

CATALOGUE OF THE TYPE SPECIMENS OF CAUCASIAN LARGE MAMMALIAN FAUNA IN THE COLLECTION OF THE NATIONAL MUSEUM OF GEORGIA

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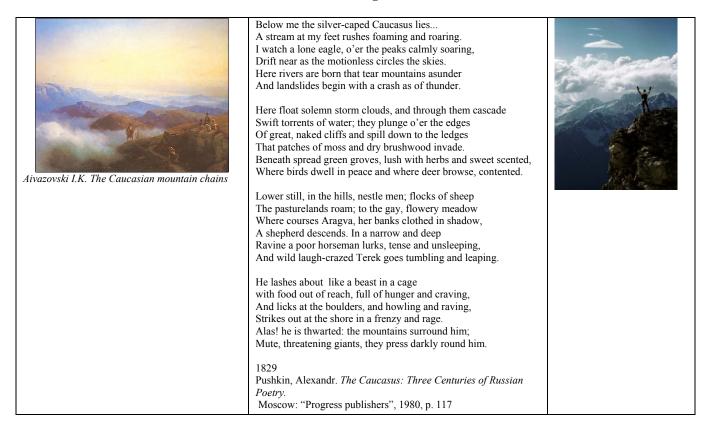
In the National Museum of Georgia are stocked the specimens of large animals, which once inhabited and dwell at present in the Caucasian territory. This catalogue contains description of animals, specimens of which are preserved in the collections of the National Museum of Georgia. The majority of specimens are of unique, academic, historic and cultural importance. Most of the specimens are Caucasus and its neighbor regions in origin, and form a good reference collection for the study of the Caucasus fauna. It is the intent of this work to support large mammalian collection data at the international level; to highlight the history of collection development; to describe the large mammals of this region that represented by specimens in the collections of the National Museum of Georgia. Catalogue consists of five parts: 1. Introduction; 2. The illustrated description of species and subspecies in the collections of Museum; 3. Index of skins and stuffed large mammalian animal species. Most of the specimens are labeled with a description which includes the locale of the animals capture, the date, the name of the person who collected the specimen, and the name of the person who classified (it is arranged in chronological order in tables); 4. References; 5. Index of Latin, Georgian, Russian and English names of animals.

Notes

- The present edition is the complete catalogue of collections of large mammalians in the Department of History of Natural Sciences of National Museum of Georgia.
- The knowledge in the catalogue is compiled from works published by K.A.Satunin, N.J.Dinnik, N.K.Vereschagin, G.A. Novikov, A.K. Tembotov, V.G. G(H)eptner, N.P. Naumov, V. E. Sokolov, A. Arabuli, A.W.F. Banfield, P. J. Weinberg, et al..
- Latin names are provided by their English, Russian, and Georgian equivalents.
- The majority of Latin names of the animals in the catalogue are identical to the names on the labels. The majority of specimens of the Museum are described and determined by K.A. Satunin and N.J.Dinnik. In his work on the Caucasian animals K.A. Satunin used books by G. Miller "Catalogue of the Mammals of Western Europe" (1912) and by E.Trouessart"Catalogus Mammalium quam viventium, tam fossilium". [K.A.Caтунин, 1915].
- The present catalogue was arranged according to book by I.J. Pavlinov and O.L. Rossolimo " Sistematics of the USSR mammalian: (Investigation of the USSR fauna)/ ed. By V.E. Sokolov. – M.: Moscow State University,1987.– 285c.
- The majority of pictures that illustrate the catalogue were done by artist and zoologist A.N. Komarov. Komarov's works illustrate the majority of books about animals among them "The carnivora mammals of the USSR fauna" by G.A.Novikov published by the Academy of Sciencies of the USSR in 1956. [Новиков Г.А. Хищные млекопитающие фауны СССР. М.-Л.: из-во АН СССР,1956.- 294 с.]; "The mamals of the USSR", V.1 and V.2 / ed. by V.G. G(H)eptner and N. P. Naumova" published by the Academy of Sciencies of the USSR in 1967 [«Млеклпитающие Советского Союза /В.Г. Гептнер и Н. П. Наумова. Т. 1. М., 1961, «Млеклпитающие Советского Союза /В.Г. Гептнер и Н. П. Наумова. Т. 2. М., 1967].
- Color pictures of animals were taken from internet (see Online References).
- If any copyright has been infringed, this was unintentional.
- At present the detailed analisys of modern areal of mammalia habitant in the Caucasus is impossible, because the information is fragmentary, and to a large extent most of data are out of date.

Introduction

The Caucasus and Its Large Mammalia Fauna



The Caucasus, comprised of the Krasnodar and Stavropol regions of Russia, the Adygea, Karachaevo-Cherkesia, Kabardino-Balkar, North Ocetian, Chechen, Ingush and Dagestan autonomous republics in the Russian Federation, and the independent countries of Georgia, Azerbaijan, Armenia, Turkey and Iran constitute one of the most interesting and diversified regions in the world.

The Caucasus mountains dissect this region in a diagonal direction, running from the north-west to the south-east and effectually dividing it into two parts; the North Caucasus and the South Caucasus, also called Transcaucasia. The mountains consist of two ranges – the Greater Caucasus in the north and the Lesser Caucasus in the south. Mount Elbrus in the Greater Caucasus range, at 18,510 feet (5,642 metres), is the highest peak.

The North Caucasus, which is bounded on the north by the Don and Astrakhan provinces of Russia, forms a slightly undulating stretch, overlaid in the western half and central portion with an extremely fertile black-earth soil, richly clothed with steppe grass vegetation. The eastern division is mostly clay and sand plains that once formed the bed of a long sea. Only in the south is there any considerable elevation, and there are hills, individual mountains, and chains of mountains which rise higher and higher to form at last the Caucasus chain that stretches like some giant wall from the Black Sea to the Caspian. The chain is highest in the center and lowest at either end, and occupies a range of 2,600 geographical square miles. [Massalski V.I., 1893]

Within this area, there is an endless variety of soils and climates; its forests are still remarkable for their natural richness and variety. But, like all Asiatic mountain chains, traveling is difficult, with poor roads or none at all for connecting the different slopes. The most famous road is the Georgian Military Road, which runs from Vladikavkaz to Tbilisi through the Dariyal gorge. Once it served as the way for great armies.

Near its central point, the Caucasian chain is joined from the south by the Suram chain, which on the one side connects the Caucasus mountains with the wide mountain region that extends over the greater part of the

Transcaucasus and on the other side divides the latter into two very characteristic and distinct tracts, the eastern and the western provinces.

Western Transcaucasus embraces the basin of the Rion and other less important rivers, as well as the lowlands on the Chorokh. It is covered with a fine wood vegetation that, owing to the warm climate and the abundance of moisture, flourishes luxuriously.

Eastern Transcaucasus includes in the northeast the valley of the Kura and its secondary tributaries, and in the south, on the border with Persia, the low valley of Araks. Here, forests are found only near the valley of the river Kura. Its hill plains are generally almost stripped of forest, while the central and particularly the lower districts on the Kura have all the characteristics of a steppe. Only in the extreme southeast, on the borders of Persia and on the shores of the Caspian Sea, are the eastern slopes of the Talysh mountains covered with forests, which by their variety and vitality remind one of the dense forests in the basin of the Rion and the lowlands of the Chorokh.

All the rest, through the valleys of the Kura, Araks, Rion and Chorokh, forming an extensive hill plain from 4500 to 7500 feet high, and intersected by separate mountain ranges, constitutes the extreme north-western link of the upland chain, which stretches through the whole continent of Asia from the west to the east, and bears the common name of the Lesser Caucasus. The Transcaucasus is bordered by Persia and Turkey (Anatolia) on whose frontier rises the famous biblical mountain, Ararat, to a height of 16,916 feet. As is to be expected, such an area is rich in unique and interesting flora and fauna. [Massalski V.I., 1893]

In the Caucasus, we find animals peculiar to very diverse climates. From wild animals there are hyena, tiger, panther, jackal, and foxes, identical to those which dwell in India (*Vulpes vulpes alpherakyi* Satunin, 1905). There are also animals which dwell in a cold climate: mustelids, ermine, and brown bear. Particularly southern in character is fauna of the outskirts of Lenkoran woods and the Talysh Mountains. The Caucasus has wild animals peculiar to middle Europe with its mild and more or less humid climate. For example, European wild goat, red deer (special race that is much closer to the European red deer than to Asian one), auroch (bison), and chamois inhabit the mountains of Western Europe. In the Caucasus, dwelling side by side with animals peculiar to middle Europe, are animals endemic to extremely dry and hot summers and very cold winters in Asian deserts. These animals include corsac fox, saiga antelope, partly goitered gazelle (*antilope subgutturosa* Pall). Almost side by side with animals peculiar to hot low land, we come across Alpine forms in the Caucasus, which spend the life span close to everlasting snows and glacier, e.g., turs, or ibexes, chamois and etc. [H.Я. Динник, 1914]. Speaking of the richness of Caucasus fauna, it is impossible not to mention that many species as well as specimens of large animals are preserved there. As for the general nature of Caucasus fauna, it has a more pronounced Asian character than European and, at the same time, it has southern character. [H.Я. Динник, 1914].

N₂	Ungulate animals	Natural Habitat (Reserve and Refuge)
1.	Caucasian-Bielowieza European Bison, Caucasian bison (endemic)	Teberdinski, Northern Osetian, Caucasian
2.	Caucasian red deer	Teberdinski, Caucasian, Ritza Lake
3.	Bezoar; wild goat (endemic)	Borjomi-Kharagauli
4.	(Alpine)chamois	Kabardino-Balkar, Northern Osetian, Caucasian
5.	Mountain goat or tur (endemic)	Kabardino-Balkar, Northern Osetian, Teberdinski
	The cat family (Felidae)	
1.	Caspian tiger, Leopard (Panther) Caucasus leopard (endemic)	Kabardino-Balkar, Northern Osetian, Caucasian
2.	Jungle cat, chaus	Dagestan, Gircan (Lenkoran), Kizil-Agach (Lenkoran-Astara)
3.	Felis Silvestris Caucasica	Pitsunda-Mussera, Pskhu-Gumysta, Ritza Lake
4.	Felis (Lynx) lynx orientalis	Caucasian, Kabardino-Balkar

Basic Endangered Species of Caucasian Large Mammalia

It is the intent of this work to support the large mammalian collection of the National Museum of Georgia with a detailed, original catalogue; to foster accessibility of collection data at the international level; to highlight the history of collection development; to describe the large mammals of this region that represented by specimens in the collections of the National Museum of Georgia. In the National Museum of Georgia are stocked the specimens of large animals that once inhabited and dwell at present in the Caucasian territory. Any pair of species differs in indefinitely large number of characteristics that can be described in any number of ways. This catalogue contains descriptions of animals, specimens of which are preserved in the collections of the National Museum of Georgia.

The Department of History of Natural Sciences collections of the National Museum of Georgia, formerly called The Museum of the Caucasus, began operations in the early 19th century. Since then, the collection has grown due to the efforts of both professional researchers and talented amateur nature lovers. Staff from the Museum's Zoology Department collected most of the mammalian specimens, but some were obtained through exchange or from donations. This type if specimen also helped the scientists in distinguishing Caucasus species of fauna. In the early twentieth century, a new permanent exhibit of the zoological collections had been planned to coincide with the opening of the Museum's new building, but WWI, civil war, and revolution delayed the opening of the zoological collections permanent exhibit until the 1920s. The head of the Zoological Department in 1914 -1919 was Nestor Smirnov, Doctor in Natural Sciences. The acting head of the Zoological Department in the Museum in 1919-1920 was Boris Uvarov (in 1926 Boris Uvarov was working in the British Museum). In 1920, Ivan Chkhicvishvili was appointed as the head of the Zoologocal Department of the Museum. The assistants were A. Ilinski (entomologist) and P. Sviridenko (zoologist). The taxidermists were V. Reish and the German naturalist, Karl Krell. The zoological exhibition was organized in the left wing of the new Museum building. In 1926, 45,640 people visited this exhibition. Baroness H. E. Drachenfels was the creator of the plaster casts of the stuffed animals; the annual reports of 1910 to 1916 show her name as sculptor and painter and include the drawings which illustrate K.A. Satunin's book Caucasus Mammalian. The painters in the Museum were Eugene Lansere, Joseph Sharleman, and Ivan Vepkhvadze.

Kaznakov divided the Museum's holdings into a research collection open to scholars and researchers worldwide and a smaller collection on view and open to the public in 1904. When the public collection closed in 1972, the specimens were included in the research collection. This unified collection constitutes one of the largest in the Caucasus, and specimens were added to it until 1990. The collection includes species of mammalian forms, which are indigenous, rare, extinct, or on the edge of extinction. The majority of specimens are of unique, academic, historic or cultural importance. Most of the specimens are Caucasus in origin and form a good reference collection for the study of the Caucasus fauna.

The oldest specimens of large mammalian animals were collected by G. Radder (1866, 1884, 1886, 1888, 1896, 1897), Noska (1894, 1899), K.A. Satunin (1887), F. (T.) K. Lorenz (1894, 1897), E.G.Konig (1899), Lesson (1894), Sergeev (1871), K.D. Ulagai (1909), D.A. Tsyss, N.J. Dinnik, L.S. Berg, A.A. Florenski, P.N. Galkin, E.K. Juthner, L.L.Lemmermann, V.J. Medzychovski, A. A. Mikirtichev, Barron T.K. Drachenfels; A. M. Shugurov, N.N.Tichonov, M.F. Vinovsky, G.N. Voronov, S. Korot'ko (1905), A.B. Schelkovnikov (1906), L. L. Mlokosievich, V. L.Mlokosievich (1907), A.A. Mikirtichev, V.J. Medzychovski, R.H. Schmidt (1907), A.N. Kaznakov (1912), E.V. Pfizenmayer (1912), S. M. Romanov (1912), N.L. Pastukhov, I.M. Looss (1914), G. N. Voronov, Matsnev (1915), Baraianc (1915), Falzfein (1914), Benard (1924), D. Sologub (1923), and I. Chkhikvishvili (1925).

They were identified and classified at different times by the well known specialists: Theoph. Novak, V. Blasius, Schpigel, A. Walter, K. A. Satunin, Sergeev, E.V.Pfizenmayer, K. Krell, E.G. Koening, E.K. Juthner, J.N.Wagner, N.A. Smirnov, V. Klipert, M. Hilzheimer, S. M. Romanov, Kobinovski, A.B. Schelkovnikov, N. K. Vereschagin, I. Chkhikvishvili, G. Gogilashvili, G. Avaliani, G. Jordania et al.

