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MAMMAL SPECIES FROM ROMANIA. CATEGORIES OF CONSERVATION

DUMITRU MURARIU

On présente la distribution en Roumanie des 99 espèces de mammifères des ordres Insectivora, Chiroptera, Lagomorpha, Rodentia, Carnivora et Artiodactyla.

Pour chaque espèce la situation on sujet de sa protection

The diversity of natural ecosystems of Romania - country favoured by its relief from the Black Sea and the Danube Delta to large plains, hills, tablelands and mountain areas - has allowed the preserving of a rich mammal genetic fund.

The about 100 mammal species were unknown for the faunistic inventory for a very long time. The first mentioned species were of a cynegetic interest. Several foreign travellers of the 17th century (e. g. Alberty, 1632) remarked, among others, some species of large mammals (*Cervus elaphus, Rupicapra rupicapra, Ursus arctos*).

The prince of Moldavia - Dimitrie Cantemir (1673-1723) noted in 1716 the following mammal species: *Ursus arctos, Bison bonasus, Saiga tatarica, Cervus elaphus, Capreolus capreolus, Rupicapra rupicapra, Sus scrofa, Lepus europaeus, Vulpes vulpes, Canis lupus, Martes* sp., *Felis silvestris, Lynx lynx, Equus caballus gmelini*. Taking into consideration that the species citings continue with those of the fishes and the wild birds, Dimitrie Cantemir's encyclopaedic book, "Descriptio Moldavie" (1716), represents a very important scientifical work with valuable zoological and geographical information.

During the following centuries (the 18th and the 19th), Romanian naturalists grouped in different scientifical associations. Thus the biological researchings were better organised, among them being also included some data on mammals provided by: Csato (1878), Herman (1870), Bielz (1887), Ştefănescu (1890), Mehely (1900), Botezat (1903, 1904, 1913, 1914), Cehovski (1927). Together with the recent mammals, the fossil ones or those disappeared in the

historical time are also studied: Pauca (1936), Simionescu (1940), Macarovici (1937, 1938, 1940).

Unless the list or the catalogues comprising the mammals from Romania (Simionescu, 1922; Călinescu, 1931; Vasiliu, 1939) several authors published their results on some species: Călinescu, 1930 - *Mustela (= Putorius) eversmanni*; 1931 - *Cricetus c nehringi*; 1930 - *Citellus citellus*; 1958 - *Ondatra zibethica*; Lăzărescu, 1928 - *Sciurus vulgaris*, 1959 - *Glis glis*; Pohle, 1932 - *Chionomys*; Popovici, 1937 - *Sus scrofa*; Pinchas, 1930 - *Ovis musimon*; Goanță, 1942 - *Ursus arctos*; Motaș, 1944 - *Muscardinus avellanarius*; Comșia, 1940 - *Cervus elaphus*.

After 1950 several researchers studied populations of different species: Hamar, 1955, 1957, 1960, 1962; Simionescu, 1965, 1968, 1969, 1971, 1973, 1986; Popescu, 1968, 1970, 1972, 1974, 1975, 1977, 1981, 1984, 1987; Barbu, 1965, 1966, 1969, 1976; Marcheș, 1954, 1955, 1957, 1958, 1960, 1964, 1965; Vasiliu, 1961, 1968, 1970, 1974.

The list of the researchers who published morphological, ecological, ethological, systematical, zoological and geographical aspects on present and fossil mammals from Romania is very long. However, we give some names, who distinguished themselves by original researchings: Almașan, Andone, Andreescu, Ausländer, Chiriac, Cociu, Danilă, Dumitrescu, Feider, Ghizelea, Hellwing, Nesterov, Orghidan, Papadopol, Petrache, Raicu, Rădulescu, Samson, Solomon, Schnapp, Șutova, Straton, Suciu, Tanasachi, Terzea, Theis, Torcea, Voiculescu.

Many other researchers published notes and monographs about mammalian game species from Romania.

