

| | | | | |
|--------------------------|-----------|---------|-------------|---------------------|
| Bonn zoological Bulletin | Volume 57 | Issue 2 | pp. 367–373 | Bonn, November 2010 |
|--------------------------|-----------|---------|-------------|---------------------|

Homeless mammals from the Ionian and Aegean islands

Marco Masseti

Dipartimento di Biologia Evoluzionistica “Leo Pardi” dell’Università di Firenze,
Via del Proconsolo, 12, I-50122 Firenze, Italia; E-mail: marco.masseti@unifi.it.

Abstract. The paper present information about several mammalian species reported erroneously from the Ionian and Aegean islands and the occurrence of stuffed specimens in museum collections which reveal intriguing stories about their origins, especially about the islands from which they were collected. According to scientific and popular literature, these islands were often not numbered among the original homelands, nor even the territories of the artificial distribution of the species. So it is almost impossible today to understand why and how certain specimens reached these islands, especially in the case of those which were dangerous predators for the livestock, and even humans. This is the case, for example, of the Asia Minor Leopard, *Panthera pardus tulliana* Valenciennes, 1856, which today figures among the collections of the Natural History Museum of the Aegean, in the village of Mytelenii on the island of Samos.

Keywords. museum specimens, Ionian and Aegean islands, continental mammals, Asia Minor leopard.

INTRODUCTION

Scientific travellers and other authors of the past have occasionally reported the diffusion on the Ionian and Aegean islands of several mammalian species today completely unknown among the relative faunal assemblages (Fig. 1). Werner (1928) for example quoted the occurrence of a kind of squirrel on the island of Skyros (Northern Sporades), where he collected a specimen between the villages of Skyros and Linaria which he recognized as *Sciurus lilaeus*. According to Ellerman & Morrison-Scott (1951), this taxon is used to define a Greek subspecies of the red squirrel, *Sciurus vulgaris lilaeus* Miller, 1907, characteristic of the region of Mount Parnassus in continental Greece. Nevertheless, the occurrence of the same species on Skyros was subsequently also recorded by other authors such as Wettstein (1942) or Cheylan (1988) in recent times. On the basis of the authority of Werner, and to an even greater extent that of Wettstein, it is very difficult to refute the truth of these reports, even if red squirrels are today completely unknown on Skyros and the other islands of the Aegean and Ionian basin. Perhaps with the exception of Euboea, the natural occurrence of these rodents is, even on the rest of the Mediterranean insular environments, practically unknown. Their presence on some of these islands, such as Veli Brijuni (Croatia) (Scotti 1980), is essentially regarded as a consequence of recent human intervention (Masseti 2005). Representatives of the genus *Sciurus* Linnaeus, 1758, occur also on Lesbos (Ondrias 1966; Hecht-Markou 1994, 1999; Gavish & Gurnell 1999; Thorington & Hoffman 2005) and the

Turkish island of Gökçeada (Imbros) (Özkan 1995, 1999; Gavish & Gurnell 1999). These islands are, however, inhabited by another species of the genus, the Persian squirrel, *Sciurus anomalus* Gueldenstaedt, 1785, whose westernmost continental distribution extends to far-eastern Europe and western Anatolia (Gavish & Gurnell 1999). At the same time, however, there is no evidence to exclude the former diffusion of red squirrels on Skyros, where a population could have existed up to the first half of the 20th century, later becoming extinct. Red squirrels could have been imported by man onto the island from the nearby island of Euboea, where their presence was already reported by Linder Mayer (1835). In the light of modern ethnozoological enquiry, it would also appear that red squirrels figure among those mammal species which have been the subject of particular human attention for a variety of cultural purposes. In the Levant, for example, people still eat Persian squirrels and live specimens are regularly sold in the markets (Mendelsohn & Yom-Tov 1999).

SPECIES ERRONEOUSLY REPORTED FROM THE IONIAN AND AEGEAN ARCHIPELAGOS

Travellers of the past have often erroneously reported certain mammalian species from the Greek islands. According to Linder Mayer (1835), the blind mole *Talpa caeca* Savi, 1822, was dispersed on Euboea. However this 19th century report strikes a false note, since the species



Fig. 1. Map with the locations of the Ionian and Aegean islands mentioned in the text.