Speaking about the exhibition activity in the museum, we must make special mention of activity in the Museum by the brilliant artists and sculptors F. Zimm, N.V. Kelchevskii, P.P. Kamenski, M. Tilke, Vereschagin, A. S. Matiasevich, baroness H. E. Drachenfels and the others. Joseph Sharleman, the great painter, graphic artist, scene painter, designer, and decorator (court painter of an imperial family), arrived in the Caucasus in 1917. Eugene Lansere, wonderful painter, graphic artist, and decorator, arrived in Tbilisi in 1920 and left the town in 1934. Eugene Lansere and Joseph Sharleman were the founders of the Tiflis (Tbilisi) Academy of Arts. In 1920-1934 Lansere, Sharleman, and other gifted artists Eugene Lansere, Joseph Sharleman, A. S. Matiasevich, O. (R). Schmerling, S. Sabutski, K. Kavtaradze, talented students of Tiflis Academy of Arts – I. Vepkhvadze and D. Tsitsishvili, whose talent and creativity made the exhibition of the Museum collections the best in the USSR (as it is mentiond in the Museum (1931-1932) Year report) were working in The State Meseum of Georgia.

There are 44 large mammalian animal species, which belong to 25 genus, 12 subgenus, 12 families and 10 sub families. Most of the specimens are labeled with a description which include, the locale of the animal's capture, the date, the name of the person who collected the specimen, and the name of the person who classified it. In general, the specimens are in good condition. Though the collections of the museum need taxonomic revision, determination, cataloguing, scientific ordering of items and species, processing of specimen, analytical description; field operations are necessary to augment and renew the collection. Some of the items and specimens stored in the Department of History of Natural Sciences of the National Museum of Georgia collections demand restoration.

Today, many people do not consider killing animals for display to be justified. These exhibits date from an earlier age of abundance, perhaps shortsightedness. Nonetheless, some of these creatures have virtually disappeared and without these examples, we would have no way of knowing as much about them as we do. Since 1911, the region

has embarked on a process of conservation and husbandry that is noteworthy in its extent. Some attempts have been more successful than others, but none have been entirely abandoned, and it is hoped that their effort will reward the region and world with the continued existence of these rare and precious mammals. [Заповедники СССР: Заповедники Кавказа, 1990]

Classification of Mammals



Carolus Linnaeus, known as the "father of modern taxonomy".

Scientists have to deal with millions of animal species and supraspecific taxa which no human language has a vocabulary to name. Aristotle divided the living world between animals and plants. The first hierarchical classification of all forms of life dates from the revolutionary work of the Swedish scientist Carl Linne (Linnaeus) (1707-1778), who used a hierchical system as a basis, grouping similar forms at different levels of relationship. He divided the entire animal world into six classes. Linnaeus's six classes have today grown to 23, and his system of classification has been expanded, added to, and modified hundreds of times since. But Linnaeus's greatest achievement was that he put an end to chaos and confusion in the study of animals and plants by giving each species a double Latin name. Linnaeus insisted that the name of every animal and plant should consist of two words, one (a noun) denoting the name of genus, and the other (an adjective) giving the name of the species. Well-marked geographicall variants are described as subspecies. The genus, species, and subspecies names form the trinomial scientific name of the mammal. The great advantage in the use of scientific names is that for each species and subspecies there is only one valid name that is recognized throughout the world, regardless of language. These names are composed of Latin or latinized Greek words or, rarely, words from other languages, and are conventionally written in italics. In this catalogue, the treatment is on a species and subspecies level. [Dmitriev Y., 1988; Banfield A.W.F., 1974; Ricciuti E.R, 1979]

Class Mammalia, seu Theria Linnaeus, 1758

All mammals share at least three characteristics not found in other animals: middle ear bones, hair, and the production of milk by modified sweat glands. Mammalian hair is present in all mammals at some point in their development. All female mammals produce milk from their mammary glands in order to nourish newborn offspring. Although mammals share several features in common, Mammalia contains a vast diversity of forms. Systematists do not yet agree on the exact number or on how some orders and families are related to others. Exciting new information, however, coming from phylogenies based on molecular evidence and from new fossils, is changing our understanding of many groups. [Жизнь животных, 1989; Соколов В.Е., Парнес Я.А., 1993; Gatesy J., 1997; Vaughan, T. A., Ryan J. M., Czaplewski N. J., 2000]

http://animaldiversity.ummz.umich.edu/site/topics/mammal_anatomy/jaws_and_ears.html

Order – CARNIVORA Bowdich, 1821

1.Carnivores, carnivorous [flesheating] mammals 2.Хищные 3. მტაცებელი ძუძუმწოვრები

Animals which belong to order Carnivora contain a vast diversity of forms and outward appearance. Members of this order may vary in size from the mouse-sized weasel to the enormous brown bear. All these seemingly disparate animals have common morphologic features and historic relationships.

In general, Carnivores are flesh-eaters (as their name implies), but some are secondarily omnivores. They have sturdy skulls, large and convoluted brains, and well-developed senses. The identifying trait is a pair of teeth which act like a pair of scissors, making it possible for the creature to cut meat and tendons. These are called the carnassial teeth. The shape and construction of the lower jaw permits only vertical movement. Members of this order may vary in size from the mouse-sized weasel to the enormous brown bear. The legs may be either four- or five-toed and have sharp retractible claws (except for Canidae). They may walk either on their toes (digitigrade) or on their heels (plantigrade). Tails vary. The body is covered with hair.

The common carnivores of the Caucasus are jackal (Canis aureus), fox (Canus vulpes caucasica), Caucasus erminea (Mustela erminea teberdina), weasel (Mustela nivalis vulgaris), European mink (Mustela lutrcola turovi), Caucasus badger (Meles meles caucasicus), marbled [mottle] polecat (Vormela peregusna), wolf (Canis lupus cubanensis), and Caucasus forest cat (Felis silvestris caucasica). Throughout the territory, from deciduous forests up to rocky alpine, preferring forest with dark and difficult to traverse underbrush is the widespread Caucasus subspecies of bob cat (Felis lynx dinniki). In the summer in the upper parts of the forest belt, the largest predators of the Caucasus Mountains are concentrated – brown bears (Ursus arctos). Close to the autumn the bears come down to the forest and stay there until winter. True otter (Lutra lutra meridionalis) is a rare species included in the Red Data Book; in the West Caucasus it is represented by its Caucasus subspecies. Nearer Asian/Caucasus leopard (Panthera pardus ciscaucasica) survives in the South Caucasus region (Lesser Caucasus Mountain Chain and Talysh mountains) and in separate areas of the Greater Caucasus Range. The African Wild Cat or desert cat (Felis silvestris lybica), a subspecies of the wild cat (F. silvestris), is found in east Transcaucasus. Jungle cat (Felis chaus) frequent the thick belt of reeds along the shore of Kizlyar Bay on the Caspian Sea. Endemic species of Caspean Sea fauna is Caspean seal (Phoca caspica Gmelin). [Динник Н.Я., 1914; К.А. Сатунин, 1915; Новиков Г.А., 1956; Н.К.Верещагин, 1938; Н.К.Верещагин, 1947; Папава А.Ф., 1957; Н.К. Верещагин, 1959; arC. janaSvili., 1963; Алекперов Х.М., 1966; Гептнер В.Г., Наумов Н.П. и др., 1967; Темботов А.К., 1972; Banfield A.W.F., 1974; Kowalski K., 1976; Ricciuti E.R., 1979; ალ. არაბული, 1987; Dmitriev Yuri., 1988; Mammals of the Soviet Union, 1989; Жизнь животных, 1989; Khuraskin, L.S., Pochtoeva, N.A., 1997; ალ. არაბული 1998; Vertebrate animals of Borjomi-Kharagauli National Park, 2001]

Suborder FISSIPEDIA Blumenbach, 1791

1. Настоящие хищные 2. True predators 3. പ്രാമുറന്ന മ്പ്രാപ്പാർത്വാർത്തും പ്രാപ്പോർത്തും പ്രാപ്പാർത്തും പ്രാപ്പാർത്തും പ്രാപ്പാം പ്രാപ്പാം പ്രാപ്പാം

Fissipedia is a former biological suborder (now defunct) comprising the largely land-based families of the order Carnivora. Cladistic analysis of particular subdivisions of Order Carnivora shows artificial character of traditional classifications [Stains, 1984; Παβλιμοβ И.Я., Россолимо О.Л., 1987; Myers P., Poor A., 2007]. A major contributor to cladistics was the German entomologist Willi Hennig, who referred to it as *phylogenetic systematics*. The term *phylogenetics* is often used synonymously with *cladistics*. The word *cladistics* is derived from the ancient Greek κλάδος, *klados*, or "branch." [Hennig W., 1966; Wiley E. O., 1981]

Superfamily: CANOIDEA s. lato

Cursorial predators are those whose limbs and feet are adapted for running. This would include not only wolves, but dogs and foxes, as well. Generally speaking cursorial predators have: relatively long legs; muscular bodies; long fluffy tails, which help them to balance; long slender snouts; and strong teeth. They have five clawed toes on their front paws and four clawed toes on their hind feet. Their senses of smell and hearing are highly developed, but their sense of sight is not good. From a distance, they can see a figure, but not well enough to know what it is. They are intelligent and social. Of this group, the wolf is the largest.

Family: CANIDAE Fischer, 1817

1. Canids, dogs (and allies) 2. Псовые, волки, волчьи, собаки, собачьи 3. പ്രദ്യാത്ത പ്രത്യാർഗ

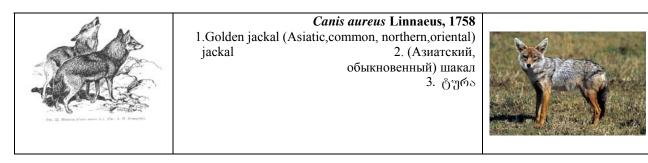
Subfamily: CANINAE s. str Genus: CANIS Linnaeus, 1758

 1. Dogs, and wolves

 2. Волки; собаки

 3. дострово

Genus Canis comprises only 7 species: wolf (*Canis Lupus*), jackal (*Canis Aureus*), coyote (*Canis Latrans*), red wolf (*Canis Rufus*), black-backed jackal (*Canis Mesomelas*), side-stiped jackal (*Canis Adustus*), Abyssinian wolf (*Canis Simensis*).

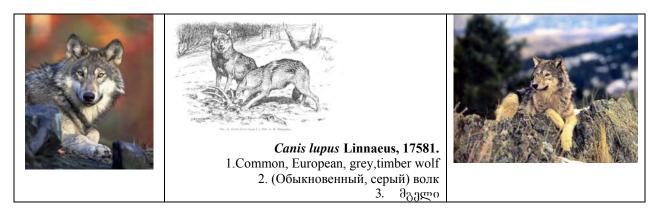


Jackal is any of three (sometimes four) small to medium-sized members of the family Canidae. Despite their outward similarity, these species are not considered closely related to one another. The Golden Jackal is thought to have evolved in Asia whilst the other two species evolved in Africa. Inhabitents of Syria and Palestine does not always tell fox from the jackal. Frequently some do not tell wolf from jackal. In ancient Rome jackals were called "golden wolves". It is easy to tame jackals. In contrary to characterization in fiction jackals are courageous and quick-witted. [Новиков Г.А., 1956; Rutter, R.J. Pimlott D.H., 1968; Дмитриев Ю. Д., 1973; Banfield A.W.F. 1974; Abuladze A., Bukhnikashvili A., Tarkhnishvili D., 2001]. Their long legs and curved canine teeth are adapted for hunting small mammals, birds and reptiles. Males tend to be larger than the females. Jackals like to follow lions and leopards, watch them at their meals. This habit has brought about a human comparison; a persistent hanger-on is called a jackal. (The name *jackal* is borrowed from Turkish *Cakal* which originates from Sanskrit: Srgālah). [American Heritage Dictionary - Jackal entry] The Ancient Egyptian god of embalming and the underworld, Anubis, was depicted as a man with a jackal's head. Jackals are considered close to what all ancestral canids looked and behaved like. Jackals live in naturally protected places. They will sometimes dig short, simple lairs or move into the former dens of foxes and badgers. Jackals do not migrate, and they feed on small animals and fruits. They are nocturnal, most active at dawn and dusk. Jackals interbreed easily with domestic dogs. In the Caucasus jackal (Canis aureus) is the background species of subtropic ecosystems Kura-Araksinski and Rioni lowlands. They are found in the Caucasus at altitudes of sea level to 5000 feet. They dwell on the Caucasus Black Sea cost, in Dagestan and Siccaspian region, in woods, reeds. They are found in the outskirts of towns and settlements. Of the three species the golden (Asiatic, common, northern, oriental) jackal has a dirty-yellow coat with red and black touches with a white mark on the throat; the color can vary with age, region and season. The fur is redder in summer; in winter the coat darkens. [Динник Н.Я., 1914; К.А. Сатунин, 1915; Верещагин Н. К., 1959; Темботов А.К., Гукетлова А.А., Копылов Ю.А., 1997; Abuladze A., Bukhnikashvili A., Tarkhnishvili, 2001]

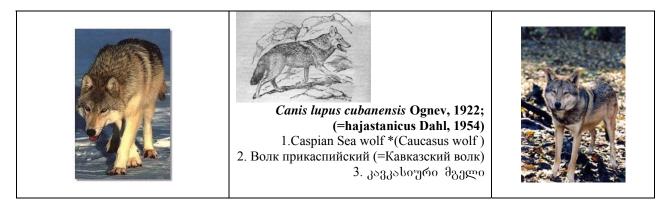
	Inventory numbers	Harvest Location	Date	Collector
1	№142 - 13-14c (stuffed animal)	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1893, I	Kratky
2	<i>№143 - 13-14c</i> (<i>stuffed animal</i>)	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1893, I	Kratky
3	№48k - 102	Batumi, Georgia	1893, III;	purchased
4	№50 - 105	Borjomi, Georgia	1893, II;	Kratky
5	№48e - 126	Zakataly Province (Azerbaijan)	1895	A.A. Kalinovski
6	№48t-15-05 -11	Karajaz (= Gardabani) on the boder of Georgia and Azerbaijan)	1905, 6, II	A.N.Kaznakov
7	№3-06	Geok-tapa, Elisavetpol Gouv (= Port-Il'itch, S.E.Azerbaidzhan, a coast of Caspian sea)	1906,30,VII	A.B.Schelkovnikov
8	№1-09 - 101	Ardebil (Iran)	1909, XII	A.N.Kaznakov, A.B Schelkovnikov
9	№6-09 - 104	Geok-tapa, Elisavetpol Gouv (= Port-Il'itch, S.E.Azerbaidzhan, a coast of Caspian sea)	1909, 1, I	E.V Pfizenmayer;
10	№118-15 - 99	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1915,10,XII	Shakhovski;
11	№11-15 - 1	Sogut-Bulagh (Soganlugh) (= Ponichala, Georgia)	1915, 21, X	A. K. Markov
12	№15-16d - 97	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1916, I,	Shakhovski;
13	№146	Tbilisi, Georgia	1924, V	I.Chkhikvishvili;
14	№133	Tbilisi, Georgia	1925, XII	I.Chkhikvishvili;