Unfortunately, now there are very few mamalogists in Romania. That is why there are few data concerning the estimation of every species population. A series of species have not been reported before 1970. Others enlarged their range, reaching also the Romanian territory. Finaly, some species were reintroduced or came back to the previous range, from where some of them were known only as subfossils.

According to these above-mentioned aspects the knowledge level on Romanian mammals can be established. In the same time it can be done appreciations on their number as well as on their statute within the Romanian protection laws. The need of conservation for each species is according to IUCN Red List Categories (1994).

Thus we hope to make our contributions to the knowledge of the mammals from Romania within the European context and the resulted data to be considered useful for the future Romanian legislation regarding the fauna protection from all country ecosystems.

MATERIAL AND METHOD

Most of the information on mammals of Romania are from the papers published up to the present. Others are the result of my own field activity. These data formed the base of the papers concerning the morphology, histology and histochemistry of the different organ structures, the systematics, ecology and zoogeography of the species. The study methods, of collecting, measuring, weighing, identification, field preserving are classical as well as those used in my laboratory activity. Most of my own data refer to insectivors, chiropters and rodents. The collected specimens were prepared as skins, skulls and skeletons.

RESULTS

Order **Insectivora** Bowdich, 1821

Erinaceus europaeus L . 1758 is common, all over the country, but with a strong tendency of numerical regression of his population, due to all kind of polluters, especially due to the chemical ones. Its protection is necessary: as yet it wasn't included within the list of the protected species from Romania. Now it is a vulnerable species. Some western European mammalogists consider rather *E concolor* to be in Romania instead of *E europaeus*.

Talpa europaea L., 1758 - it is a common species on the open lawns, deciduous forests, gardens and orchards from the plain areas to an altitude of 1500 m. Although it has natural enemies, as the predator birds, *T europaea* recorded only slight decreasing of its populations. Its absence in the oil areas or of the chemical works has only a local character. It doesn't need protection. There is a species with a lower risk - least concern.

Talpa caeca Savi, 1822 - it is mentioned only from the Eastern Carpathians (Simionescu, 1971). If the species identifications were correct, that means that it is a rare vulnerable species which needs protection.

Sorex araneus L., 1758 - it is common in the deciduous forest but also in the fallow places, covered with high vegetation. Its populations present a numerical regression, at least in the plain area. In the mountains it occurs up to the altitude of 1950 m. This is a species with a lower risk least concern and must be protected.

Sorex minutus L., 1766 - it has smaller and isolated populations, much more threatened to become extinct than *S araneus* on the Romanian territory It was mentioned only from Moldavia, Transylvania and Wallachia. It prefers afforested areas up to 1200 m altitude. It needs protection even if it is a species with lower risk - near threatened.

Sorex alpinus Schinz, 1837 - it is very rare, occured only in the compac forests of the mountain areas. It is very rare, being mentioned only from the Eastern and Southern Carpathians. It must be protected as a vulnerable species.

Neomys fodiens (Pannant, 1771) - it is vulnerable because it is dependent on the river flows, most of them polluted. Scarcely occurred, from the Danube Delta and the Romanian Plain level to 1500 m altitude. It must be protected as an endangered species.

Neomys anomalus Cabrera, 1907 - it is also vulnerable; it has much smaller populations than *N fodiens*. It is distributed from the plain area to the mountain one, at 2000 m altitude. The very few mentionings point out its scarcity, critically endangered. It must be protected.

Crocidura leucodon (Hermann, 1780) - it occurs in the plain, hilly and sub-Carpathian regions. Not being a rare species, it is vulnerable because of its natural habitat destroying and of the population division Its protection is necessary.

Crocidura russula (Hermann, 1780) - it has a contested occurrence since 1970. Most of its mentionings have been from Moldavia, Dobrogea, Transylvania and Wallachia. If these mentions were correct, according to the respective identifications, probably *C. russula* limited its range to the Southern Europe, continuing through Minor Asia up to China and some islands of the Pacific Ocean. Because it hasn't been mentioned in Romania since 1970, it can be considered an extinct species.