is limited in its south-eastern European distributional range to the continental Balkan peninsula. No moles have ever been reported from the eastern Mediterranean islands, with the only exception of the Balkan mole *Talpa stankovici* V. Martino & E. Martino, 1931 on the islands of Corfu (Niethammer 1962, 1990; Kryštufek 1999a) and Cephalonia (Catsadorakis 1985; Giagia-Athanassopoulou 1998; Stamatopoulos, *in verbis*). Wettstein (1942) observed another species, the crested porcupine *Hystrix cristata* Linnaeus, 1758, but mentioned that local people referred to its presence on the Eastern Aegean islands of Icaria and Lesbos. He (Wettstein 1942) added that this might have been the result of confusion with a hedgehog, the today dispersed Northern white-breasted hedgehog *Erinaceus roumanicus* Barrett-Hamilton, 1900 (Kryštufek et al. 2009). Effectively, the Greek term used to indicate the hedgehog is *skanzohiros*, which means “spiny pig”, which is probably the reason of a confusion with the English “porcupine” (and/or the Italian “porcospino” and the French “porc-épic”). Moreover, the common porcupine has never been reported from the Balkan peninsula (Masseti et al. *in press*), while the Indian crested porcupine, *Hystrix indica* Kerr, 1792 is known from Anatolia with an occurrence further east to the Near East, including Arabia, Kashmir, Nepal and through peninsular India to Sri Lanka (Harrison & Bates 1991). These publications are probably the baseline of several unproven reports. Cheylan (1988) still quoted the occurrence of “*Hystrix cristata*” (sic) on the Eastern Aegean islands of Rhodes, Icaria and Lesbos. The occurrence of *Microtus subterraneus* (de Selys-Longchamos, 1836) was reported from Euboea by Cheylan (1988), while Niethammer (1982) and Krystufek (1999b) mentioned it as absent from

the entire Mediterranean coast and islands (see also Masseti 2009). A label without specimen, written by Ioannis C. Ondrias himself, in the mammal collection of the University of Patras (coll. no. 3158) reports the occurrence of the common vole *Microtus arvalis* (Pallas, 1779), from the area of Mytilene in south-eastern Lesbos. But, according to Stella Fraguedakis Tsolis (*in litteris* 13th July 2006), this species does not appear to exist or to have ever existed on this island. Furthermore, the specimen to which the label referred has unfortunately been lost. Contrary, the presence of Gunther’s vole *M. guentheri* (Danford & Alston, 1880) is known from Lesbos (Stamatopoulos & Ondrias 1995), but according to Kryštufek & Vohralík (2005) this is the only record from all Mediterranean islands so far.

THE INSULAR EDIBLE DORMICE

Erroneous evaluations, or rather inattentive reading of publications of early authors have supported cultural models which are still difficult to eradicate, e.g. the consideration of the diffusion of several species of glirids in the Greek islands. One example is the erroneously supposed occurrence of the forest dormouse *Dryomys nitedula* (Pallas, 1778). Erhard (1858) reported the occurrence of *Myoxus nitela* Schreber, 1782, a species of glirid, similar in name to the forest dormouse from Andros, Naxos and Siphnos, where it occurred in orchards and orange groves. This report supported the assumption that this rodent occurs on these islands, but in reality the taxonomic classification does not correspond to that of the forest dormouse. According to Ellerman & Morrison-Scott (1951) *Myoxus nitela* is indicated as one of the synonyms of *Eliomys quercinus* (Linnaeus, 1766; garden dormouse), a species currently unknown in the Aegean area and being widespread in the central-western Mediterranean basin. Here it is not found further east than Dalmatia and the north-western Balkan Peninsula. Although according to Kryštufek (1999b), this forest dormouse does not occur on Mediterranean islands, Cheylan (1988) reported it from Euboea. Recently, the presence of the forest dormouse was reported on the island of Andros, which is still an unconfirmed record (Chondropoulos & Fraguedakis-Tsolis, *in verbis*). We have, on the other hand, known for some time of the presence of the edible dormouse on islands such as Crete (Zimmermann 1953; Kahmann 1959; Niethammer & Krapp 1978; Catsadorakis 1994), Euboea (Ondrias 1966), Corfu (Niethammer 1962; Niethammer & Krapp 1978) and Cephalonia (Niethammer & Krapp 1978; Catsadorakis 1985; Giagia-Athanassopoulou 1998). On the latter island, its occurrence has been recently confirmed by H. Pieper (*in litteris*), whereas Dimaki (1999) provided arguments for the existence of the species on Andros. According to H. Alivizatos & A. Lane (*in verbis*), the ed-

ible dormouse is also present on the island of Thassos where they mentioned its occurrence in the surroundings of the village of Panaghia, on 30 August 2000. Wettstein (1942) reports the occurrence of a dormouse, possibly the forest dormouse, from Rhodes, but according to other authors the species is still unknown here (cf. Festa 1914; De Beaux 1929; Zimmermann 1953). A remarkable human impact on the geographical distribution of some dormouse species in the Mediterranean region was observed by Carpaneto & Cristaldi (1994), Colonnelli et al. (2000) and Masseti (2005). The population density can be documented since antiquity through historical and biogeographical analyses, supported by paleontological and archaeozoological data. Furthermore, ethnozoological enquiries document the utilisation of dormice for food or medicine, through traditional captive-breeding techniques, up to very recent historical times.