UNLESS NOTED OTHERWISE, ALL ITEMS ARE PELTS, HIDES, OR SKINS

15	<u>№</u> 134-136	Yevlakh region, Elisavetpol Gouv.(=Karabakh), Azerbaijan	1925, 19, II	<i>I.Chkhikvishvili;</i> Chidjavadze;
16	№128-138	Zakataly Province, Alazani river bank, Azerbaijan	1926, 14, I	Expedition
17	№751	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan	1928, 20,VI	Kobinovski;
18	№755	Yevlakh region, Elisavetpol Gouv.(=Karabakh),(Azerbaijn)	1928, 7, III	I.Chkhikvishvili;
19	№8	Kirtskhi, (Chkhorotsku r-n), Georgia	1941, 3, IV	
20	№66-54 - 788	Kvareli, Georgia	1954, 10,XI	I.Chkhikvishvli;
21	№20-62 - 807-809	Nukha (Juozbashevan waters), Azerbaijan	1962,17,20,XI	Tuskia
22	№12-64	Tbilisi region, Georgia	1964, 9, IX	Tuskia
23	№867-868	Mskhaldidi, Georgia	1972, 23, II	O.Orudji;
24	№869	Vashlovani National Park, Georgia	1972, I	G. Gogilashvili;
25	№44-981-9-7	Levtana Forest, Georgia	1981, 29, V	O. Orudji;



Historically, wolves had the largest and most extensive range of all mammals, second only to humans. However, they have been extirpated from much of their former range. They inhabit a wide variety of habitats throughout their range, including grasslands, tundra, coniferous and deciduous forests, swamps, and deserts. The wolf has occupied a place of horror in the minds and imaginations of humankind for centuries. It has been, and often still is, seen as a predator, an incarnation of evil, and a symbol of things dark, dangerous, and dastardly. An exception to this is found in some Indian cultures, where the wolf is considered to be a "wild brother". While wolves have been described negatively, the dog is considered to be "man's best friend," loyal, loving, brave, and sacrificing. The reality is that except for being domesticated, wolves and dogs share identical traits. Wolves are lanky creature with long legs, large feet, a narrow chest, and a large, slightly pointed face. Its muzzle is black; its ears are rounded, and its tail is long, bushy, and black-tipped. Wolves come in color ranging from snow white to coal black, with intermediate creams, grays, browns, and orangey blacks, but grizzled gray is the predominate color. There is no geographical connection to coloration; any colored wolf may appear in any locality. Territorial wolves inhabit one and the same place, but exterritorial make great migrations following sheep flocks. Wolves are found from Western Europe across to Central Asia and in North America. [Rutter, R.J., Pimlott D.H.1968; Верещагин Н.К., 1938; 1947, Дмитриев Ю. Д., 1973; Banfield A.W.F. 1974; Dmitriev Yuri., 1988; o. ბადრიძე, 1998;]. Thousands of wolves roam the Caucasus Mountains and their environs. They are found throughout the Caucasus except for the Colchis lowland, Megrelia, and Adjara, where they have been exterminated. During the winter snows, wolves in search of food even venture into the suburbs of the few large towns of the area. The governments, in fact, consider the wolf population of the Caucasus too large for the welfare of the area's cattle breeding efforts, and carry on a systematic program of wolf control there. [Abuladze A., Bukhnikashvili A., Tarkhnishvili, 2001]



*Caspian Sea wolf – (*Canis lupus cubanensis*, not recognized by all taxonomists)– is named by western biologists subspecies of grey wolf dwelling on the country between Caspian and Black Seas. The researchers of the former Soviet Union name it «Caucasian wolf».

The Caspian Sea Wolf (=Caucasus wolf) (*Canis lupus cubanensis*) is a critically endangered subspecies of the gray wolf and was once found throughout the area between the Caspian and Black seas. The Caucasian wolf is the size of a large dog. It has a proportional, sturdy build with a short neck and an average-length tail and is of medium height. It will vary in length. Members of this subspecies are primarily reddish-gray, but some can have straw-colored or black tints; if they have much black hair they look blackish. An individual's color will vary. The legs are much lighter than the body, and in winter the fur appears to be grayer. These wolves can live almost anywhere: in reeds, under large rocks, on rock ledges, in ravines, thickets, under fallen trees, and in caves. There have even been rare instances of their living in badger or fox dens. Mainly active at night, they prey on small animals, but will also eat fruits and berries. [BepeIIIATHH H.K., 1938; 1947]. This common species is much reduced in numbers due to human hunting. [Abuladze A., Bukhnikashvili A., Tarkhnishvili D., 2001]

	Inventory numbers	Harvest Location	Date	Collector
1	№ 91 2-26 - 1 (stuffed animal)	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan	1915. IX	Peasent A.Tsiklauri
2	№ 92 2-26 - 2 (stuffed animal)	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1915. IX	Peasent A.Tsiklari
3	№ 93 2-26 – 3 (stuffed animal)	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1915. IX	Peasent A.Tsiklari
4	№ 94 2-26 – 4 (stuffed animal)	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1915. IX	Peasent A.Tsiklari
5	№ 725 (stuffed animal)	Nadikvari , Georgia	1926	
6	<i>№ 47dddd-95</i>	Psebai, Kuban, North CaucasusRussian Federation	1894-1897	E.K.Juthner
7	<i>№ 47 bbb – 24</i>	Psebai, Kuban, North Caucasus,Russian Federation	1897	E.K.Juthner
8	<i>№</i> 47cccc - 10	Kedabeg (copper mine in the Caucasus) (Азербайджан)	1897	F. Koll
9	№52-06 - 22	Lagodekhi	1906, IX;	L.L.Mlokosevich
10	№4-06 - 9b	Artvin (Turkey)	1906	H.Simroth
11	<i>№</i> 47eeee – 12		1912	
12	№ 11-07 – 6	Pitsunda (Abkhazia), Georgia	1907,11,VII	A.I. Brenner
13	№ 78-08 – 73	Tbilisi, Georgia	1908	Purchased
14	№122-15 – 5	Velistsikhe, Georgia	1915,10,XII	Shapsilashvili;
15	<i>№33-15</i> – 8	Kaghizman (Turkey)	1915, IV	Christofor G. Shaposhnikov
16	№15-16 – 2	Karajaz (= Gardabani), on the boder of Georgia and Azerbaijan)	1916, 25, I	Shekhovskoi P.T.Alekseev
17	№90	Lelobi Forest, Georgia	1924,15,XII	Peasent A.Tsiklauri
18	№2-26-85	Digomi forest, Georgia,	1926, 14, II	I.Chkhikvishvili
19	№758	Racha, Georgia	1927,12,XII	I.Chkhikvishvili
20	№759	Digomi forest, Georgia,	1927, 1, XI	I.Chkhikvishvili

21	1	№ 754	Lelobi Forest, Georgia	1928, II	I.Chkhikvishvili
22	2	№92-985-7-8-9-10- 11	Lelobi Forest, Georgia	1984,30,XI	O. Orudji;
23	3	№ 41-987 - 1-7		1985, 4, I	O. Orudji;

Genus: VULPES Frisch, 1775

1. Foxes 2. Лисицы 3. достадо

	Vulpes (V.) corsac Linnaeus, 1768 1. Corsac fox 2.Корсак= Степная лисица 3. ვარსალо	Foreir Grafes grant Li, Gan, A. B. Rongrand.
A AND	0	Ropean (Valpes mooth L.). (Patt. A. H. Rosapona).

The Corsac fox resembles small valley gray foxes, but differs in the color of the beautiful silver-white top hair of chine. The Corsac fox has a much smaller cranium and bigger teeth than the red fox. They are more social than other foxes. Corsac fox is relatively small in size. It resembles a fox but has some distinguishing features. Its legs are relatively long. It has massive, pointed ears, very wide at the base. The general color of the hair cover is light reddish brown or reddish-gray with silver shading. The silver-colored tips of fur along the fox's back give a silver hue to the fur. The middle of the back and shoulders are more intensive in color than the flanks. The abdomen is dirty white or yellowish, but never black. The inner side of the ears is reddish-gray, not black. The point of the tail is dark (dark brown or black), but not white like the point of a fox's tail. They run so slowly that a slow dog could catch them. They don't seem to have a home range that they protect from other foxes and migrate south when the food gets scarce. They are nocturnal creatures that often will live in dens made by other animals. They like to live in burrows on steppes and semi-deserts. They are found in Transcaspia, Afghanistan, Mongolia, Transbaikalia, and northern Manchuria. [H.Я. Динник, 1914]

	Inventory number	Harvest Location	Date	Collector
1	№98-14 - 1-15 291	Kopet-Dagh Range in Transcaspia	1914, 5, II	Karaev

	Vulpes vulpes Linnaeus, 1758 1.(Common, common red, European,red)fox 2 (Обыкновеня, рыжая) лисица 3. дელა	
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The red fox is the largest member of the fox family. The natives of Syria and Palestine do not always distinguish the fox and jackal, although the two animals are markedly different. The jackal and wolf also are frequently confused. The red fox has appeared in countless Aesop's fables as the crafty and sly fox who always outwits everyone. It is not affected by habitat destruction because it is equally at home in the city. The red fox can adapt easily. They are rarely tamed.

They are incredibly varied in size throughout their range. Males tend to be larger than the females. Foxes generally have a slender body set on long, thin legs. The fox has long silky fur, which gives them an appearance of being larger than they really are. They are slightly heavier in the northern parts of their ranges and slightly lighter in far southern locations. Their tails are thick and bushy. Their muzzles are long, pointed and narrow. The large ears are triangular in shape and high on the top of the head. Vulpes foxes have vertically slit of eyes, just like those of the felinae cats, as opposed to the rounded pupils of other canids. Red foxes' eyes are yellow. Though often called the red fox, foxes come in several colors. The most common, of course, is the red color of the fairy tales. In the wild, colors range from a deep ruddy red to pale orange and can be of any shade and intensity in between. Some individuals are almost solid red or orange, while others have darker brown or grayish hairs interspersed throughout to various degrees, giving them a grizzled appearance.

As many as 48 subspecies of red fox have been described, although many are questionable. The subspecies of foxes of different parts of Europe and Western Asia differ more or less from each other considerably in coloration. Some

authors have given the local types distinct specific names. Some researchers consider all these subspecies as merely local races of one species, the common fox, Vulpes alopex or Canis vulpes. In addition to Geographic variation in coloration, foxes from the same locality demonstrate significant individual departure. The most visible are variations in color – pure white (albino) or silver fox specimen (melanin).

The fur of the typical red fox *Vulpes alopex* Satunin consists of rather long over hair and thick tender under fur. In spite of rather warm climate in the Caucasus, the fur of the local foxes is of good quality. In winter it is thick, soft, tender and beautiful. But it is not as beautiful as furs of Northern countries. The fur of damp lowland foxes is worse. The fur of the Caucasus highlands is much better. The summer fur of foxes is not as bright and beautiful as winter fur. The population density of foxes is the highest in the half desert zone of upland steppes less inhabited are alpine meadows. In the Caucasus red fox can be found at all altitudes, and several subspecies are considered to be found there. These are: *Vulpes vulpes alpherakyi* Satunin, 1905; *Vulpes vulpes alticola* Ognev, 1926 = *Vulpes vulpes Kurdistanica* Satunin, *1905*; *Vulpes vulpes caucasica* Dinnik, *1914; Vulpes vulpes flavescens* Gray, *1843*. In the National Museum of Georgia there are light gray foxes from Vladikavkaz and Artvin region; very beautiful dark foxes with silver top hair from Arde (a)bil. The yellowish color is visible only on back; belly is black-gray; the point of a tail is white. In the same Museum there are very beautiful foxes from Dagestan, resembling silver fox from the north. Red color is slightly seen on the flanks of the neck; legs are black, the point of the tail is white; the pelage on sacral bone and small of the back is covered with silver top hair. [Динник Н.Я., 1914; Bepeigaruh H.K., 1947; HOBUKOB Г. A., 1956; Bepeigaruh H.K., 1959; Дмитриев Ю.Д., 1973; Banfield A.W.F. 1974; Abuladze A., Bukhnikashvili A., Tarkhnishvili D., 2001]





Vulpes vulpes flavescens Gray, 1843 =cinerascens, splendens 1. Central Asian fox 2. Среднеазиатская лисица

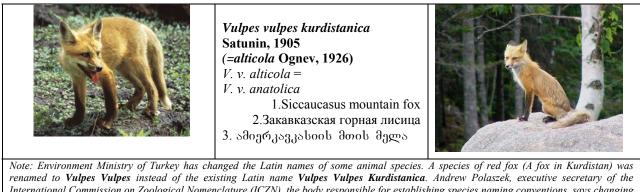
Vulpes vulpes flavescens –very small in size gray fox, with maximal degree of reduction of red pigment. It has small infantile type cranium. It is found in the plains of Central Asia, Iran, Ardagan, and Kars (Turkey). [Н.Я. Динник, 1914; Н.К. Верещагин, 1959; Гептнер В.Г., Наумов Н.П. и др., 1967]

	Inventory number	Harvest Location	Dates of collection	Collector
1	№1-10 - 191	Ardebil (Iran)	1910, I,	A.N.Kaznakov, A.B.Schelkovnikov
2	№27-15 - 1- 260	Krasnovodsk (=Turkmenbashi) (peninsula Mangishlak), , Turkmenistan	1914,X	N.A.Smirnov
3	№65-16 - 259-263	Krasnovodsk (=Turkmenbashi) (peninsula Mangishlak), Turkmenistan	1914, 7, X	N.A. Smirnov
4	№65-152 - 176	Krasnovodsk (=Turkmenbashi) (peninsula Mangishlak), Turkmenistan	1914,22,X	N.A.Smirnov
5	№65-16 - 267	Kizil-Arvat, Turkmenistan	1914, XI	N.A.Smirnov
6	№65-16	Krasnovodsk(=Turkmenbashi) (peninsula Mangishlak)	1916,17,XII	N.A.Smirnov