Crocidura suaveolens (Pallas, 1780) is a common species, but only in dry places of the plain and hilly areas. It prefers the fallow place but it can be occurred in orchards, cereal crops and vineyard, too. It isn't protected, but being useful (its food consisting in numerous invertebrates) and taking into consideration the alarming rhythm of its habitat destroying, *C suaveolens* has to be included in the list of the protected mammal species from Romania. It is vulnerable.

Order **Chiroptera** Blumenbach, 1779

Rhinolophus ferrumequinum (Sahreber, 1774) mentioned from over 40 caves from the Western, south-western and Eastern Romania, could be considered a common species. Taking into consideration that it has been mentioned only in Oltenia and a single locality from Transylvania, during the last 20 years, a strong decreasing of its populations is suggested. Now, it isn't protected, but it has to be included within the vulnerable protected species list of Romania.

Rhinolophus hipposideros (Bachstein, 1800) has a larger distribution than *R ferrumequinum*, practically being mentioned from all Romanian regions. As regards the last two decades, it was mentioned only from Oltenia. It is obvious the decreasing of its populations during the last years, especially because of its habitat destroying, unorganised tourism development, fire kindlings in caves, phonic pollution etc. Meanwhile it has to be noticed the low number of Romanian mammalogists which implies the lack of authorised researchings of large country areas. *Rh hipposideros* is not protected now but it has to be included within the vulnerable mammal species list of Romania.

Rhinolophus euryale Blasius, 1853 - it is known only from the Western and south-western Romania, mentioned more and more rarely. As yet, unprotected. It is necessary to be included within the endangered protected species list.

Rhinolophus blasii Peters, 1867 has a similar distribution to the previous species. It isn't protected by law and it has to be included within the endangered protected species list of Romania.

Rhinolophus mehelyi Matschie, 1901 - it is known only from the south-eastern Romania (Dobrogea) and from a single mentioning from the Romanian Plain (south of the country). It is a rare, vulnerable species, as yet unprotected, but it has to be protected.

Myotis myotis (Borkhausen, 1797) mentioned from the whole Romania up to 1970. It seemed to be a common species. Today it has limited populations and it is necessary some reservations to be founded for it to become protected (e.g. the caves of the Southern Carpathians).

Myotis blythii (Tomes, 1857) - it was common for Romania long time ago. Today, it is a rare species. During the last two decades it has been mentioned only from Oltenia (south, south-east of the country). Its protection is necessary, being a species with lower risk - conservation dependent. In July 1995 it was identified a colony of 200 specimens of *M blythii* in the church tower of the Slătioara village - Maramureş county.

Myotis capaccinii (Bonaparte, 1837) has never been numerous. Mentioned only from the south western Romania (Banat and western Oltenia), it is scarcely observed becoming a vulnerable species and needs protection now.

Myotis dasycneme (Boie, 1825) - it is known only from Banat up to 1970 That is why, today, its presence is doubtful in Romania There is an endangered species and must be protected.

Myotis daubentoni (Kuhl, 1819) - it is known only from Transylvania, before 1970. It is a rare, vulnerable species and needs protection

Myotis emarginatus (E. Geoffroy, 1806) - it was mentioned from Transylvania, Western Oltenia and Dobrogea. Today it is present only in the last two counties, as a rare, vulnerable species which must be protected.

Myotis mystacinus (Kuhl, 1819) - it was mentioned before 1970 from Transylvania, Banat and Dobrogea. Now it occurs only in Oltenia. It is a species with small populations, lower risk - near threatened and has to be protected.

Myotis nattereri (Kuhl, 1818) - it was known as a very rare species before 1970 from Transylvania and Dobrogea. Probably extinct If it still exists in the Romanian fauna, it must be protected.

Myotis bechsteini (Kuhl, 1818) - also, it was known as a very rare species, from Transylvania, Oltenia and Dobrogea, only before 1970. Critically endangered. It has to be included within the protected species list.