HOMELESS GREEK ISLAND CARNIVORES IN THE EUROPEAN MUSEUMS

Several European natural history museums conserve material collected on the Greek islands which create problems in the attempt to arrive at their origins. This is the case, in the lynx, *Lynx lynx* (Linnaeus, 1758), collected on the island of Corfu and part of the collection of the Museum Alexander Koenig in Bonn, registered under the collection number ZFMK 93423. The specimen was purchased by Jochen Niethammer during the mammalogical exploration of the island. But the occurrence of the lynx on Corfu was very questionable and immediately resolved by the collector himself. Niethammer reported that he had bought it at the market, where he had been told that it originated from northern Greece, more specifically from Macedonia. In other cases specimens represent species which are in fact completely unknown to the islands which they are reported to originate from. In some cases, species have recently become extinct, like jackals from Corfu represented in the collections of the Museum Koenig (ZFMK 61193, 93420). Dispersed in the Balkan and Anatolian peninsulas, the Golden or Asiatic jackal *Canis aureus* Linnaeus, 1758 has been reported from Corfu (Niethammer 1962; Douma-Petridou 1977; Adamakopoulos et al. 1991; Demeter & Spassov 1993), Cephalonia (Demeter & Spassov 1993), Lefkada (Douma-Petridou 1977; Demeter & Spassov 1993) and Kythera (Jameson 1836, 1937), while other authors mentioned its occurrence on Ikaria (Atanassov 1955) and Skyros (Werner 1928; Wettstein 1942; Atanassov 1955). Ioannidis & Giannatos (1991) surveyed with positive results the island of Samos where jackals exist in the same habitats as in the rest of the southern Balkan Peninsula. Following the account of the expedition to the Greek archipelago published by the botanist Joseph P. de Tournefort (1717), Clarke (1801) ob-



Fig. 2. Stuffed specimen of the badger *Meles meles* collected on the island of Santorini (Thera) in 1859, and part of the collection of the Zoological Museum of the University of Athens (ZMUA 128) (photo Anastasios Legakis; courtesy Zoological Museum of the University of Athens).

served that “*Samos is infested with wolves*”. Anyway, this record should refer to jackals rather than wolves. There is in fact no evidence for the occurrence of the latter canides on the Greek islands of the late Holocene. According to Ioannidis & Giannatos (1991), the jackal no longer exists on Corfu, Kythera, Skyros and Ikaria, where it possibly became extinct in very recent historical times, but jackals vanished from Corfu not before 1991–1992 (Grémillet, *in verbis*). The only Aegean islands where the species still survives are Euboea (Demeter & Spassov 1993) and Samos (Laar & Daan 1967; Douma-Petridou 1977; Adamakopoulos et al. 1991; Ioannidis & Giannatos 1991; Demeter & Spassov 1993; Ioannidis et al. 1996; Dimitropoulos et al. 1998).

Among the collections of the Greek museums, there are several specimens that provoke questions which are still far from having been satisfactorily answered. For example, there is a stuffed badger, *Meles meles* (Linnaeus, 1758) today on display at the Zoological Museum of the University of Athens (ZMUA 128, Fig. 2) and collected on the island of Santorini (Thera) by K. Bassiliou in 1859. This specimen is intriguing because of the old age and it is the only record of the badger from this island. According to Schmalfuss (1991) the species is today unknown from Santorini. If the origin of the ZMUA specimen is correct, the species must have become extinct around the end of the nineteenth century because Douglas (1892) did not mention the badger in his list of the insular mammals. Santorini should therefore be added to the distribution areas of the badger within the Aegean islands. Known in Greek as *asvós*, the badger was recorded from Cephalonia (Catsadorakis 1985), Rhodes (Festa 1914; Tortonese 1973) and Crete (Raulin 1859; Barrett-Hamilton 1899; Bate 1906,



Fig. 3. Detail of the early 16th century wall decoration showing the “Life of St. Benedict” in the Great Cloister of the monastery of Monte Oliveto Maggiore (Siena, Italy) painted by the Italian artist Giovanni Antonio Bazzi.