In Transcaucasia is described the local subspecies of red fox named Vulpes vulpes alpherakyi Sat. (Caucasus valley fox)- small foxes of east Transcaucasia valleys which demostrate three major variations: trascaucasus red fox, trascaucasus red-gray fox, and trascaucasus gray fox. They are distiguished by comparably rough (coarse) low fur (hair) with a huge amount of black top hair on the croup and shoulders and an existence of more or less wide broad yellowish or reddish "belt along the back, which is especially marked on the pale and dirty color pelage of young species. Its size is small. The basic color of the pelage is dim (dirty yellow and grey colors prevail); the main tint of the upper part is dirty-grizzly or reddish grey with black and white speckles. Along the chine is a long reddish, red speckled strip. The undercoat on the spine is smoky gray. A gray colored pelage is characteristic for young of the species. It is found in dry uninhabited steppes in southeast Transcaucasus. It is not found in the mountains. [H.Я. Динник, 1914; H.К. Верещагин, 1947; Новиков Г.А., 1956; H.К. Верещагин, 1959; Гептнер В.Г., Наумов Н.П. и др., 1967; В.Каляев, 1991; Abuladze A., Bukhnikashvili A., Tarkhnishvili, 2001]

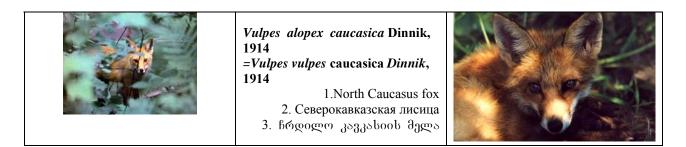
	Inventory number	Harvest Location	Date	Collector
	№190- 15-05 9	Karajaz (=Gardabani), on the	1905, 6, II	A.N.Kaznakov
1	(stuffed animal)	boder of Georgia and	, ,	
		Azerbaijan)		
2	№172 - 40-06	Talysh, Zuvant, Lencoran,	1906,7,VII	A.B.Schelkovnikov
2	(stuffed animal)	Azerbaijan		Mamakseev
3	№138-14 – 168	Tsilkani, Georgia	1914, 4,VI	Natadze
4	№138-14 – 169	Zurnabad (Elisavetpol Gouv.),	1914, IX;	
4		(=Karabakh) Azerbaijan		
5	№ 84-15-164		1915, 5, X	E.V.Pfizenmayer
6	№8-57	Tsitelitskaro, Georgia	1957,523,V	G. Avaliani
7	<i>№</i> 8-57 – 785	Taribana, Georgia	1957, 23, V	G. Avaliani
8	№38-60 – 801	Kodjori, Georgia		G. Avaliani
9	№865	Gardabani, Georgia	1971, 20,I	O. Orudji
10	№870	Vashlovani National Park,	1972,10,V	G. Gogilashvili
		Georgia		
11	№ 876	Nakhshirgora, Georgia	1972, 23,X	G.Gogilashvili;
12	№79-974 - 1-2-3-4	Mskhaldidi, Georgia	1975,23,IX,	O. Orudji
13	№70-976 – 2	Gomareti, Georgia	1976, 12, V	O.Orudji
14	№73-976 – 4	Kokhiani forest, Georgia	1976, 12, V	O.Orudji
15	№75-376 - 1	Lomisi forest, Georgia	1977, 26, V	O.Orudji
16	№130-977 – 1	Mestia, Georgia	1977, 26, V	T. Khorguani
17	№ 82-977 – 2	Mskhaldidi, Georgia	1977,17, IV	O.Orudji
18	№45-980 – 1	Agbulakh (= Akhaldaba)	1979,10,VI.	O. Orudji
		forest,Georgia		
19	№135-980 - 1-2	Bandiani forest, Georgia	1980,6, XII	O.Orudji
20	№135-980 – 3	Bandiani forest,Georgia	1980,6, XII	O.Orudji
21	№64-983 - 19-20	Bandiani forest, Georgia	1982, X	O.Orudji
22	№64-983 – 22	Didgori forest, Georgia	1982, 20, X	0.0rudji
23	№63-983 - 14-15	Kokhiani forest, Georgia	1983,20,XII	0.0rudji
24	<u>№44-984 - 8-9</u>	Nakhshirgora, Georgia	1984, 29, V	O. Orudji
25	<i>№40-984 – 6</i>	Agbulakh (= Akhaldaba)	1984, 20, I	O.Orudji
	1. (0.00 (forest, Georgia	1004 5 11	
26	<u>№40-984 - 7-8-9</u>	Levtana Forest, Georgia	1984, 7, II	0.0rudji
27	№86-84 - 1-5	Didgori forest, Georgia	1984, 3, IV	0.0rudji
28	№86-84 - 6-11	Bandiani forest, Georgia	1984, 5, X	0.0rudji
29	<u>№92-985 – 1</u>	Kokhiani forest, Georgia	1984, 16, X	O.Orudji
30	№92-985 No 25-085-5-0	Didgori forest, Georgia	1984, 25, X	0.0rudji
31	<u>№35-985 - 5-9</u>	Kokhiani forest, Georgia	1985, 1, I	0.0rudji
32	<u>№54-985 - 6-8</u>	Didgori forest, Georgia	1985,1,VIII	0.0rudji
33	№58-988 - 3-4 №02.085 10.11	Bandiani forest, Georgia	1986,15,11-25, XII	0.0rudji
34	№93-985 - 10-11	Bandiani forest, Georgia	1988, 14, I	0.0rudji
35	№41-989 – 2	Agbulakh (= Akhaldaba) forest, Georgia	1988, 16. I	O.Orudji
36	№19-990	Kokhiani forest, Georgia	1990,15, I	0.0rudji



International Commission on Zoological Nomenclature (ICZN), the body responsible for establishing species naming conventions, says changing a species name for political reasons is verboten. But the Turkish changes probably don't violate ICZN rules because the new names are scientifically acceptable alternatives.

In the south-east of Transcaucasus the local subspecies of fox, V. v. kurdistanica Satunin, was found. This fox was first found in the Kars region and described by Satunin in 1902. The Transcaucasus mountain fox is bigger than Vulpes vulpes alpherakyi, but smaller than Vulpes alopex caucasica and is distinguished by its inconspicuous color. The fur is thicker and fluffier than fur of the other Caucasian subspecies. Coloration varies from light vellow to brownish-gravish-reddish, sometimes gravish or absolutely white. There is a light red and light yellowish stripe on the back running along the backbone. Below it is white. Its ears are black; its auricle is coverd with white and yellowish hair. These foxes tend to live close to human settlements. They dig their own burrows, make use of badgers' burrows, or take natural shelter. A Transcaucasus mountain fox burrow has a single tunnel with one outlet, located at an elevated place, in sandy soil and ravine slopes. It stays in one place, migrating only when forced to do so by unfavorable conditions. It is active early in the morning and late in the evening. In summer, it is more active both day and night. The Transcaucasus mountain fox is indigenous to Armenia and is found in the subalpine and alpine zones and in the secondary steppes. They are found in Asia Minor, Central Asia, in north-west Iran, Ardagan and Kars regions in Turkey. [Н.Я. Динник, 1914; Н.К. Верещагин, 1947; Новиков Г.А., 1956; Н.К. Верещагин, 1959; Гептнер В.Г., Наумов Н.П. и др., 1967; В.Каляев, 1991]

	Inventory number	Harvest Location	Date	Collector
1	№158 496(stuffedanimal)	Borjomi, Georgia	1913, VI	
2	№50e – 299	Gudauri Georgia	1868,X	O.F.Romanova
3	№50-13° - 160	Lake Goygol, (Ardahan)Turkey	1904	K.A. Satunin
4	№48-07 - 127	Bogasakeran(near Borchaly, on the boder of Georgia and Azerbaijan)	1907	R.G. Schmidt
5	№65-09 - 192	Artvin, Turkey	1909	A. A. Florenski
6	№75-12 – 189	The district of Kars-Ardahan, Turkey	1913, I	P.Z.Vinogradov-Nikitin
7	№75-12 – 161	The district of Kars-Ardahan, Turkey	1913, I	E.V.Pfizenmayer, P.Z.Vinogradov-Nikitin
8	<i>№29-18 – 7</i>	Akhalkalaki, Georgia	1915, X	N.K.Vereschagin
9	№16-16 – 4	Akhalkalaki, Georgia	1915, 12,X	Matsnev,Realsculer
10	№52-12 – 195	Lagodekhi, Georgia	1915,25,XI	
11	<i>№29-18z – 255</i>	Akhalkalaki, Georgia	1915	N.K.Vereschagin
12	<i>№16-162 – 185</i>	Akhalkalaki, Georgia	1915,15, XI	Matsnev,Realsculer
13	<i>№163-16 – 197</i>	Akhalkalaki r-n of Georgia	1915,21, XI	Matsnev,Realsculer
14	№29-16-250	Sarigamish (Central Asia),	1916, XI	
15	<i>№15-17z – 252</i>		1916	Gadjimuk
16	№794	Djanakir (Erevan), Armenia	1924,XI	Sosnin
17	<i>№2-58 – 781</i>	Sukhumi(Abkhazia),Georgia	1958,23,XIII	
18	<i>№</i> 797 - 33-60	Tsageri, Georgia	1960,6,VIII	
19	№1-65 - 8-23	Manglisi, Georgia	1964, 2, X	Evseev
20	№1-65 – 824	Manglisi, Georgia	1964,16,XII	Evseev
21	№854	Kvareli, Georgia	1970, 5, XI	Gogilashvili



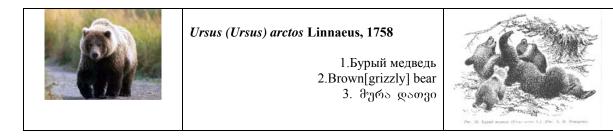
The North Caucasus fox resembles the common European red fox. It is described under the name *Vulpes vulpes caucasicus* Dinnik. The question whether it is a subspecies of European red fox or it must be included into European red fox group remains unresolved. Some authors consider *Vulpes alopexs caucasicus* Dinnik as a transition form to *Vulpes vulpes alpherakyi* Sat. *V. alopexs caucasica* is found in the North Caucasian Mountain area, the steppes of Sis Caucasus and Greater Caucasus Mountains. It is characterized by two different colorations – red and gray. There are more rufous individuals in the west and more grayish or sometimes blackish-dark-brown ones in the east. In winter it is from black to gray, in summer it is white. Its pelage is low and rough (coarse). It inhabits woods, sub alpine meadows. It is found among bushes and reeds. [Н.Я. ДИННИК, 1914; Н.К. Верещагин, 1947; НОВИКОВ Г.А., 1956; Н.К. Верещагин, 1959; Гептнер В.Г., Наумов Н.П. и др., 1967; В.Каляев, 1991]

	Inventory number	Harvest Location	Date	Collector
1	№269-49e (stuffed animal)	Storozhevaja (NorthCaucasus) Russian Federation	1896, 30, I	F. (T.)K. Lorenz
2	№49g – 294	Psebai, Kuban, North Caucasus, RussianFederation	1893	G.I.Radde; Noska
3	№50n – 188	Vladikavkaz, North Ocetia, Russian Federation	1894, 5,V	G.I.Radde; E.G. Koenig
4	№50m – 183	Vladikavkaz, North Ocetia, Russian Federation	1894, 5, V	G.I.Radde; E.G. Koenig
5	№ 50e-181	Yevdokimoskaia, Russian Federation	1894,VII	G.I.Radde
6	№ 50k-196	Yevdokimoskaia, Russian Federation	1894,VII	G.I.Radde

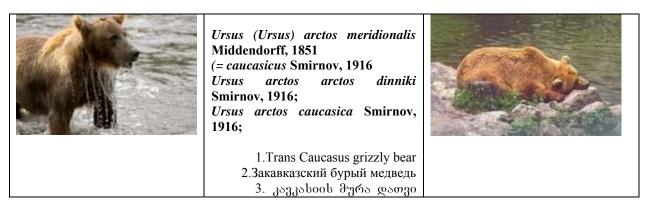
Family URSIDAE Fischer, 1817 Genus URSUS Linnaeus, 1758

1. Bears 2. Медведи 3. დათვები

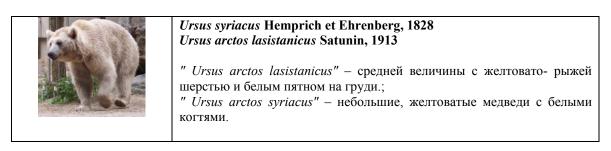
Subgenus URSUS s. str.