Myotis ikonnikovi (Ognev 1912) - it was mentioned only once from Sinaia (the Bucegi Mountains), before 1970. Although it is an Asiatic species, it seems that Romania is the western limit of its European range. Taking into account its less numerous populations, critically endangered and it is necessary to protect its erratic individuals.

Plecotus auritus (Linnaeus, 1758) - it seems to be a common species if we take into consideration the mentionings of its presence all over the country. But being scarcely observed in small colonies, less than as single individuals we cannot state that it is so common to be unprotected. There is a species with lower risk - least concern.

Plecotus austriacus (Fisher, 1829) is much less numerous, being mentioned only from Moldavia, Oltenia and Banat. It needs protection. There is a vulnerable species.

Vespertilio murinus (Linnaeus, 1758) has a large distribution in Romania, excepting the south-eastern area. In spite of this distribution, the small and few colonies place it among the rare and vulnerable species, and it has to be protected.

Eptesicus serotinus Schreber, 1774 - it is known from the whole Romania but has small and rare populations. There is a species with lower risk - conservation dependent. It has to be protected.

Eptesicus nilssoni (Keyserling and Blasius, 1839) - it hasn't been mentioned since 1918. It could be absent in the Romanian fauna. This information seems to be valuable taking into consideration that both Romania and ex-Yugoslavia were its southern limit of its distribution range. Anyhow, it is a very rare species, probably extinct from the Romanian fauna and has to be protected if appears

Nyctalus noctula (Schreber, 1774) - it is a common species in Romania. It lives both in caves and in hallows, under the tree bark, house eavea, in lofts,

steeples, cellars. Practically, it is present in all regions of the country but it needs protection in order to establish a certain equilibrium with the number of the insects which consist its food. It can be considered a species with lower risk - least concern.

Nyctalus lasiopterus (Schreber, 1780) - it is a rare and vulnerable species, mentioned only from some localities of Transylvania, Banat and Wallachia. Incidentally it has been identified in colonies of *N. noctula*. It must be protected.

Nyctalus leisleri (Kuhl, 1818) - it is mentioned as a very rare, endangered species in Dobrogea, Wallachia, Banat and Transylvania. Its protection is necessary.

Pipistrellus pipistrellus (Schreber, 1774) - it is common, but with small populations, in colonies of some tens of individuals. It has to be protected as a species with lower risk - near threatened.

Pipistrellis nathusii (Keyserling and Blasius, 1839) - it is mentioned only from 6 localities from Romania, in Dobrogea, Wallachia and Transylvania. That few remarked colonies were not larger than 12 individuals. It is a rare and vulnerable species, and it must be protected.

Pipistrellus savii (Bonaparte, 1837) is mentioned for the first time by Mr. Năstase Rădulet (1933, in verbis) from Dobrogea. Its distribution from Spain and Canary Islands, through Marocco, the Caucasus, Mongolia, north-eastern to Korea and Japan makes us to consider Dobrogea the northern limiting line of its range, and the Cape Verde Islands, India and Myanmar Union the southern limiting line. This being its first mention from Romania, here the species is very rare, endangered and must be protected.

Barbastella barbastellus (Schreber, 1774) - it is a rare and vulnerable species, mentioned only along the Eastern and Southern Carpathians, at an altitude of maximum 900 m. Its withdrawal from the summer shelter to caves only in January (Dumitrescu and coll., 1962-1963) and its emerging in March suggest us its resistance to cold more than the other species. It must be protected.

Miniopterus schreibersi (Kuhl, 1819) - it is a common species with numerous populations (e. g. 12.000 - 14.000 individuals in Peştera Liliecilor (the Bats Cave) - Râmnicul Vâlcea, according to Dumitrescu and coll., 1962 - 1963). It is not mentioned from Moldavia and Wallachia. It must be protected as a species with lower risk - least concern.

Order **Lagomorpha** Brandt, 1855

Lepus capensis Linnaeus, 1758 - it is common from the Danube Delta and from the plain areas to about 2000 m altitude, with small densities in the

mountain. It is an important cynegetic species. Its hunting is established b Hunting Law no. 26/1976. Its protection is necessary as a vulnerable species.

