direct examination of the available material from the area of Sloenfeh. In this area the local name for the species, often confused by local people with the gazelle, is "Yahmur, Al-Ayl, or Al-Asmar". Four specimens of roe deer have been examined in the course of the survey. Part of this material is still kept in private collections in the village of Bab Janné (Sloenfeh). One right antler is instead kept in the author's collection (cat. n. MM. 7. 1993: total length: 197 mm; circumference of the coronet: 9 mm).

One of the specimens examined was killed in 1985, and the other three in 1993. This evidence confirmed without any doubt the persistence at that time of a population of roe deer in the northern Jibal al-Nusayriyah range, not far from the southern slopes of the Amanus mountains, that represent the southernmost range of the species in Turkey (cf. Kumerloeve, 1967; Üstay, 1990). According to hunters of the villages of Basseet, Kassab and Sloenfeh, the roe deer also seems to survive in small numbers on Jabal Bayr, in the Kassab mountains on the Turkish border. In the course of the research, no record was obtained from the hills west of Aleppo, where the species has been reported by Harrison and Bates (1991). In Fig. 1 a list of records is given. The symbols used on the map are as follow:

■ - records based on personal observations (sightings, field sign records and specimens from museums and private collections):

□ - records based on interviews to local hunters, taxidermists, University researchers, Forest Service rangers, etc.

Specimens from the entire area are provisionally referred to the Kurdish subspecies, *Capreolus capreolus coxi*, which was described by Cheesman and Hinton (1923) from the type locality of Zakho, in Kurdistan (northern Iraq). According to Harrison (1968), this race certainly seems to merit subspecific status on account of its distinctive pale grey colour in winter pelage, which sharply distinguishes the few known specimens from the forms inhabiting the rest of Asia Minor, which have been placed in *C. c. capreolus* (L., 1758) by Corbet (1978) and Harrison and Bates (1991) following Flerov (1952). The summer pelage of the Kurdish roe deer is still unknown (Harrison and Bates, 1991). Its antlers are covered with velvet, which is unusually long and dense, pale brownish grey in colour (Fig. 2). Reed (in Hatt, 1959) observed that a male killed on 12 April 1955 still retained the velvet on the antlers but another male shot somewhat earlier had already lost all traces of

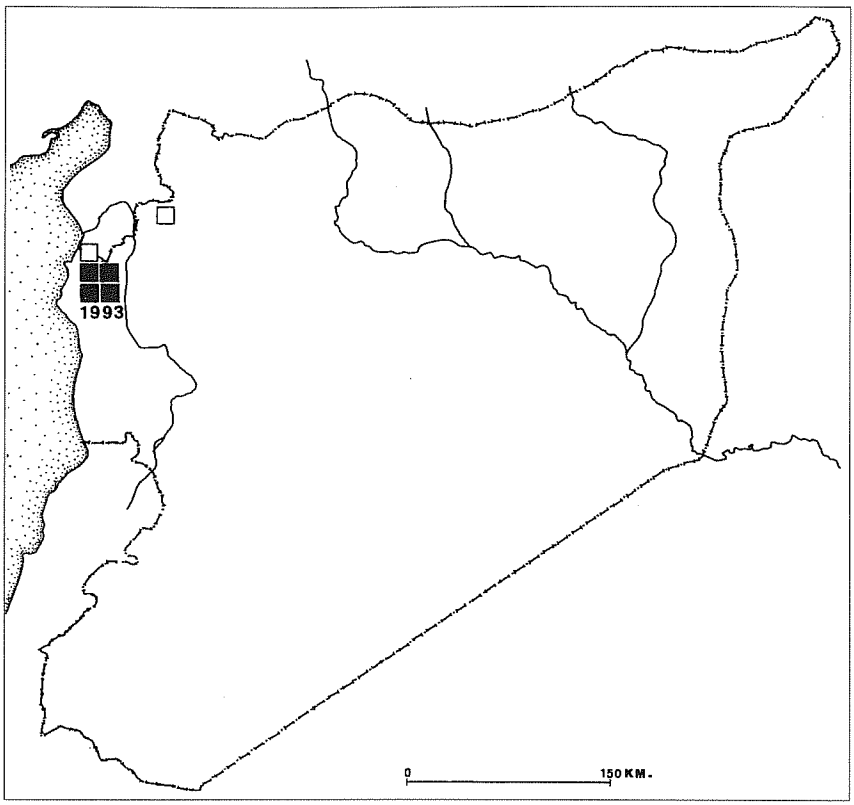

Fig. 1 - Present occurrence of roe deer in the Syrian Arab Republic, based on data mentioned in the text. Symbols are accompanied by the year of the record (drawing by Silvia Cantagalli Masseti).

it. The disappearance of the roe deer from the region is no doubt partly due to the increased hunting pressure and the progressive deforestation of its former habitat (Harrison, 1968; Harrison and Bates, 1991). According to Hatt (1959), Kurdish roe deer have become increasingly scarce in the Zagros mountains of Iraq, where they occurred at altitudes between 920 and 1550 metres. In former times, these ungulates extended down the Mediterranean hills as far south as the southern Levant (Tristram, 1876). About 10 years ago, some specimens from Turkey, possibly of the form *C. c. capreolus*, have been introduced in the reserve of Zubiya (32°25'N, 35°45'E), in the western highlands of Jordan, north of the town of Ajlun. Roe deer will surely disappear from the region altogether unless conservation measures are urgently adopted to save both the species and its habitat from extirpation. The Kurdish roe deer is in dire need of conservation, as it appears to be facing extinction throughout its natural range. In the course of recent decades, its numbers have been greatly diminished by human persecution and the exploitation of natural habitats. The territories of its latest distribution in the Levant

Fig. 2 - The antlers of the roe deer of Jibal al-Nusayriyah (north-eastern Syria) are covered with velvet, which is unusually long and dense. This specimen was killed in the winter 1993, Bab Janné (Sloenfeh) (photograph by Marco Masseti).

have no area-based environmental laws or protected-area systems dedicated specifically to conserving biodiversity (Evans, 1994). Hunting is common throughout these territories and it seems to be increasing.

Despite the fact that strict hunting laws do exist, there is considerable illegal hunting, and poaching is frequent (Evans, 1994). In the light of all this, the roe deer of Jabel Slenfeh may represent the only native relic population of roe deer that still survives in the north-western Levant. The future survival of this population will depend on continuing and rigorous protection. A feasibility study of the introduction of this roe deer into other protected areas would be advisable with the aim of continuing the study and intensifying the protection of this ungulate.

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