Bears are not only the largest terrestrial carnivorous mammals, but are also one of the most recently evolved family groups. They are heavy-set, bob-tailed mammals with five clawed toes on each foot. They are plantigrade. There is little agreement on classification of brown bears. Some systems have proposed as many as 90 sub-species while recent DNA analysis has identified as few as five. Recent DNA research has shown that bears of the Alps and other European mountains are genetically distinct from those of taiga forests. http://dinets.travel.ru/russianbears.htm



In the Caucasus there is only one genus of Ursus: Ursus arctos. The Caucasian brown bear is smaller than the Siberian and is distinguished from the latter by its less aggressive nature. The Caucasus subspecies of bear differ from the other bears so much that some taxonomists distinguish it into the independent species. They differ according to the size of the body, color of fur, shape of head, diet, etc. Four distinct forms are identified in the area: "Ursus arctos meridionalis" – small silvery-brown bears; "Ursus arctos caucasicus" – larger and darker animals; "Ursus arctos lasistanicus" – medium-sized with yellowish-red coats and a white chest spot; and "Ursus arctos syriacus" – small yellowish bears with white claws. [Н.Я. ДИННИК, 1914; Н.К. Верещагин, 1959; sc. sc. sc. sc. 1987; A. Abuladze, A.Bukhnikashvili, Tarkhnishvili, 2001]



Without any doubt Ursus arctos lasistanicus is the same "white" bear that sometimes appeard on the arena of Roman circus because Romans had not any idea what real white bear looked like. The homeland of this "white bear" Aristotle considered Midia and Asia minor, others considered that it was Thrace (modern European Turkey) some thought that it was south eastern Black sea cost of Lazistan. In the Caucasus it occurred at altitudes from 200 to 3500m. "Lasistanicus" is also found in the forests of the Southern slope and in Transcaucasia, and "syriacus" only occasionally wanders into the mountains, but is more common in dry hills of Armenia. In the fall, the first three forms migrate to the lowlands, sometimes using the same trails. Only the first two groups hibernate in winter. The breeding habits of these forms is strikingly different. Males of the first two forms are strictly territorial. During mating season they remain below the timberline where they mark their territories by scratching trees. Males of the latter two groups do not have territories and spend the mating season in forest clearings and meadows. If they find a receptive female, they follow her around, but for no longer than three or four days. There was not found cases of "lasistanicus" or "syriacus" males mating with "meridionalis" or "caucasicus" females. Very few pairs formed by "lasistanicus" females and "meridionalis" or "caucasicus" males are observed. In these pairs females did not pay attention to males' territorial marks and moved to the meadows. It is obvious that only molecular research of all the bear populations of Eurasia will shed light on the old problem of the number of bear species actually existing in the world. Note that bears are extremely diverse in individual appearance. In almost every local population, you can find animals looking like typical members of all known subspecies. [Н.Я. Динник, 1914]

Typical bears from the Northern Caucasus, known as *U. a. meridionalis*, and *U. a. caucasicus*, look like smaller versions of European brown bears. They are not aggressive, almost entirely diurnal, and predominantly herbivorous. *Ursus arctos meridionalis* is a small silvery-brown bear; sometimes it is dark-brown-red or dark-brown-straish-greyish. The withers are usually darker than the back. The pelage is relatively short, rough, and light in color. "Caucasicus" spends summer months at the Northern slope of the Caucasus, and on Alpine meadows on both sides of the range, while "meridionalis" summers in hardwood forests of the Southern slope, and at higher elevations in Transcaucasia. The Caucasian brown bear is smaller than the Siberian, and is distinguished from the latter by its less aggressive nature. *Ursus arctos syriacus* is protected in the reserves: Dilijan, Hosrovand National park "Sevan." Earlier it was dwelling on the Black Sea cost. Now it irregularly comes from north Iran to the southwest part of Kopetdag (Central Asia). [H.Я. ДИННИК, 1914; Красная КНИГА СССР, 1984]

	Inventory number	Harvest Location	Date	Collector
1	<i>№52nn</i> – 484	Psebai, Kuban, North Caucasus Russian Federation	1894	

2	<i>№55pp</i> – 472	Psebai, Kuban, North Caucasus	1894	
-		Russian Federation		
3	№52rr – 486	Vladiksavkaz,North Osetia,Russian	1894	
3		Federation		
4	<i>№45-02 – 527</i>	Sukhum,(Abkhazia),Georgia	1908	K.A.Satunin
5	<i>№111-11 – 499</i>	Nukha (Juozbashevan waters)	1911, IX	A.N.Kaznakov
6	<i>№45-12 – 479</i>	Kamenomozdok, Near Cuba,	1912, X	E.V.Pfizenmayer
0		Azerbaijan		
7	№16-12 – 513	Pasanauri, Georgia	1912, II	N.A. Smirnov
8	№16-12 - 500	Botanic Garden, Tbilisi, Georgia	1912, VI	G.N.Voronov
9	№107-14- 514	Pasanauri, Georgia	1914,13,VIII	N.A. Smirnov
10	№132-14 – 526	Zurnabad (Elisavetpol Gouv.),	1914, 21, X	
10		(=Karabakh), Azerbaijan		
11	№52 - 481 juv,	Tiflis r-n, Georgia	1914, 1, VII	
12	№52° - 480		1914, 1, VII	
13	№17-59	Lagodekhi, Georgia	1959, 4, XII	O. Jordjania
14	№804 (36-53)	Kvareli r-n, Georgia	1962,13. XII	Chokheli
15	№853	Kvareli r-n, Georgia	1970, 4, X	G.Gogilasdhvili
16	<i>№34-60 – 799</i>	Mestia r-n,Georgia		
17	№507 (stuffed animal)	Borjomi, Georgia	1912 ,X	

Family: MUSTELIDAE Fischer, 1817

1. Mustelids, martens, otters, (badgers and) weasels, shunks and allies 2. Куньи, куницы, куницеобразные 3. კვერნისებრი

The weasel family is one of five families of dog-like mammals descended from the wolf-like Vulperines and comprises five sub-families of 55 species in 24 genera: Subfamily Mustelinae: weasels, stoats, mink, polecats, martens, wolverines; Subfamily Lutrinae: otters; Subfamilies Melinae, Taxidiinae, Mellivorinnae: badgers.¹ The weasel family is a vigorous group of animals that have dispersed themselves into all conceivable niches of our natural environment. The otter and the mink took the water, the sea otter developed a marine life, the fisher and marten are found the coniferous forests, the wolverine developed a powerful physique and took to timberline and the sub-arctic. The feet of this family have five toes both in the front and in the back. From the very small weasel to the moderate-sized sea-otter, this family is comprised of digitigrades² or semiplantigrades, with non-retractable claws on five-toed feet. They have long-legged elongated bodies and prominent anal scent glands. Their skulls are small, flattened, and elongated. They have small teeth and small bony ears. There is a marked difference in size between genders. Small but fierce predators, the pine marten *Martes(Martes) martes* and the weasel *mustela nivalis* are marked by lightning speed ferocious determination, and needle-sharp teeth. The weasel can squirm through openings the size of a coin to root out small rodents in their dens. The marten a forest dweller is a marvelous climber and the terror of arboreal squirrels. [Динник., 1914 Н.Я.; НОВИКОВ Г.А., 1956; & comprod ., 2001; Abuladze A., Bukhnikashvili A., Tarkhnishvili D., 2001; Banfield A.W.F., 1974; Ricciuti E.R., 1979]

Sub family: MUSTELINAE s. str

Собственно куньи
 Mustelids; weasels

¹ <u>http://www.nhc.ed.ac.uk/index.php?page=24.134.166.172.292</u>

 $^{^{2}}$ A **digitigrade** is an animal that stands or walks on its digits, or toes. Digitigrades include walking cats, dogs, and most other mammals, except humans, bears, and a few others. They are generally faster and quieter than other types of animals.

While humans usually walk with the soles of their feet on the ground (plantigrade locomotion), digitigrade animals walk on their distal and intermediate phalanges. Digitigrade locomotion is responsible for the distinctive hooked shape of dog legs.

Because so little surface area needs to get off the ground, and also because of the added length of the foot, digitigrade locomotion tends to be swift.

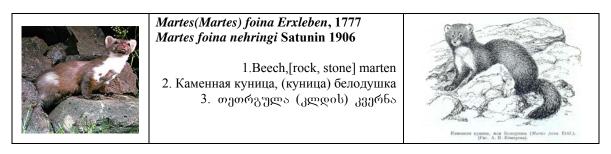
3. საკუთრივ კვერნები

Tribe MUSTELINI s. str.

Genus: MARTES Pinel, 1792

1.Куницы 2.Martens (and fishers) 3. კვერნები

Sub Genus MARTES s. str.

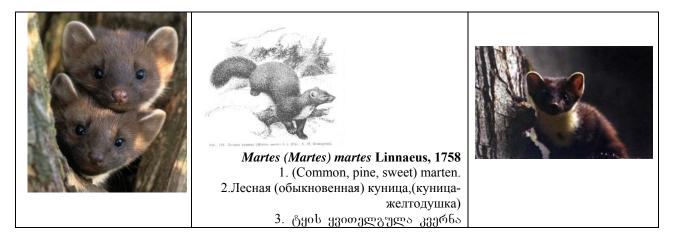


Stone Marten is a close relative of pine marten and they look much alike, but several characters distinguish them. The former are smaller and have shorter legs and ears, longer tails, and less fluffy, thinner looking tails that those of pine marten. A stone martin is nearly black; the spot on the neck in most species is white (rare-yellowish). The pelage is grayish-brown (grizzly); the down is white.

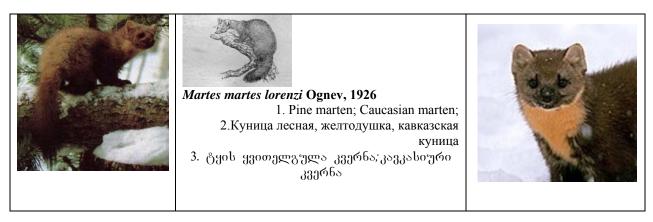
The stone marten dwelling in the Caucasus has grizzly colour fur with slight chesnat tint, the below part of the body is lighter than the back. The fur is very beautiful. The Stone Marten's feet are not covered with hair and the toe pads can be easily seen. It is dark brown with a white, or more rarely straw-colored, spot on its throat. Sometimes, the stone marten has two stripes running down its legs. The stone marten is diurnal rather than nocturnal. They hunt mainly on the ground and in trees, and they run very well both on the ground and in trees. They migrate when forced to do so by deteriorating conditions. Stone marten inhabit Asia Minor and the Caucasus; occupies altitudes up to 3500 m above sea level. It is dwelling in Stavropol Hills, wavy lowlands, foothills of the Greater Caucasus Mountains. In the gallery forests of Kura-Araks lowlands, stone marten is not found. In Transcaucasia it occupies mainly low parts of the mountainous forests. In the Armenian upland region and in Talysh, stone marten is found everywhere where forests and bushes are. In the upper zone of the mountains, stone marten are widely spread. In the uninhabited intermountain valleys, they are dwelling in detritus of cliffs and gorges of separate mountain picks. From natural habitat and ecology stone marten is endemic to the Caucasus. [H.Я. Динник, 1914; Новиков Г. А., 1956; H.K. Верещагин, 1959; Banfield A.W.F., 1974; Ricciuti E.R.,1979; Аристов А.А., Барышников Г.Ф., 2001; & context A., Bukhnikashvili A., Tarkhnishvili D., 2001]

	Inventory nember	Harvest Location	Date	Collector
1	№614 56p	Bordjomi, Georgia	1898	G. I.Radde
2	№619	Karaklis (Armenia)	1906, IX	
	<i>№3-06 – 590</i>	Geok-tapa, (= Port-Il'itch, S		A.B.Schelkovnikov
3		E.Azerbaijan, a coast of		
		Caspian sea).		
4	№61-10-618	Tbilisi region, Georgia		G. Eptum
5	№796 - 33-60	Lakhvani, Georgia	1960, 5, IX	
6	№16-62 – 808	Kurzu, Georgia	1962, VI	Nachkebia
7	<i>№</i> 8-63 – 821	Khidi(Tsulukidzer-n), Georgia	1962, VII	
8	№817 (7-65)	Dabati (Gori r-n), Georgia	1964, 18,II	Chokheli
9	№7-65 – 848	Variani (Gori r-n), Georgia	1964, VII	Chokheli
10	№82-977 – 1	Mskhaldidi, Georgia	1974,5, IV	0.Orudji
10			1977, 17,V	
11	№6-977 - 3-6	Kokhiani forest, Georgia	1976,29,IV	0.0rudji
12	№73-976 – 3	Kokhiani forest, Georgia	1976,29,IV	0.0rudji
13	№75-976 - 4-5	Lomisi forest , Georgia	1976, 12,V	0.0rudji
14	№76-976 – 4	Kokhiani forest, Georgia	1977, 25,II	0.0rudji
15	№66-977_2-3	Samtskepela forest, Georgia	1977, 15, II.	0.Orudji
15			17-V	

16	№58-988 – 6	Bandiani forest, Georgia	1986, 15, II	O.Orudji
17	№58-988 - 5-8	Natliscem forest, Georgia	1986,15,II, 1987,5,XII	O.Orudji
18	№4-989 - 3-5	Agbulakh - Akhaldaba forest, Georgia	1988,10-16,1	O.Orudji



Stone marten crawls; pine marten is saltigrade. Geographic variation of outward morphological characters is small (color and quality of fur, the sizeof body). For reasons of virability of given characters many geographic races are discribed of which 11 subscpercies are recognased. An individual will have different colored fur on different parts of its body. There is a marked difference in the size of the sexes. Both sexes are omnivorous and are voracious in both appetite and curiosity. While martens live in trees, they do spend a lot of time on the ground and can dive and swim if needed to escape some threat. They are active from dusk until dawn, but on cloudy days may come out in the late afternoon. They do not hibernate. [Н.Я. Динник, 1914; К.А. Сатунин, 1915; Н.К. Верещагин, 1959; ზერდელо მ., 1997].



The marten is an arboreal weasel with a slender body. According to morpho-ecologic analysis, pine marten is a more particularized and young filogenetic species in comparison with stone marten. [H.K. Верешагин, 1959]. Pine marten is the most graceful, beautiful, dexterous animal in its genus. It has a relatively long, slender skull, the frontal region of which is broad and flat, a sharp nose, relatively large ears, and relatively large, bright, beady black eves, short limbs, broad feet, sharp, flattened recurved claws, admirably suited for climbing. In mid winter the undersurface of the marten's feet is heavily covered with hair that the toe pads do not show. It has a bushy tail; the tail appears slenderer in summer. Marten's pelage is long and lustrous; the tan underfur is dense and soft; the guard hairs are long and glossy, particularly in the winter coat. The summer coat is short and rough. The colour is extremely variable from dark brown-almost black to pale buff dorsally, and shows a certain amount of geographical variation. The dorsum is generally dark brown; the bushy tail and legs are almost black, and the head is light grey. The well-furred ears are pale; the underparts are pale brown with irregular creamy or orange-coloured breast spots. The fur of Crimean and Caucasus Martes Martes is considered to be the best. It occupies mainly long-bole beech woods of the north and south slopes of the Great Caucasus Mountains, gradually disappearing to the east. The marten likes mountains covered with primeval and secular fir forests in altitudes up to 2400 m above sea level. In the Lesser Caucasus, it occupies the northern slopes of the Adjar-Imeretian mountain ridge and the Trialeti ridge from Borjomi and Bakuriani up to Tetri Tskaro. The absence of pine marten in the eastern part of the Lesser

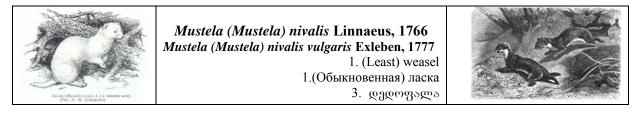
Caucasus and in Talysh may be explained by relatively the late appearance of the species in the Caucasus and the presence of the ancient woodless river basin of Khrami. [Динник Н.Я., 1914; Сатунин К.А., 1915; Верещагин Н.К., 1959; Abuladze A., Bukhnikashvili A., Tarkhnishvili D., 2001]

	Inventory nember	Harvest Location	Date	Collector
1	№604 55a juv(stuffed animal)	Borjomi, Georgia	1892, VII	G. I.Radde
2	<i>№</i> 55 <i>m</i> – 583	Batumi, Georgia	1893, III	G. I.Radde
3	№55n - 584	Psebai, Kuban, North Caucasus, Russian Federation	1893	G. I.Radde
4	<i>№</i> 55 <i>k</i>	Borjomi, Georgia	1894	G. I.Radde
5	№55bb - 29-05 585	Bzib river (Kuban), North Caucasus, Russian Federation	1906 VII	K.A.Satunini
6	№2-58 - 777	Batumi (Adjara), Georgia	1958, 2, VIII	G.Avaliani
7	№47-63-805	Kvareli, Georgia	1963,30,VIII	Chokheli
8	№819 - 7-65	Kvareli, Georgia	1964, 20, II	G.Avaliani
9	№7-65 - 817	Kvareli, Georgia	1964, 18,II	Chokheli
10	№52-06 - 580	Lagodekhi, Georgia		Chokheli
11	№19-990 - 6-15	Mtskheta, Georgia	1989, 15, X	O.Orudji

Genus: MUSTELA Linnaeus, 1758

1. Горностаи и хорьки 2. Weasels and stoats 3. ყარყუმი და ქრცვინები

Subgenus MUSTELA s. str.