Oryctolagus cuniculus (Linnaeus, 1758) - it was brought from Fran Moldavia during 1905-1907. Now, it is also present in Wallachia. In Transyl it was brought too. It is a rare species, thus it is protected by the same law 26/1976) concerning the hunting economy and the proper hunting in Romani protection is necessary as an endangered species.

Order **Rodentia** Bowdich, 1821

Sciurus vulgaris Linnaeus, 1758 - it is common along the w Carpathian chain, at an altitude of 1400 - 1500 m, but it also occurs in deciduous forests of the hilly regions. Due to its protection by the Law 26/197 penetrated into the small plain forests. It is necessary its protection further or forbidding its hunting all year long. There is a species with lower ri conservation dependent.

Marmota marmota Linnaeus, 1758 - it disappeared from the Roma fauna at the end of the 19th century. After several failures in reintroducing it, in 1972 its repopulation succeeded in three mountain massifs: Făgăraș and Re with Parâng from the Southern Carpathians and Căliman from the Eas Carpathians. The lots which the recent populations resulted from (around marmots) were brought from France and Austria. The species is still vulnerable and it is protected by the Law 26/1976.

Spermophilus citellus (Linnaeus, 1766) is absent in Transylvania bu the other counties it has a discontinuous distribution. Its populations from plain areas and Dobrudja do not exceed 20 individuals/ha. Also, it occurred at an altitude over 450 m. It isn't protected and its populations more and more rare due to its habitat destroying. It must be protected as endangered species.

Elyomis quercinus (Linnaeus, 1758) - it is a rare, endangered spec populating plain and hilly oak forests as well as the miseed mountain forest wasn't protected and it is necessary to be included within the protected spe lest of Romania.

Dryomys nitedula (Pallas, 1779) seems to have a larger distribution t *E. quercinus*, but for the Romanian fauna it is also a rare, endangered species needs protection.

Myoxus glis (Linnaeus, 1766) - it is a rare and vulnerable spec although it has been remarked more frequently than previous dormice. It is preserved and it must be included within the protected species list.

Muscardinus avellanarius (Linnaeus, 1758) - it is the best represented species among all dormice, but it still has the biological statute of rare and vulnerable species, and must be protected.

Cricetus cricetus (Linnaeus, 1758) - it is common in Moldavia, Wallachia and Transylvania. It occures scarcely in Oltenia and is absent in Dobrogea and Banat. It isn't necessary to be protected. There is a species with lower risk - least concern.

Mesocricetus newtoni (Nehring, 1898) - it is rare, vulnerable, occurring only in south-eastern Romania. Its vernacular name is "Hamsterul dobrogean" ("Dobrudjean hamster") because it occures only in Dobrudja. It has to be protected.

Cricetulus migratorius (Pallas, 1773) - during Holocene it occurred in the whole present Romanian territory. It become a rare species, being distributed only in Moldavia. It has to be protected as a species critically endangered.

Clethrionomys glareolus (Schreber, 1780) - it is common in all depressions and Carpathian afforested valleys (600 - 1800 m altitude). It isn't necessary to be protected There is a species with lower risk - least concern.

Arvicola terrestris (Linnaeus, 1758) - it is widely distributed from the Danube Delta level and along all slow flowing rivers to about 1500 m altitude. It became a rare species, being closely competed by *Rattus norvegicus* Because large populations are very detrimental, especially in fruit-trees, it isn't necessary to be protected. There is a species with lower risk - least concern.

Pitymys subterraneus (de Sélus-Longchamps, 1836) - once it was common but now it rarely occurs and is vulnerable. It is necessary to be protected.

Microtus arvalis (Pallas, 1779) - it is common all over the country, excepting the compact forests. It isn't necessary to be protected. There is a species with lower risk - least concern.

Microtus agrestis (Linnaeus, 1761) - it is a rare species, mentioned only from some localities from the Western, Eastern and Southern Carpathians. It has to be included within the protected species list as a vulnerable species.