1913; Miller 1907, 1912; Zimmermann 1953; Ondrias 1965; Ragni et al. 1999) where it is locally indicated by the vernacular term *arkalos*. In the course of the present study, it was possible to confirm its occurrence on the islands of Tinos, where it is locally known as *chakalos* (Gaetlich, pers. com.), Euboea, Crete, Rhodes, and possibly Andros (Gaetlich, pers. com.). There are unconfirmed records of badgers from Siphnos (Erhard 1858; Heldreich 1978; Cheylan 1988), but this does not exclude *a priori* the possibility of a previously more widespread distribution in the Aegean basin, and more specifically on the Cyclades. Moreover, the human practice of the importation of badgers onto the Greek islands is documented since prehistorical times. On Crete the oldest bones of *M. meles* were discovered in the Aceramic Neolithic levels at Knossos, while Ceramic Neolithic and later levels produced numerous remains of the species (Jarman 1996). Other osteological material was found on the site of Aghia Triada, and Kavousi-Vroda and has been respectively referred to the Ancient Minoan period (about 3,000–2,200 B.C.) (Wilkens 1996), and to the Late Minoan III C (Klipper & Snyder 1991; Snyder & Klippel 1996). It is not immediately apparent why human should have wanted to introduce badgers onto the islands, which is suggested because otherwise they would not have been able to pass unobserved on the small boats employed to reach the new territories (Vigne 1988, 1995; Masseti 1995). Since very an-

cient times, they may have played an important role in human societies, both symbolically and as food. Badgers might also have been utilised for their fur (Masseti 1995). Moreover, in medieval Europe another use of this mustelid has been documented. Wall paintings from the early 16th century (Fig. 3) at the monastery of Monte Oliveto Maggiore (Siena, Italy), painted by the Italian Giovanni Antonio Bazzi, better known as Sodoma, clearly show badgers as pets, very likely representing an authentic status symbol that underscored the affluence and social position of their owner, the painter himself (Carli 1980).

LEOPARDS ON SAMOS – CONCLUDING REMARKS

A stuffed adult leopard (Fig. 4) is on display at the Natural History Museum of the Aegean in Mytilenii, on the Greek island of Samos (Masseti 2000). This specimen previously belonged to the Town Council (Greek: *Nomarkia*) and has been exhibited there for several decades (Ioannidis et al. 1996; Dimitropoulos et al. 1998). On its label it is classified as *kaplani*, with the explanation that this is the Samian terminology indicating a species of panther. However, the word derives from the Turkish term *kaplan*, commonly used in Anatolia to indicate the tiger, and erroneously also the leopard (Danford & Alston 1880). On the basis of available information, it is today not possible to ascertain the age and the origin the specimen. It is said that the leopard was killed on the island between 1870 and 1880, but there is no evidence that this is correct. The title of one of the most famous novels of the contemporary Samian writer Alki Zei, *To kaplani tis vitrinas* (=The *kaplani* of the showcase), better known however as *Wildcat under glass*, was inspired by this leopard. Speaking of her childhood, the author described this *kaplani*, and since she was born in 1936, it can be presumed that the leopard is older. Unfortunately, the Samian specimen is of an unnatural shape because it has been rather inexpertly stuffed, and hardly recalls the form of a living individual. It has a total length of about 235 cm and tail length of 90 cm, apparently proving that this specimen is a large one. But since the skin of felids is extremely elastic, the original dimensions could have been altered during the taxidermic procedure. The coat colour has deteriorated due to bad preservation conditions, and its prolonged display under daylight. The hair of the skin is worn in patches, but it seems that originally the colouration was tawny or buff on the back and paler on the flanks, where it could have merged into the white of the belly. Today, the entire coat is uniform pale, with dark-brown rosettes along the flanks and the back, which are fairly large (about 3–4 cm in diameter), widely spaced and thinly rimmed, with the centres slightly darker than the



Fig. 4. The stuffed specimen of Asia Minor leopard, *Panthera pardus tulliana* Valenciennes, 1856, shown at the Natural History Museum of the Aegean, Samos (Greece) (photo Marco Masseti; courtesy Natural History Museum of the Aegean, Mytelenii, Samos).