The least weasel is the smallest of all the carnivores. Its body shape is typical of its larger relatives, but it has a short stubby tail. As with the ermine, the weasel is brown during the warm season and turns white during the cold. Although they look similar, one way to tell the difference between a stoat and a weasel is that, unlike stoats, weasels do not have a black tip to the tail. Its habits are also similar to the ermine, and it is even more agile. Weasels will live in a variety of habitats from fields to forests. This subspecies is found in the southern part of the former USSR, the Crimea, and the Caucasus. Systematic position of the Caucasian weasels remains unclear. Two species of weasels in the Caucasus are distinguished: large Caucasian weasel = *Mustela (Mustela) nivalis dinniki* Satunin, 1907 = *Putorius nivalis dinniki* Satunin, 1907, and small Caucasian *Mustela nivalis caucasicus* Berrett-Hamilton, 1900 = *Putorius nivalis caucasicus* Berrett-Hamilton, 1900. [Н.Я. Динник, 1914; Сатунин К.А., 1915; Верещагин Н.К., 1959; И.Я. Павлинов О.Л., Россолимо, 1987; & Эбод от а, 1997]

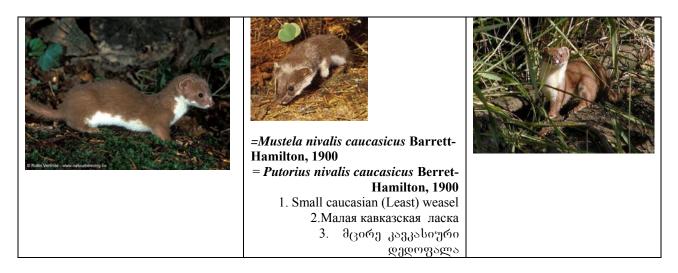


=Mustela (Mustela) nivalis dinniki Satunin, 1907;

- 1. Large caucasian weasel in summer coat
- 2. Большая кавказская ласка.
- 3. დიდი კავკასიური დედოფალა

Large Caucasian weasel is one and a half times larger of *Mustela (Mustela) nivalis* Linnaeus dwelling in West Europe and is distinguished by much longer tail. The weasel is brown during the warm season and turns white during the cold. In winter it does not moult in places with mild winter. In snowy parts of its range the colour changes to clean white. In summer the upper part of weasel, tail ears and the front part of legs are reddish - brown. A small spot of the same color is on the both sides of a head. The upper lip and the under part of the body is white. The range of vertical distribution of large Caucasian weasel is very wide. It is found in the mountains as well as near sea coast. It is more common in lower and middle mountain belts, than in alpine meadows. Large Caucasian weasel is distributed in Pre-Caucasus. On the northern slopes of the Caucasian range in the area of distribution of small Caucasian (Least) weasel it mingles with the small Caucasian (Least) weasel. [K.A. Catyhuh, 1915; H.A. Juhhuhk, 1914]

	Inventory number	Harvest Location	Date	Collector
1	<i>№61h</i> – <i>711</i> - <i>7-08</i>	Psebai, Kuban, Russian Federation	1908	E.K.Juthner
2	№727 641-699	Near Gunib, Dagestan (RussianFederation)	1916,26, II	Lukstin
3	№725	Near Gunib, Dagestan (RussianFederation)	1916	
4	№861	Adjara, Georgia	1971	G.Gogilashvili



Small caucasian (Least) weasel is middlesized; it has a long slender body, and a short tail. The narrow head is supported on a long neck, and the legs are short. The large eyes are black, and the ears are rounded. It is as graceful as, other members of subgenus *Mustela*. Every its movement demonstrates the strength and extraodinary flexibility. It is distinguished dy individual variability in color. The fur is ginger to a rich chocolate-russet brown in colour, and the underparts are creamy-white. In summer the fur above is ginger to a rich chocolate-russet brown in colour. The upper part of the head, body and flanks are dark colour. Borderline between dark color of flanks and white color of underparts are sharply expressed. White line runs from the upper lip to the bottom of the ear. The abdomen is white or creamy-white. The front part of legs is dark. It has a black tip to its tail. Geographical distribution of small caucasian (Least) weasel covers Crimea, North Caucasus, the Transcaucasia, northern Iran and Asia Minor. Small caucasian (Least) weasel occupies wide belt; it was found in the glacier. In northern parts of the range, weasels turn white in winter. Speciemen, described by Berrett – Hamilton was found up the snow line. It dwells below sea-level in the East Transcaucasus. [H.Я.ДИННИК, 1914; К.А. Сатунин, 1915; Bepeigarun H.K., 1959; Teмботов A.K., 1972; <code>@gffcggrgco.d., 1997]</code>

	Inventory number	Harvest Location	Date	Collector
1	№643-61p (stuffed animal)	Tiflis, Georgia	1901, VII	
2	<i>№61° - 657</i>	Lencoran, Azerbaijan	1866,18,IV	G. I.Radde
3	<i>№61a 685</i>	Lencoran, Azerbaijan	1866, IV	G. I.Radde
4	№61- 688	River Kura region, Georgia	1879, 3,XI	G. I.Radde
5	<i>№63c</i> - 716	Uvara, The Volga Delta, Russian Federartion	1892, 15, I	K.A.Satunin
6	№8-11 - 640	Bakuriani, Georgia	1911, I	Julikovich
7	№13 - 709	Urdo (Tiflis region)	1915,21,III	V.N.Rostombekov
8	№719	Zar-Djevan, ElisavetpolGouv. (=Karabakh)Azerbaijan	1915,22, X	
9	№39 - 726	Elizavetinsk (= Kirovabad = Ganja), Elisavetpol Gouv.(=Karabakh)Azerbaijan	1915,28,IX	
10	№720	Djevanshir , Elisavetpol Gouv. (=Karabakh) Azerbaijan	1915,21, X	
11	№61° - 724	Diugerli , Elisavetpol Gouv. (=Karabakh) Azerbaijan	1915,25, X	Vasilenko
12	№ 722	Kelbajari (Djevanshir, Elisavetpol Gouv. (=Karabakh), Azerbaijan	1915, 20,X	

13	№721	Sarybash (Djevanshir , Elisavetpol Gouv. (=Karabakh), Azerbaijan	1915,22,XI	
14	№674	Djevanshir , Elisavetpol Gouv. (=Karabakh), Azerbaijan	1916	
15	№723	Troitskoe (Azil),	1916, XI	
16	№2-15	Karachanakh, Elisavetpol Gouv. (=Karabakh), Azerbaijan	1916, II	Devaliger
17	№13 - 681	Urdo (Tbilisi region), Georgia	1925, III	A.V. Mulin
18	№734	Tbilisi region, Georgia	1926, III	
19	№29-278-1-41-1-4	Levtana Forest, Georgia		O.Orudji

Mustela (Mustela) erminea Linnaeus, 1758

and the second	Mustela (Mustela) erminea aestiva Kerr, 1792 Mustela erminea teberdina (= balcarica Baziev, 1962) 1(Обыкновенный) горностай 2.Ermine(common,Europea) or stoat,	E C
Mustela erminea L.	(greater, short-tailed) weasel 3. შუა რუსეთის ყარყუმი	Fopureral (Mandr environ L.) + smann sexy. (Per. A. H. Environd)

The stoat or ermine is a small fierce fossorial³ hunter, of the family Mustelidae, one of the most species-rich families in order Carnivora, with a long, bushy tail, known for its beautiful silky pure white fur with its noticeable black tip at its tail, which has been highly prized by trappers. It resembles other members of this family in many ways. It is muscular, swift, and agile; often appearing and disappearing with confusing rapidity. It can climb trees, swim and often cross small streams. In summer the ermine's coat is a rich medium brown with an off-white belly. "Ermine" (a term originating from the Latin phrase "Armenius mūs" = Armenian rat) refers to the animal only when it has white fur, which it moults to in winter in snowy parts of its range the colour changes to clean white. In winter, the coat is thicker. In all seasons the ermine has a black tip to its tail. The legend says that the ermine would die before soiling its fur that's why it becomes a symbol of purity and chastity. We can find numerous examples in art, literature, and heraldry of the ermine representing the purity that its white coat suggests. It is depicted in heraldic symbols, royal gowns, and extremely wealthy. They are omnivorous and voracious, both in appetite and in curiosity. They seem to be more at home in boreal coniferous or mixed forests, but they also inhabit boundaries of meadows, shrubby riverbanks, and lakeshores. They stay close to the cover of rock talus, stonewall, hedgerows, stumps, and logs. A rare subspecies of ermine (Mustela erminea) Caucasus ermine (Mustela erminea teberdina) is dwelling in Caucasus. The information about the stoat in the Caucasus in the beggining of the 20th c. is scanty. Konstantin Satunin included it into the list of Caucasian animals based on the speciemen of the animal collected on Mount Elbrus by F. (T.) K. Lorenz and sent to Satunin. At present some scientists assume, that in the Caucasus is dwelling rare subspecies of ermine (Mustela erminea teberdina) - caucasian ermine. The speciemen were collected in the country between Teberda and Big (Large) Laba rivers. The region of distribution - mountain stripe from the upper forest boarder up to subnival belt (from 2000 to 3500 m). The mountain subspecies differ from valley subspecies by small size of body and relatively narrow and flat cranium. Caucasian subspecies of Mustela erminea is the smallest. [H.A. Динник, 1914; К.А. Сатунин, 1915; Новиков Г. А., 1956; Верещагин Н.К., 1959; Banfield A.W.F., 1974; Ricciuti E.R., 1979; Добролюбов А.Н., 1997]

	Inventory nember	Harvest Location	Date	Collector
1	№663 3-16 (stuffed animal)	Uvara, The Volga Delta, Russian	1892,1, V	K.A.Satunin
1		Federartion		
2	№3-16 - 712	Krasninski,RussianFederation	1904	K.A.Satunin
2	№719	Ardjevan (Elisavetpol Gouv.)	1915,22, X	
3		(=Karabakh), Azerbaijan		

³ Used to describe animals that have large forelimbs or other adaptations for digging and burrowing, or to describe the parts of the body used for this purpose

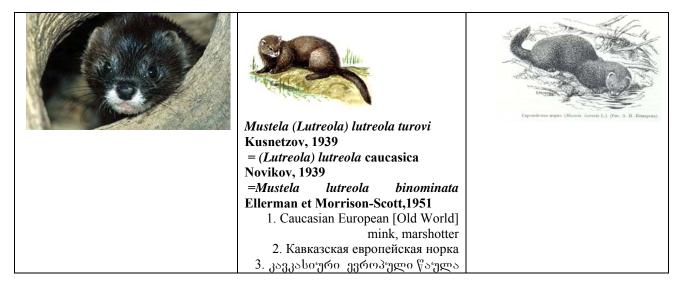
Sub genus: LUTREOLA Wagner, 1841

Mustela (Lutreola) lutreola Linnaeus, 1761

 1. European [Old World] mink, marshotter

 2. (Европейская, обыкновенная, русская) норка

 3. ევროპული წაულა



There are two living species of mink the American mink and the European mink, which always has a large white patch on its upper lip, while the American species sometimes does not. The mink is closely related to the weasel, but longer, and lighter светлей. In the wild they range in color from dark brown to black, with an occasion albino or pearl-colored individual. It has a long lither body, short sturdy legs, a long serpentine neck, and a flat, pointed face. It has a bushy tail about half the body length, and small ears. The sole of the feet are only sparsely haired. Male mink are much larger than their mates. The pelage is soft and lustrous, with thick greyish-brown underfur and long, glistering guard hairs. The colour of fur almost is the same in simmer and in winter; but in winter the fur is fluffier, thicker, and softer. In summer it is thinner and coarser. The dorsum is generally dark brown or dark-chestnut, abdomen is lighter with greyish tint. Ears are light brown. It has small sometimes invisible white patch behind the throat. It has a large white patch on its upper lip and around the mouth. The fur on legs is the same color, as the body; the end of the tail is dark-brown or black. [Н.Я.Динник, 1914; К.А. Сатунин, 1915] They are primarily nocturnal and remain active except for the coldest winter months. Mink are excellent swimmers; the pelage is about the only aquatic adaptation that this amphibious weasel possesses. They also lope along the ground with a typical mustaline gait. These semi-aquatic creatures feed both on land and in the water. They are found near water, but will live at the forest's edge. Caucasian European mink (Mustela lutreola turovi) is found in the plains forest belt of the Northern Caucasus; it is not found in Transcaucasus. Minks dwell on the river banks and near the lakes. They are not dwelling in the high mountains. [Верещагин, 1959; Гептнер В.Г. и др., 1967; Данилов, Туманов, 1976; Туманов, Зверев, 1986; Rozhnov, 1993; Туманов, 1996; Рожнов В., Туманов И.Л., 2009]

	Inventory number	Harvest Location	Date	Collector
1	$N_{2}64 - 524$ (stuffed animal)	Moscow region, Russian	1894, I	Purchased
1		Federation		(Satunin)
2	<i>№64a-624</i>	Psebai, Kuban, North	1894,12,III	Noska
2		Caucasus; Russian Federation		

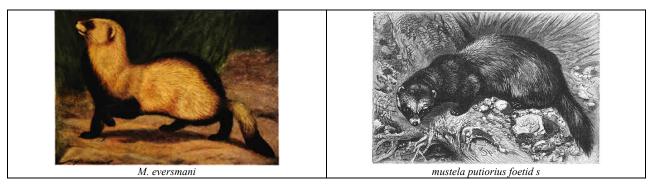


Polecat is the name given to any member of the Mustaline subgenus Putorius. They are dark brown with a lighter bandit-like mask across the face, pale yellow underbody fur, a long tail, and short legs. They are somewhat larger than weasels. The slang term *polecat* comes from Old French *pole* or *poule* "chicken"! That would make a *pole cat* a "cat which hunts (or eats) chicken," much as a chicken hawk hunts and eats chicken. The cat part of the term refers simply to the catlike appearance of the animal. The name dates back to 1320 in England, where it refers to the European Putorius foetidus (now known as Mustela putorius) and a member of the weasel family (the Mustelidae). It must be noted that this polecat is the ancestor of the domesticated ferret and is not the same as a skunk. The skunk has been erroneously called a *polecat* as far back as 1781, when it was noted that "The Skunk is...very different from the Pole-Cat, which he is sometimes called." Presumably this is because the polecat and the skunk (like other members of the Mustelidae) have the ability to produce a strongly offensive smell. Polecats are confined to the northern hemisphere. The European polecat, mustela putiorius, inhabits the whole central and northern parts of the continent. The wild European polecat is dark brown above and black below; the face is variegated with white. The fur is long and coarse. The European polecat rarely climbs trees. It is extremely blood-thirsty and hunts at night. It is replaced in north Asia by allied species M. eversmani, and on the central plateau of United States by a third form, M. nigrapes, with creamy yellow fur, brown legs, and black feet and tail. A related genus Vormela, whose fur is white marbled with reddish spots above, extends from east Europe to Afghanistan. All these animals resemble M. puterius in habits. [Новиков Г.А., 1956; Banfield A.W.F., 1974]

	Inventory number	Harvest Location	Date	Collector
1	№50 62 – 675	Kazabinsk,	1899,XII	L.S.Berg
2	<u>№</u> 676	Ubinsk, Ubinsky ranges, The Altai;Russian Federation	1900,28,VI	Tolmachev
3	<u>№2 – 677</u>	Vilkovo (the Ukrainian Danube Delta)	1902,19,VI	
4	$N_{2}57c-613$	Saxony		purchased



There are two forms of *mustela putiorius* in the Caucasus: *M. eversmani* and *mustela putiorius foetidus*. [Н.Я.Динник, 1914; К.А. Сатунин, 1915;].