Microtus nivalis (Martins, 1842) - withdrawn at altitude of over 700 m, it became a rare species, with a discontinuous distribution in the Carpathians. It must be protected. Its statute of a tertiary relict justifies the need of protection as a vulnerable species.

Microtus epiroticus (Ondrias, 1966) recently mentioned in the Romanian fauna (Randik and coll., 1980); it doesn't exceed westwards the limits of Dobrudja. It is rare and it had to be protected as a vulnerable species.

Ondatra zibethicus (Linnaeus, 1766) - firstly, it penetrated into the Western Romania (in 1938) and then into the Danube Delta (1951). Now, it is

common for the Romanian fauna. Although it is hunted for its fur, it isn't necessary to be protected. There is a species with lower risk - least concern.

Micromys minutus (Pallas, 1771) - it is mentioned from Moldavia, Wallachia, Oltenia and Dobrudja but with a discontinuous distribution according to the preferred habitat availability. It has to be protected as a vulnerable species.

Apodemus sylvaticus (Linnaeus, 1758) - it is common all over the country. It doesn't need protection. There is a species with lower risk - least concern.

Apodemus flavicollis (Melchior, 1834) - it is rarer than *A. sylvaticus* but present in all forests and in the alpine area. It isn't necessary to be protected. There is a species with lower risk - least concern.

Apodemus agrarius (Pallas, 1771) - it is common but with a discontinuous distribution. It prefers very wet habitats. It doesn't need protection. There is a species with lower risk - least concern.

Apodemus microps Kratochvil and Rosicky, 1952 - it is mentioned from almost all Romanian counties, being cited only few localities. It may be considered a rare species which doesn't need protection. There is a species with lower risk - near threatened.

Rattus rattus (Linnaeus, 1758) - became a rare and vulnerable species in the Romanian fauna. It isn't necessary to be protected, taking into consideration that it is one of the main transmissible factors of infection in man.

Rattus norvegicus (Berkenhout, 1769) - it is the most common and undesirable murid of the Romanian fauna. It must be taken drastic measures for controlling it. There is a species with lower risk - least concern.

Mus musculus Linnaeus, 1766 - it is common all over the country. It must be put under control. There is a species with lower risk - least concern.

Mus hortulanus Nordmann, 1840 - it is common in the steppe and forest steppe areas of Romania. It isn't necessary to be protected. There is a species with lower risk - least concern.

Spalax leucodon Nordmann, 1840 - it is a rare and endangered species, with a discontinuous distribution in Dobrudja, Wallachia, Oltenia, Transylvania and Moldavia. It must be included within the list of the protected species.

Spalax microphthalmus Güldenstaedt, 1770 - it is rarer than *S leucodon*, it needs protection. Excepting the habitat distructions by common fallowing and agro-technical activity, its populations are also destroyed by predators (e.g. *Mustela nivalis, M. erminea* and others). It must be protected as an endangered species.

Sicista betulina (Pallas, 1779) - it is very rare, mentioned only from three places (two in Eastern Carpathians and one in the Southern Carpathians). It must be protected as an endangered species.

Sicista subtilis (Pallas, 1773) - it is mentioned only from the steppe areas: Dobrudja, Wallachia, Oltenia, Transylvania and Moldavia. It is a rare and vulnerable species and it must be protected.

Myocastor coypus (Molina, 1782) - about 20 years ago it escaped from farms and lived freely in the Danube Delta and in the Danube Meadow. It must be protected, the Law 26/1976 forbidding only its hunting all year long. There is a vulnerable species.

Order **Carnivora** Bowdich, 1821

Canis lupus Linnaeus, 1758 - it became a rare and endangered species in the Romanian fauna but it is still unprotected. Practically it is extinct from the Danube Delta, the Romanian Plain and hilly areas. From this regions it hasn't been observed since 1949-1950. It must be protected.

Canis aureus Linnaeus, 1758 - it appears rezident only in Southern Romania but it is included within the list of the species which can be hunted. It is rare, endangered and must be protected by striking it out from the list of the species which can be hunted (Law 26/1976).