ground tint. The coat is fairly short and full, the hair on the nape is long, and the tail is decidedly bushy. According to the colouration and coat pattern, this specimen could belong to the Anatolian leopard *Panthera pardus tulliana*, as mentioned by Valenciennes (1856), Pocock (1930) and Leyhausen (1991), and clearly distinct from other Near Eastern subspecies (Masseti 2000). It has also been said that the animal arrived at Samos from the opposite coast of Turkey, swimming across the channel separating the island from western Anatolia. In fact there is a deeply-rooted traditional belief on Samos which refer to leopards swimming from Anatolia in various periods. This was reported by Tournefort (1717) who confirmed this legend, observing that: “*Il y passe quelques tigres qui viennent de terre ferme par le Petit Boghas*”. Petit Boghas was the name used at this time to indicate the above mentioned channel. Clarke (1801) followed this observation and mentioned that: “*tigers sometimes arrive from the mainland, after crossing the little Boccaze; thereby confirming all observation made by the author in the former section, with regard to the existence of triggers in Asia Minor*”. However, Tournefort (1717) report was probably not based on an own observation, but rather

inspired by local people. In any case, since the distance between the island and the mainland is not more than 1.7 km, it cannot be excluded that leopards could have reached the island by swimming, at various times. These felids are good swimmers and could have come e.g. from the Samsundag area (Masseti 2000) which was until the early 1970s the last western Anatolian stronghold of the species (Kumerloeve 1971; Avci 1978; Ulrich & Riffel 1993; Masseti 2000).

Acknowledgements. I would like to express my appreciation and gratitude to the following friends and colleagues for their suggestions and assistance while the preparation of the present paper: Wolfgang Böhme and Rainer Hutterer, Zoologisches Forschungsmuseum Alexander Koenig, Bonn; Suleyman Karakaya and Suleyman Kaçar, Forest Department of Antalya (Turkey); Ioannis C. Ondrias, Basil Chondropoulos, Stella Fraguedakis-Tsolis and A. Stamatopoulos, Department of Biology of the University of Patras; Martin Gaetlich, Zoological Museum of the University of Athens; Xavier Grémillet, SOS Otter Network Sizun, France; Achilleas Dimitropoulos, Maria Dimaki and Yannis Ioannidis, Goulandris Natural History Museum, Athens; and Anastasios Legakis, Department of Biology of the University of Athens.