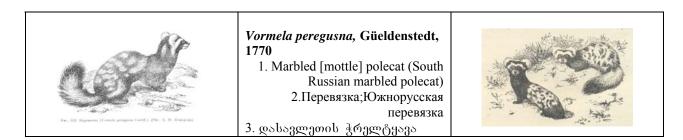
The down and fur on most bodyparts of the polecats dwelling in the Caucasus are light reddish, but the tips of long hair are black. The chest is covered with black fur; the belly is light reddish or light yellowish with white hair tips. The back and upper part of the neck are light brown; the legs are black. The head is particoloured: both eyes are covered with a dark brown "mask" surrounded by whitish or pure white space. The occipital part of head is dark. The ears are white, not large, and slightly rounded. The head of *M. eversmani* dwelling in the Caucasus is rather short; the muzzle is pointed; the eyes are middle sized. The long body stands on very short legs; legs have more or less hairy feet. The colour of *M. eversmani* is lighter than that of *M. foetidus*.

Mustela putiorius foetidus is smaller than M. Eversmani; its pelage and muzzle are darker. The colour of fur of Mustela putorius foetidus dwelling in the Caucasus is dark, beautiful, golden-red. It is not whitish as the fur of M. eversmani. Its muzzle is darker than the muzzle of M. eversmani; its cheeks are not white, and the stripe on the muzzle is brown. Its tail is golden-red with brown tint; the end of the tail is black. Down and fur on the most part of the body of the polecat are light-red, but there are black tips on hair. The chest is covered with black fur; the abdomen is light red or light yellow. Hair tips on the abdomen are white. The upper part of the body is brown; the legs are dark. They are dwelling in the fields, forests, steppes and foothills of North Caucasus, River Don and Astrakhan regions. They were not found in the Transcaucasus. They do not dwell high in the mountains. [H.Я.ДИННИК, 1914; К.А. Сатунин, 1915].

	Inventory number	Harvest Location	Date	Collector
1	№58 - 62	Khanskaia stavka,North Caucasus	1887,VII	K.A. Satunin.
2	№57g - 628	Psebai, Kuban, North	1892	Noska
2		Caucasus, RussianFederation		
3	№581 - 629	Psebai, Kuban, North	1900	
3		Caucasus, Russian Federation		
4	№58g (30-06)	Terepl-Mektebi,	1906, 14,V	
4		Karenag,		
5	№58f - 634	Atu-kail (Kuma),	1906, 2, V	
6	№58c - 633	Adjikulak(Stavropol gouv.),	1906, 3, VI	
U		Russian Federation		
7	№60-13 - 3-13 672	Bzib, Kuban,		Th.D. Pleske
/		Russian Federation		

Triba *ICTONYCHINI* Pocock, 1922 Genus: VORMELA Blasius, 1884

1. Перевязки 2. Marbled[mottled] polecats 3. ჭრელტყავები



A related genus to polecat, Marbled [mottle] polecat (Vormela) is very particoloured; it has a light-colored mask on



its face and a relatively long and fluffy tail. The end of the tail is dark grizzly. It is a middle sized animal. The pelage is short. There is great individual variety in the colour of these animals. The general color of the dorsum is a yellow tint spotted by small, irregular red and grizzly spots. The muzzle is relatively blunt and flattened. The fur around the lips and chin is white; the head is dark. The end of an upper part of a muzzle and the space between ears are dark

grizzly. Wide stripes are over the eyes and the circle of the mouth,



and the ends of the ears are white. Rather large ears are well distinguished due to their white colour.



Vormela sarmatica PALL. From the life species in Adjicabul by barronessa von Drachenfels

Marbled polecat is widely distributed in the North Caucasus; it is widely spread in the Pre-Caucasus and Caspian steppes and semideserts. In Transcaucasus it is widely distributed as in the Northern Caucasus. It is not found in damp woodlands of west Transcaucasus. [Верешагин Н.К., 1959; Темботов А.К., 1972; Красная книга СССР, 19841

	Inventory number	Harvest Location	Date	Collector
1	№ 761	Tbilisi Zoo, Georgia	1928,15 IX	

Sub family: MELINAE Bonaparte, 1838

Tribe MELINI s. str.

Genus: MELES Brisson, 1762

1. Барсуки 2. Eurasian badgers 3. მაჩვები



The Eurasian badger is the tallest among the Mustalidae family. When it was first discovered, it was classified as a small bear, and, in fact, it does resemble the bear. In English, a male badger is called a boar, while the female is called a sow. Its body is stout, but flattened dorso-ventrally; its muzzle is pointed; it has a fat neck; its eyes are small; it has short ears, legs, and tail, and broad semiplantigrade feet. The ivory-coloured claws on the forefeet are extremely long, but those on the hind feet are short. The dorsal pelage is coarse and longer than that on the venter, particularly on the flanks, where it forms a fringe which exaggerates the flattened effect of the body. The base of the dorsal hairs is creamy or buff-colourd then follows a subterminal black band and a white tip, giving the back a grizzled appearance. The stubby tail is covered with stiff buff-brown hairs; the underparts are creamy or buff white; the legs are chocolate brown, and the broad feet are blakish; the foot pads are naked. The badger's head has a very distinctive pattern: the muzzle, crown, and hind neck are dark brown to almost black, and the whole area is divided by a narrow white mid-dorsal line that runs from the muzzle to the shoulders. This white line is matched on each side of the face by white cheeks and white ears trimmed with black. Behind the eye, on each cheek is a black crescentic spot. The fur is much shorter on the head than on the back. Males are larger than females. Badgers live in

a system of interconnected tunnels and chambers called a sett.⁴ In the Caucasus fauna *meles minor* Satunin is the biggest representative of Mustaelidae.



Meles meles canescens Blanford, 1875 (*=Meles meles minor* Satunin, 1905)

1. Caucasian badger 2. Кавказский барсук 3. പ്രാപ്പാംഗരധ പ്രത്യം



The Caucasus subspecies differ from the other members of the familly by much lighter colour and smaller size. [Н.Я.Динник, 1914; К.А. Сатунин, 1915; Новиков Г.А., 1956; Верещагин Н.К., 1959; Темботов А.К., 1972]

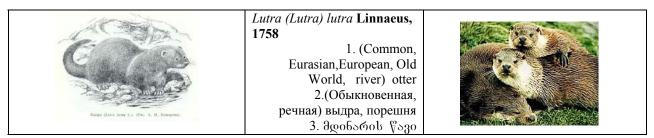
	Inventory number	Harvest Location	Date	Collector
1	№ 533 25-07 (stuffed	Zubovskaya, Mugan/Talysh,	1907, 9,III	R.H. Schmidt;
1	animal)	Azerbaijan		A.B.Schelkovnikov;
2	№ 569a (stuffed animal)	Mtskheta, Georgia	1924, VI	
3	№ 538 - 54 22-06	Shamahy (Azerbaijan)	1906, 17, IV	R.H.Schmidt;
3				A.B.Schelkovnikov
4	№ 25-07 – 563	Zubovskaya,Mugan/Talysh,	1907, 3, III	R.H.Schmidt;
4		Azerbaijan		A.B.Schelkovnikov
5	№ 86-07 – 575	Ardanudj (Turkey)	1907, XI	A.A. Florenski
6	<u>№ 55-08 – 577</u>	Tbilisi r-n, Georgia	1908, IV	
7	<u>№ 55-08 – 576</u>	Tbilisi r-n, Georgia	1908, X	V. Klipert
8	№ 568	Aleshushak(Azerbaidja)	1910, XII	V. Klipert
9	№ 35-10-548	Poili, Elisavetpol	1910,3,III	E. Jungerbaur
9		Gouv.(Karabakh), Azerbaijan		
10	№ 35-10-534	Poili, Elisavetpol	1910, 6, III	E. Jungerbaur
10		Gouv.(Karabakh), Azerbaijan		
11	№ 14-11 – 543	the district of Kars-Ardahan,	1911	S.Korot'ko
11		(Turkey)		
	№ 40-12-540	Adjikent, Elisavetpol Gouv.	1912 VII	A.B.Schelkovnikov
12		(=Karabakh)		
		Azerbaijan		
	№ 40-12	Adjikent, Elisavetpol Gouv.	1912, VII	A.B.Schelkovnikov
13		(=Karabakh)		
		Azerbaijan		
14	№ 60-13 – 529	Kuban, North Caucasus, Russian	1913, 9, I	Th. D. Pleske
		Federsation		
15	№ 157-14 — 535	Tbilisi, Georgia	1914, XII	O.F.Getling
16	<u>№</u> 570	Borchaly(on the boder of	1915, 30, XII	Kuchtenbakh
		Georgia and Azerbaijan)		
17	<u>№</u> 561	Tbilisi, Georgia	1921, IV	I.Chkhikvishvili
	<u>№</u> 562	Karajaz (=Gardabani, on the	1924	V.Reish
18		boder of Georgia and		
		Azerbaijan)		
19	<u>№</u> 564	Telavi, Georgia	1926,16,VIII	I.Chkhikvishvili
20	<u>№</u> 566	Telavi, Georgia	1926,18,VIII	I.Chkhikvishvili
21	<u>№</u> 3	Djenisi,	1941, 25, III	Ananaba
22	№ 80 - 2-4,	Djikhaskari (Zugdidi r-n),	1941, 3, IV	Ananaba
22		Georgia		
23	№ ??,	Sarakoni (Chkhorotsku,	1957,19,VIII	Ananaba
25		Megrelia), Georgia		
24	<u>№</u> 7	Tsalka, Georgia	1957, 10, I	Ananaba
25	<u>№</u> 779 - 2-58	Adjaria, Georgia	1958,18,VIII	G. Avaliani
26	<u>№</u> 2-58 – 778	Kedlebi,Adjaria,Georgia	1958,12,VIII	Avaliani

⁴ http://www.badgers.org.uk/badgerpages/eurasian-badger-64.html

27	№ 798 - 33-60	Tsageri, Gerorgia	1960,30,VIII	G.Avaliani
28	<u>№</u> 795 - 33-60	Tsageri, Georgia	1960,27,VIII	G.Avaliani
29	№ 10-61	Abastumani, Georgia	1961,15,VIII	R. Djordania
30	№ 29-975 - 8	Mskhaldidi, Georgia	1975, 23, IV	O.Orudji
31	№ 66-977 – 1	Bandiani forest, Georgia	1977, 5, II	O.Orudji
32	№ 29-978 - 10-12	Bandiani forest, Georgia	1978, 15, I	O.Orudji
33	<u>№</u> 100-978	Kheledula gorge (Lentekhi r-n),	1978, V	Liparteliani
33		Georgia		
34	<u>№</u> 28-978 – 3	Kokhiani forest, Georgia	1978, IV	O.Orudji
35	№ 56-978 – 1	Mskhaldidi, Georgia	1978, VII	O.Orudji
36	№ 29-274 - 1-3	Didgori forest, Georgia	1979, I	O.Orudji
37	<u>№</u> 45-980	Agbulakh - Akhaldaba forest	1979, 10, II	O.Orudji
57		(Tetritskaro region), Georgia		
38	№ 19-990 – 4	Kokhiani forest,Georgia	1979, 20, XII	O.Orudji
39	№ 135-980 - 5-6	Didgori forest, Georgia	1980, 6, XII	O.Orudji
40	№ 63-983 - 6-10	Agbulakh - Akhaldaba forest	1983, 5, XI	O.Orudji
40		(Tetritskaro region), Georgia		
41	№ 93-985 - 8	Bandiani forest, Georgia	1985, 12, I	O.Orudji
42	<u>№</u> 4-989 – 7	Kokhiani forest, Georgia	1988, 30, I,	O.Orudji

Sub family: LUTRINAE Bonaparte, 1838 Tribe *LUTRINI* s.str. Genus: LUTRA Brunnich, 1771

1. (River, typical) otters 2. (Настоящие) выдры 3. წავები



The otter is well-adapted to its amphibious way of life. It has a long, streamlined body and flattened head; it has very short, strong legs, webbed feet, and small ears that can close under water. The tail is flattened on both sides, tapering at the end. It is rather large. The fur is rough but sleek.. It is dark brown above, greyish-brown or chestnut, sometimes whitish below. Under the lower jaw and on the upper lip it has whitish or white spots. In winter the fur is darker than in summer. Its thick and lustrous coat is another adaptation to its water-based lifestyle, since such fur helps to keep it afloat. Otters can swim well both on the surface of the water and underneath it. They are also well-adapted to movement on land. They are fond of sliding down hills on their bellies. In summer, they use grassy or muddy hillsides. True otter (Lutra lutra meridionalis) –a rare species, is included into the Red Data Book; in the Caucasus it is represented by its Caucasian subspecies. [HOBIKOB Γ. A., 1956]