Vulpes vulpes (Linnaeus, 1758) - excepting the hare, it is the most common fur species. It is present all over the country. It isn't protected and it doesn't need this statute. There is a species with lower risk - least concern.

Nyctereutes procyonoides (Gray, 1834) - it was mentioned in the Southern Romania only in 1951. Today it is present all over the country. It isn't protected and it seems it doesn't need protection although it is hunted for its fur. There is a species with lower risk - least concern.

Ursus arctos Linnaeus, 1758 - it is distributed only along the Carpathians Chain. It is a rare species and it is protected by the Law 26/1976 concerning the hunting economy and the proper hunting in Romania. It must be continuously protected, the bear hunting being allowed to those with private licences. There is a vulnerable species.

Meles meles (Linnaeus, 1758) - it is common and the Law 26/1976 establishes the periods when it can be hunted. It must be protected as a vulnerable species.

Lutra lutra (Linnaeus, 1758) - it is distributed along the inner rivers. Its populations are more and more limited, becoming a rare species. It is protected by Law 26/1976, but its hunting wasn't forbidden all along the year. There is an endangered species.

Martes martes (Linnaeus, 1758) - it is common in the afforested areas. The Law 26/1976 establishes the periods when it can be hunted. There is a vulnerable species

Martes foina (Erxleben, 1777) - it is rarer than *M martes*, being known from the rocky areas of low altitude from Dobrudja, Oltenia, Transylvania and Moldavia. It must be protected as an endangered species.

Mustela lutreola (Linnaeus, 1761) - it became a rare species, critically endangered, its distribution in Romania being limited only to the Danube Delta. The Law 26/1976 establishes its hunting in different periods of the year but it needs special measures for protection, being threatened with disappearance from Romanian fauna.

Mustela putorius (Linnaeus, 1758) - once, common, now it is present in small populations, distributed all over the country. It isn't protected but it must be included within the vulnerable protected species list.

Mustela eversmanni (Leesson, 1827) - it is distributed in the south-eastern Romania (in Dobrudja); it is rare, endangered and must be protected.

Mustela erminea (Linnaeus, 1758) - it is distributed all over the country but has small populations, becoming a rare and vulnerable species. It needs protection

Mustela nivalis (Linnaeus, 1766) - it is common, with a distribution from the Danube Delta level to the mountain areas. There aren't necessary special protection measures. There is a species with lower risk - least concern.

Vormela peregusna Güldenstaedt, 1770 - it is distributed only in Dobrudja (south-eastern Romania). It is a rare, endangered species and needs protection.

Felis silvestris Schreber, 1777 - it is distributed all over the country, from the Danube Delta to the mountains. It prefers the river meadows and afforested areas. It isn't protected by the Hunting Law but it should be, because it is more and more rare and vulnerable.

Lynx lynx (Linnaeus, 1758) - it is distributed along the whole Carpathian Chain but rarer in the Western and Southern Carpathians and more frequent in the Eastern Carpathians. It is declared monument of nature. Its hunting is established by the Law 26/1976. It is an endangered species.

Monachus monachus (Herman, 1779) - it has a doubtful presence by the Romanian littoral. 30-40 years ago it was fished with the hooks fixed for sturgeons. It is critically endangered and there are necessary severe protection measures if it hasn't already disappeared from the Black Sea.

Order **Artiodactyla** Owen, 1848

Sus scrofa Linnaeus, 1758 - it is common all over the country. Its hunting is established by the Law 26/1976. It doesn't need protection measures. It is a species with lower risk - least concern.

Alces alces (Linnaeus, 1758) - it is rare species which has reappeared in the Romanian fauna since 1964. The Hunting Law (no. 26/1976) forbiddens its hunting all the year. There are necessary special measures for its protection. It has to be declared monument of nature, as a critically endangered species.

Cervus elaphus Linnaeus, 1758 - frequently occurring along the whole Carpathian Chain and it is rare in the hilly and plain area. It is protected by the Hunting Law. It may be declared monument of nature. Now it can be hunted having a private licence. There is a vulnerable species.