REFERENCES

- Adamakopoulos P, Adamakopoulos T, Bousbouras D, Giannatos G, Hatzirvassanis V, Yoannidis Y, Papaioannou DH, Sfougaris A (1991) Les grand Mammifères de Grèce (Carnivores et Artiodactyles): situation actuelle, repartition, habitats - les espèces menacées, perspectives de protection. *Biologia Gallo-hellenica* 18: 107–126
- Atanassov N (1955) The jackal (*Canis aureus* L.) in Bulgaria. *Comptes Rendus Acad. Bulg. Sci. Sofia* 8 (4): 61–63
- Avci O (1978) Dilek Yarimadasi Milli Parki. Unpub. MS for Dilek Yarimadasi Milli Park fiefi. Orman Fakültesi, Istanbul Üniversitesi, 4 pp.
- Barrett-Hamilton G (1899) Note on the Beech Marten and Badger of Crete. *Ann. Mag. Nat. Hist. London* 7 (4): 383–384
- Bate DMA (1906) On the mammals of Crete. *Proc. Zool. Soc. London* 2: 315–323
- Bate DMA (1913) The Mammals of Crete. In Trevor-Battye A (ed.) *Camping in Crete*. Witherby & Co., London, pp. 254–256
- Carli E (1980) Le storie di San Benedetto a Monteoliveto Maggiore. *Silvana Editoriale/Monte dei Paschi di Siena, Siena*, 184 pp.
- Carpaneto GM, Cristaldi M (1994) Dormice and man: a review of past and present relations. *Hystrix The Italian Journal of Mammalogy* 6 (1-2): 303–330
- Catsadorakis G (1985) Προκαταρκτική καταγραφή της πανίδας και διαφόρων διαχειριζόμενων θεμάτων του εθνικού δρυμίου Αίνοι (Κεφλληνιάς). Διενθυσση Δασών Κεφλληνιάς, Cephalonia, 25 pp.
- Catsadorakis G (1994) The vertebrate animals of Samaria National Park (Crete, Greece). *Biologia Gallo-hellenica* 22: 9–22
- Cheylan G (1988) Compte-rendu de la table ronde: répartition géographique et statut des mammifères menacés dans les îles méditerranéennes. *Bull. Ecol.* 19 (2–3): 481–484
- Clarke ED (1801): *Travels in various countries of Europe, Asia and Africa. / First Part, Russia Tartary and Turkey*. 2nd ed. (1810). Xxviii, T. Cadell and W. Davies, London, 812 pp.
- Colonnelli G, Carpaneto GM, Cristalli M (2000) Uso alimentare e allevamento del ghio (*Myoxus glis*) presso gli antichi romani: materiale e documenti. In *Atti del 2° Convegno Nazionale di Archeozoologia*. Asti, 14–16 novembre 1997. Abaco Edizioni, Forlì, 315–325
- Danford CG, Alston ER (1880) On the Mammals of Asia Minor. Part II. *Proceedings of the Scientific Meetings of the Zoological Society of London* 1880: 50–64
- De Beaux O (1929) Mammiferi. In Ghigi A. (ed.): *Ricerche faunistiche nelle isole italiane dell’Egeo*. *Archivio Zoologico Italiano* 12–13: 135–154
- Demeter A, Spassov N (1993) *Canis aureus* Linnaeus, 1758 - Schakal, Goldschakal. In Stubbe M. & Krapp, F. (eds.) *Handbuch der Säugetiere Europas. Raubsäuger 1*. Aula Verlag, Wiesbaden, pp. 107–138
- Dimaki M (1999) First record of the edible dormouse *Glis glis* (L., 1766) from the Greek island of Andros. *Ann. Musei Goulandris* 10: 181–183
- Dimitropoulos A, Dimaki M, Ioannidis I. (1998) The animals and wetlands, close to human settlements. *Contribution to island fauna* 14, Athens, 180 pp.
- Douglas G (1892) Zur Fauna Santorins. *Zool. Anz. Leipzig* 15: 453–455
- Douma-Petridou E (1977) Systematics and geographical distribution of the families Canidae and Mustelidae in the Peloponnese (in Greek). Unpl. Manuscript. University of Patras, 197 pp.
- Ellerman JR, Morrison-Scott TCS (1951) *Checklist of Palaearctic and Indian mammals 1758 to 1946*. British Museum (Natural History), London, 810 pp.