Cervus dama Linnaeus, 1758 - it is distributed only in the hilly and plain areas which are often left for open places or agricultural terrains. It is a rare and vulnerable species. Its hunting is established by the Law 26/1976, a private licence being necessary for hunting it.

Capreolus capreolus (Linnaeus, 1758) - it is common all over the country. It is protected by the Hunting Law (no. 26/1976) - which allows the male hunting during the period 15.V - 31 X. and the female hunting during the period 1.IX. - 28.II. There is a species with lower risk - near threatened.

Ovis musimon Pallas, 1811 - it is a species included in the Romanian fauna, with better results after 1954. Today it is distributed in Dobrudja, Wallachia and Transylvania. It has to be protected. The Hunting Law establishes the period when it can be hunted. There is a vulnerable species.

Rupicapra rupicapra Linnaeus, 1758 - it is a rare and endangered species, being distributed only in the Retezat, Făgăraş, Bucegi, Rodna, Piatra Craiului and Parâng mountains. It is declared monument of nature and has to be protected. Now it can be hunted possessing a private licence.

Bison bonasus (Linnaeus, 1758) - it is a rare species, extinct in the wild, having been brought in the Romanian fauna in 1958, from Poland (few specimens). Today it occurs in the Eastern and Southern Carpathians. The Law no. 26/1976 forbiddens its hunting all year long. It must be declared monument of nature

CONCLUSIONS

1. For Romanian fauna there are mentioned 99 species of the orders: Insectivora (11), Chiroptera (28), Lagomorpha (2), Rodentia (32), Carvonira (18) and Artiodactyla (8).

2 The distribution of every species is taken in general, according to the altitude and ecosystems, without citing the localities.

3. The categories of conservation for the mammal species from the Romanian fauna leads us to the following result: extinct = 3, extinct in the wild =

1: critically endangered = 7, endangered = 21, vulnerable = 39. Among the species with relatively small risk of threatening, 3 are conservation dependent, 4 - near threatened and 21 are least concern.

SPECIILE DE MAMIFERE DIN ROMÂNIA. CATEGORII DE OCROTIRE

REZUMAT

Cu excepţia a trei specii din Ordinul Cetacea sunt notate 99 specii de mamifere pentru fauna României, aparţinând ordinelor: Insectivora (11), Chiroptera (28), Lagomorpha (2), Rodentia (32), Carnivora (18) şi Artiodactyla (8).

În afara comentariului privind raspândirea fiecărei specii se estimează categoria de ocrotire în care se încadrează, după "IUCN Red List Categories" (1994). Astfel, între insectivore sunt trei specii cu grad scăzut de risc în existenţa lor, cinci specii vulnerabile, una periclitată, una grav ameninţată şi una - probabil dispărută. Dintre lilieci, şapte specii sunt cu grad scăzut de risc: trei - puţin sau deloc în situaţie îngrijorătoare, două în apropierea stadiului de a fi ameninţate şi două - deşi cu risc scăzut - sunt dependente de ocrotire. Alte douăsprezece specii de lilieci sunt vulnerabile, cinci - periclitate, două în pericol critic şi două - probabil dispărute.

Logomorfele sunt reprezentate numai prin două specii: una în categoria vulnerabilelor şi alta - periclitată.

Rozătoarele cuprind 13 specii cu risc scăzut de ameninţare în existenţă, 12 - vulnerabile, şase periclitate şi una grav ameninţată. Dintre carnivore, trei specii sunt în categoria celor cu grad scăzut de ameninţare, şase vulnerabile, şapte periclitate şi două grav ameninţate.

În sfârşit, artiodactilele sunt cu două specii în categoria celor cu grad scăzut de ameninţare, trei vulnerabile, una periclitată, una în situaţie critica şi una dispărută, în stare sălbatică.

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Muzeul de Istorie Naturală "Grigore Antipa"
Şos Kiseleff nr 1 - 79744 - Bucureşti, 2
România