- Erhard D (1858) *Fauna der Cykladen. Die Wirbelthiere der Cykladen, Nebst einem Anhang über deren Pflanzendecke*. Voigt and Günther, Leipzig, 117 pp.
- Festa E (1914) *Escursioni del Dr. Enrico Festa nell’Isola di Rodi. Mammiferi*. *Boll. Mus. Zool. Anat. Comparata R. Univ. Torino* 686: 1–21
- Gavish L, Gurnell J (1999) *Sciurus anomalus* Gùldenstaedt, 1785. In Mitchell-Jones AJ et al. (eds.) *The Atlas of the European mammals*. Academic Press, London, pp. 176–177
- Giagia-Athanassopoulou E (1998) Τα Θηλαστικά – Mammals. In Efthymiatou-Katsouni N (ed.) *Dedication to the National Park of Ainos*. Museum of Natural History, Cephalonia and Ithaca, pp. 159–161
- Harrison DL, Bates PJJ (1991) *The Mammals of Arabia*. Harrison Zoological Museum, Sevenoaks (England), 354 pp.
- Hecht-Markou P (1994) Beschreibung, geografische Verbreitung, Biotope und Ortswechsel des *Sciurus anomalus* Gùldenstaedt, 1785 auf der Insel Lesbos (Griechenland). *Ann. Musei Goulandris* 9: 429–444
- Hecht-Markou P (1999) Das Markieren des Lebensraumes von *Sciurus anomalus* auf der Insel Lesbos. *Ann. Musei Goulandris* 10: 201–221
- Heldreich T (1878) La faune de la Grèce. Ie Partie. Animaux vertebrés. *Expos. Univ. de Paris en 1878*
- Ioannidis Y, Giannatos G (1991) Preliminary survey on the distribution and status of jackal (*Canis aureus* L., 1758) in southern Greece. *Biologia Gallo-hellenica* 18 (1): 67–74
- Ioannidis I, Dimaki M, Dimiropoulos A (1996) Säugetiere auf Samos. In Samiakos M (ed) *Samiotische Studien*, B 1995–1996; Pnevmatiko Idryma Samou “Nikolaos Dimitriou”; Athen, S. 465–468
- Jameson R (1836) *Naturgeschichte der Insel Cerigo*. *Isis (Oken)* 1838 (2): 127–130
- Jameson R (1837) Notes on the Natural History and Statistics of the Island of Cerigo et its dependencies. *The Edinburgh New Philosoph. Journal* Oct. 1936–Apr. 1937, 22: 62–69
- Jarman MR (1996) Human Influence in the Development of the Cretan Mammalian Fauna. In Reese DS (ed.) *Pleistocene and Holocene Fauna of Crete and its First Settlers*. Prehistory Press, Madison (Wisconsin), pp. 211–239
- Kahmann H (1959) Notes sur le statut actuel de quelques mammifères menacés dans la région méditerranéenne. *Mammalia* 3: 329–331
- Klipper WE, Snyder LM (1991) Dark age fauna from Kavousi, Crete. The vertebrates from the 1987 and 1988 excavations. *Hesperia* 60: 179–186
- Kryštufek B (1999a) *Talpa stankovici* V. Martino & E. Martino, 1931. In Mitchell-Jones, A.J. et al. (eds.) *The Atlas of European Mammals*. Academic Press, London, pp. 88–89
- Kryštufek B (1999b) *Dryomys nitedula* (Pallas, 1778). In Mitchell-Jones, A.J. et al. (eds.) *The Atlas of European mammals*. Academic Press, London, pp. 300–301
- Kryštufek B, Vohralík V (2005) *Mammals of Turkey and Cyprus*. Rodentia I: Sciuridae, Dipodidae, Gliridae, Arvicolinae. University of Primorska, Koper (Slovenia), 292 pp.
- Kryštufek B, Tvrtković N, Paunović M, Özkan B (2009) Size variation in the Northern white-breasted hedgehog, *Erinaceus roumanicus*: latitudinal cline and island rule. *Mammalia* 73: 209–306
- Kumerloeve H (1971) Zum Stand des Vorkommens von *Panthera pardus tulliana* Valenciennes, 1856 in Kleinasien. *Zool. Garten N.F.*, Leipzig 40: 4–22

- Laar V, Daan S (1967) The Etruscan Shrew, *Suncus etruscus* (Savi, 1822), found on Samos, Greece. *Zeitschrift für Säugetierkunde* 32: 174–175
- Leyhausen P (1990) The subspecies question. *Cat News* 15: 17–18
- Lindermayer D (1835) Euboea. Eine naturhistorische Skizze. *Bulletin de la Société Impériale de Naturalistes de Moscou*, XXVIII. Imprimerie de l'Université Impériale, Moscou: 27–30
- Masseti M (1995) Quaternary biogeography of the Mustelidae family on the Mediterranean islands. *Hystrix The Italian Journal of Mammalogy* 7 (1–2): 17–34
- Masseti M (2000) Wild cats (Mammalia, Carnivora) of Anatolia. With some observations on the former and present occurrence of leopards in south-eastern Turkey and on the Greek island of Samos. *Biogeographia* 20: 607–618
- Masseti M (2005) Natural and anthropochorous squirrels and dormice of the Mediterranean Region. *Hystrix The Italian Journal of Mammalogy* 16 (1): 3–26
- Masseti M (2009) Mammals of the Mediterranean islands: homogenization and the loss of biodiversity. *Mammalia* 73: 169–202
- Masseti M, Albarella U, De Grossi Mazzorin J (in press) The crested porcupine, *Hystrix cristata* L., 1758, in Italy. *Anthropozoologica*
- Mendelssohn H, Yom-Tov Y (1999) Fauna Palaestina. Mammalia of Israel. The Israel Academy of Sciences and Humanities, Jerusalem, 439 pp.
- Miller GS (1907) Some new European Insectivora and Carnivora. *Ann. Mag. N. H. London*, Sez. 20: 389–398
- Miller G (1912) Catalogue of the mammals of Western Europe (Europe exclusive of Russia). British Museum (Natural History), London, 1019 pp.
- Mitchell-Jones AJ, Amori G, Bogdanowicz W, Kryštufek B, Reijnders PJH, Spitzenberger F, Stubbe M, Thissen JBM, Vohralik V, Zima J (eds) The Atlas of the European mammals. Academic Press, London, 484 pp.
- Niethammer J (1962) Die Säugetiere von Korfu. *Bonner zoologische Beiträge* 13: 1–49
- Niethammer J (1982) *Microtus subterraneus* (De Sélys-Longchamps, 1836) – Kurzohrmaus. In Niethammer J, Krapp F (eds.) *Handbuch der Säugetiere Europas*. Bd. 2/I Rodentia II. Akademische Verlagsgesellschaft, Wiesbaden, pp. 397–418
- Niethammer J (1990) *Talpa stankovici* V. et E. Martino, 1931 – Balkan-Maulwurf. In Niethammer J, Krapp F (eds.) *Handbuch der Säugetiere Europas*. Bd. 3/I (Insektenfresser, Herrentiere). AULA-Verlag GmbH, Wiesbaden, pp. 141–144
- Niethammer J, Krapp F (1978) *Handbuch der Säugetiere Europas*. Band 1. Rodentia I. Aula Verlag, Wiesbaden
- Ondrias JC (1965) Die Säugetiere Griechenlands. *Säugetierk. Mitt.* 13: 109–127
- Ondrias JC (1966) The taxonomy and geographical distribution of the rodents of Greece. *Säugetierk. Mitt.* 14: 1–136
- Özkan B (1995) Gökçada ve Bozcaada Adalarinin Kemiricileri. Trakya Üniversitesi, Edirne, unpublished PhD thesis
- Özkan B (1999) Gökçada ve Bozcaada Kemirici Faunası (Mammalia; Rodentia). *Turkish Journal of Zoology* 23: 133–147
- Pocock RI (1930) The Panthers and Ounces of Asia. *Journal of the Bombay Nat. Hist. Soc.* 34: 63–82, 307–336
- Ragni B, Masseti M, Roussos T, Belardinelli A, Cicconi P (1999) The carnivores of the island of Crete, Greece. *Contributions to the Zoogeography and Ecology of the Eastern Mediterranean Region* 1: 117–123
- Raulin V (1859) La Crete en 1845. Description physique de l'île de Crete. Livre I. Th. Lafargue, Bordeaux (Editions de l'Entre-deux-Mers/Entre-deux-Mers - Régions d'Europe, Saint-Quentin-de-Baron, 2009), 159 pp.
- Schmalfuss H (1991) Santorin. Leben auf Schutt und Asche. Ein naturkundlicher Reiseführer. Verlag Josef Margraf-Scientific Books, Weikersheim, 85 pp.
- Scotti G (1980) L'arcipelago del Quarnero. Mursia, Milano, 270 pp.
- Snyder ML, Klippel WE (1996) The Cretan badger (*Meles meles*) as a food resource at Late Bronze/Early Iron Age Kavousi-Kastro. In Reese DS (ed.) *Pleistocene and Holocene fauna of Crete and its first settlers*. Prehistory Press, Madison (Wisconsin), pp. 283–293
- Stamatopoulos C, Ondrias I (1995) First record of the Levant vole *Microtus guentheri* Danford and Alston, 1880 in Lesbos island, Greece. *Säugetierk. Mitt.* 36: 53–59
- Thorington RW, Hoffman RS (2005) Family Sciuridae. In Wilson DE, Reeder DM (eds.) *Mammals species of the world. A taxonomic and geographic reference*. The John Hopkins University Press, Baltimore, pp. 754–843
- Tortonese E (1973) Appunti faunistici relativi all'isola di Rodi. *Atti del Museo Civico di Storia Naturale-Trieste* 28: 269–280
- Tournefort de JP (1717) *Relation d'un du Levant, Fait par Ordre du Roy*. 3 Vols. Lyon
- Ulrich B, Riffel M (1993) New evidence for the occurrence of the Anatolian leopard *Panthera pardus tulliana* (Valenciennes, 1956) in Western Turkey. *Zoology in the Middle East* 8: 5–14
- Valenciennes MA (1856) Sur une nouvelle espèce de Panthère tuée par M. Tchihatcheff à Ninfi, village situé à huit lieues Est de Smyrne. *Comptes Rendus Hebdomadaires l'Académie des Sciences* 42: 1035–1039
- Vigne J-D (1988) Les Mammifères post-glaciaires de Corse. Etude archéozoologique. 26e suppl. *Gallia Préhistoire*. CNRS, Paris, 337 pp.
- Vigne J-D (1995) Aproximacions arqueozoològiques de la relació 'home-animal en els territoris insulars: l'exemple mediterrani. *Cota Zero* 11: 61–70
- Werner F (1928) Beiträge zur Kenntnis der Fauna Griechenlands, namentlich der ägäischen Inseln. *Sitzungsberichte d. mathematurw. Kl., Abt. I, Akademie der Wissenschaften in Wien* 137: 284–295
- Wettstein von O (1942) Die Säugetierwelt der Ägäis nebst einer Revision des Rassenkreises von *Erinaceus europaeus*. *Ann. Naturhist. Mus. Wien* 52: 245–278
- Wilkens B (1996) Faunal remains from the Italian excavations on Crete. In Reese, D.S. (ed.) *Pleistocene and Holocene fauna of Crete and its first settlers*. Prehistory Press, Madison (Wisconsin), pp. 241–261
- Zimmermann K (1953) Das Gesamtbild der Säuger-Fauna Kretas. *Zeitschrift für Säugetierkunde* 67: 1–72

Received: 01.IX.2010

Accepted: 03.XI.2010