Caucasian otter – Lutra lutra meridionalis – is a rare, little-studied subspecies. It is a typical representative of near water biotope. The colour of fur above is dark-brown, brown, brownish-black, grayish brown. reddish-black. The underparts are pale brown, or sometimes it is dirty white; the lower part of the neck is pale-grey- white or whitish. Under the lower jaw, on its chin and upper lip there are whitish or white spots. The undercoat consists of thin hair, which is light-grey on the bottom and brown at the top. Its fur coat is thick and lustrous. Naked parts of the nose and lips are dark brown or black. [Н.Я.Динник, 1914; К.А. Сатунин, 1915; Новиков Г. А., 1956]

Caucasian otter dwells in the river Kuban basin (Russian Federation) and Mountain Rivers in Georgia, Azerbaijan, and Armenia at altitudes up to 2000 m above sea level. It settles in fresh-watered reservoirs in all landscaped zones. It inhabits holes burrowed in perch trout shores of reservoirs and, more rarely, cracks in rocks. In the regions where the riverbanks are under human exploration, the quantity of animals is significantly reduced. They are protected in the reserves [Новиков Γ . А., 1956; Верещагин Н.К., 1959; Красная книга СССР, 1984]

	Inventory number	Harvest Location	Date	Collector
1	№ 711 (stuffed animal)	Tiflis r-n,Georgia	1906, IX	K.A.Satunin
2	№ 714 (stuffed animal)	Borchaly(on the boder of Georgia and Azerbaijan), the river Khrami bank	1924, II	Benard
3	№ 713 3-16 (stuffed animal)			Branderburg
4	№ 53-718	Tiflis, Georgia	1891,12,IX	G.I. Radde
5	№ 53 - 704	Psebai, Kuban, North Caucasus Russian Federation,	1894	G.I. Radde
4	№ 711 juv	Tiflis, Georgia	1906, IX	S. Smirnov
5	<u>№</u> 12-15 - 710	Karachanakh , Elisavetpol Gouv. (=Karabakh), Azerbaijan	1915, I	Delvisir
6	№ 862	Khevsureti, Georgia	1971	G. Gogilashvili

PINNIPEDIA Illiger, 1811 –

1. Ластоногие 2.Pinnipeds, fin-footed carnivores, web-footed, seals and walruses, seals and allies 4. ფარფლფეხიანები

According to recent conception, Pinnipedia, fin-footed carnivores comprised of seals and walruses, are two superfamilies in the Carnivora order (*Carnivora*). In some classifications, fin-footed carnivores are presearved as a group in the rank of suborder within the order of carnivora. [Hennig W., 1966; Wiley E. O., 1981; И. Я. Павлинов, О.Л. Россолимо, 1987]

Superfamily PHOCOIDAE s. lato Family – PHOCIDAE Gray, 1821

1. (Earless, true, hair) seals 2. Тюленевые, настоящие [безухие] тюлени 3. бъдододо სეдръздоо

Subfamily - PHOCINAE s. str.

 1. True seals

 2. Настоящие, или десяти резцовые тюлени

 3. ნამდვილი სელაპები

Tribe PHOCINI s.str.

 1.Pinnipeds,fin-footed carnivores, web-footed, seals and walruses, seals and allies

 Ластоногие
 дъбудудободо

Genus - PHOCA Linnaeus, 1758

1. Hair [harbour, true] seals 2. Обыкновенные [настоящие] тюлени или нерпы

3. ჩვეულებრივი სელაპი

Subgenus - PUSA Scopoli, 1777



Phoca (Pusa) caspica Gmelin, 1788

1. Caspian seal 2 Каспийский тюлень 3. კასპооს სელაპо



The distinctive feature of the Caspian ichthyofauna is its high endemism caused by the early separation of the Caspian Sea from the World Ocean. One of the endemic species of fauna is the Caspian Seal (Phoca caspica Gmelin), the smallest existing variety of seals and the nearest relative of northern earless seals *p. Puso*. It is the only mammal in the fauna of the Caspian Sea. Males and females are nearly of the same size: maximum length is 160 cm, maximum weight during the period of the best sate of nourishment ranges from 90 to 100 kg. Caspian seal has



small fore limbs and its hind limbs are relatively short. It uses its limbs in walking on the ground. Caspian seal is distinguished by the different sizes and shapes of brownish or nearly black merge spots on its back. Numerous dark, irregular, often merging spots are typical of adult animals. They are sparse or completely absent on the sides and belly. In wintertime, seals are concentrated in the Northern Caspian at the edge of the ice cover. Their pupping, mating and molting happens on ice. Pupping takes place from late January to late February, and pups are born with a white woolly coat. This white coat is moulted at 3 weeks

of age and is eventually replaced by the adult coat which is greyish-yellow on the back, light grey on the front and sides, and covered with irregular brown or black camouflage markings. The Caspian seal occurs throughout the Caspian Sea from the coastal areas of the Northern Caspian to the Iranian coast. In 1993, the Caspian seal, according to the classification of the IUNP (International Union of Nature Protection), was referred to vulnerable species and listed in the Red List of the IUNP. [Верещагин Н.К., 1942; Верещагин Н.К., 1947; Верещагин Н.К., 1959; Kazancheev E.N., 1981; Aladin N., 2006; Хураськин Л. Захарова Н. Морской зверь Каспия] http://www.biodiversity.ru/programs/seal/publications/sea-animal.html]

http://www.pinnipeds.org/species/caspian.htm

	Inventory number	Harvest Location	Date	Collector
1	№ 3-29-12 (stuffed animal)	Tbilisi Zoo, Georgia	1929,14,III	Boiko
2	№ 3-29-13 (stuffed animal)	Tbilisi Zoo, Georgia	1929,17,III	Boiko
3	№ 3-29-14 (stuffed animal)	Tbilisi Zoo, Georgia	1929,17,III	Boiko
4	<i>№ 66b</i>	Petrovsk-port, eastern shore of the Caspian sea	1894, VI	K.A.Satunin
5	<i>№</i> 66c	Petrovsk-port, eastern shore of the Caspian sea	1894, VI	K.A.Satunin
6	<i>№ 66d</i>	Petrovsk-port, eastern shore of the Caspian sea	1894, VI	K.A.Satunin
7	№ 66e	Petrovsk-port, eastern shore of the Caspian sea	1894, VI	K.A.Satunin
8	№ 54-14	1	1914, 12,V	Grigorian

Super family: FELOIDEA s. lato Family: HYAENIDAE Gray, 1821

1. Hyenas, strand wolves 2. Гиеновые, гиены 3. აფრთისებრნი

The Hyanidae family includes only four genus, each represented by single species consists of four living species: the Striped Hyena and Brown Hyena (genus Hyena), the Spotted Hyena (genus Crocuta), and the Aardwolf (genus Proteles). In the Caucasus fauna there is Striped Hyena. Hyanidae, according to their appearance, resemble dogs, but differ from dogs by some significant characteristics. The body is less oblong and noticeably raised at the neck where it joins with the backbones. The guard hair of the mane is coarse. The head is massive and slightly oblong with large ears. The tail is long and shaggy. The pelage is rough, coarse, and thin. The general coloration is dirty grizzly with dark stripes or spots; there are light spots on the legs. All hyenas – the spotted, the striped and the rare

brown species – are scavengers and in certain sections of their ranges act as a sanitation corps. [Новиков Γ . А., 1956]

Genus HYAENA Brunnich, 1771



1. Hyenas, strand wolves 2.Гиены 3. საკუთრივ აფთრისებრი

Striped hyena is the only representative of the species in the Caucasus fauna. The construction of the body is typical for the family. The front part of the body is more massive and heigher than the back part. Its legs are strong and curved, with big, broad, adapted for digging claws. Its coarse coat is grayish-yellowish-brownish with dark brown or black markings. Along dorsum it has a guard mane. The guard hair of the mane along the dorsum is black. The muzzle is brown the rest part of the head is lighter in color. The ears are very thin and are coverd with fur. There are stripes on the flanks. The underparts are dirty gray.

It prefers carrion, and even if the vultures have cleaned all meat from a carcass, the hyena still feeds on bones which it crushes with ease. It also attacks small animals, is known to have carried off little children, and occasionally digs up human burials. Normally it avoids a fight; when in danger it growls and bristles up its mane. The striped hyena is smaller than its spotted relative and has a different range which extends from Asia Minor eastwards to Central Asia, Afghanistan, West Pakistan, and India. In the Caucasus there is the peripheral area of the animal distribution. In modern times the regions of there dwelling reduced significantly and there are only some spots of animals dwellings in Trans Caucasus and Central Asia. At present, the quantity of animals is significantly reduced and in some parts of the area it is extinct. .[H.Я.ДИННИК,1914; К.А.Сатунин,1915; Г.А.НОВИКОВ, 1956; Красная книга СССР, 1984]

	Inventory number	Harvest Location	Date	Collector
1	№ 322 153-14 (stuffed animal)	River Kara-su, near Bosdag, Azerbaijan	1914,25,XII	I. M. Loos [lus]
2	№ 321 (stuffed animal)	River Kara-su, near Bosdag, Azerbaijan	1914,25,XII	I. M. Loos [lus]
3	<i>№</i> 46b-325	Tsarskye Kolodetsy (Dedoplis Tskaro),Signakh province, Tiflis Gouv.,East Georgia	1868,XII	Prince Albert von Altenburg
4	<i>№ 46a-325</i>	Tiflis,Georgia	1869	G. I. Radde
5	№ 100-11 - 323	Bushlukh , Elisavetpol Gouv. (=Karabakh) Azerbaijan	1911, 27,X	E.V.Pfizenmayer
6	№ 1-12 - 324	Arushti , Elisavetpol Gouv. (=Karabakh) Azerbaijan	1911,20,XII	I. M. Loos
7	<u>№</u> 43-04 - 330	Astabad, Azerbaijan		
8	<u>№</u> 331 - 327	Signaghi, Georgia	1923, XII	I.Chkhikvishvili
9	<u>№</u> 752	Gurjaani, Georgia		

Family FELIDAE Fischer, 1817

1. Кошачьи, кошки

The story of the cat is really extraordonary. And not merely because the cat has been worshipped as a goddess and persecuted as a witch. The cat has been living beside man for many centuries; it has served man faithfully, and vet it has remained independent and in many respects half wild. It is believed that the forefather of all domestic cats was the wild cat of Nubia which was brought to Egypt some five thousand years ago. Nubian cat had a small head with a pointed muzzle, long legs, and a body which seems disproportionately long. The cats depicted on Grecian urns look quite different. In the 10th and 11th centuries, cats made their way into Central Europe. Even the Ancient Egyptions crossed the Nubian cat with the swamp lynx, thus obtaining new varieties. There is a vast army of white, black, red, grey and spotted animals which are both domestic and wild. They have wild relatives, too. Though not numerous, they are highly varied. Among them are desert and forest and reed cats, the lynx, the snow leopard, the clouded leopard, the panther, the cheetah, and the tiger. The cats are the most specialized of carnivores in structure and habits. Their heads are short and broad; their lower jaws have a distinct chin; their muzzles are short; and their eye sockets are directly forward. Their teeth show a high degree of specialization for biting and bolting food. Their bodies are sinuous and powerful. There are five toes on the forefoot (the pollex is high on the wrist), and the hind foot carries only four toes. Each toe is armed with a compressed, curved, retractible claw, which is withdrawn in walking but extended in climbing and slashing prey. Cats are generally solitary, stealthy, nocturnal hunters. They possess keen eyesight and generally abhor water. They are almost cosmopolitan in distribution, except for Australia and Madagascar. [Н.Я.Динник, 1914; К.А. Сатунин, 1915; Новиков Г. А., 1956; Дмитриев Ю. Д., 1973]

Sub femily FELINAE s. str. Triba *ACINONYXINI* Pocock, 1917 (1867) Genus ACINONYX Brookes, 1828

Cheetah Cheetahs, chitas, hunting leopards
 2. Гепарды

3. გეპარდეზი



http://ariadna-travel.ru/ZA%20files/LEO.jpg

The word "cheetah" is derived from the Sanskrit word citrakāy, meaning "variegated body," via the Hindi cītā cheetah (n.d.) meaning "spotted one." The Cheetah's coat varies from a tawny to a golden tone covered in a pattern of solid black spots. The cheetah (Acinonyx jubatus) is an atypical member of the cat family (Felidae) that is unique in its speed, while lacking climbing abilities. Therefore it is placed in its own genus, Acinonyx. The genus makes the special subgenus Acinonychinae; it consists of one species. The Cheetah is a tall and elegant cat in appearance. It is sharply distinguished from Felinae by its large chest, narrow waist, legs with no drawn in claws, and a small mane on its back; it is long, thin, and well adapted for long and quick runs. The cheetah is the speed champion of all mammals. It is the fastest land animal, reaching speeds between 112 and 120 km/h. Cheetah has been considered the easiest of the exotic cats to tame and very loving. Cheetahs were first tamed by Sumerians. The cheetah has lived in association with humans since at least 3000 BC, when the Sumerians depicted a leashed cheetah with a hood on its head on an official seal. The Cheetahs were used as hunting partners for sport in Asia prior to the Assyrian Dynasty in Libia, during the reign of the Pharaohs. During this period in Egypt, the cheetah was revered as a symbol of royalty in the form of the cat goddess Mafdet. In Egypt cheetahs were kept in houses as lookouts and guardians. Cheetahs were kept as pets by many famous historical figures such as Genghis Khan, Charlemagne, and Akbar the Great of India (who had more than 9,000 in his stable). These cats were also used for sport. Trained and tame, they were typically hooded and carried on horseback or in a cart. Hunters in India have made use of the cheetah's swiftness for centures; they employed the animal in big game chases. In Azerbaidjan, Georgia and Armenia the nobility used to hunt with cheetah up to 14 c. It lives in Africa and West Asia, rarely occurring in the Central Asia. The last two Asian Acinonyx jubatus Hilzheimer were in the Iran Zoo (1976).

[Верещагин Н.К., 1959].

http://tenikwa.co.za/Fact%20File%20Cheetah.html

http://www.britannica.com/EBchecked/topic/108332/cheetah/235383/Status-and-taxonomy

The American Heritage Dictionary of the English Language, Fourth Edition.

http://dictionary.reference.com/browse/cheetah. Retrieved on 2007-04-16.

http://bigcats.ru/index.php

Genus ACINONYX Brookes, 1828



Acinonyx jubatus Schreber, 1776 1. Cheetah,chita, hunting leopard. 2.(азиатский) гепард *т*.,чита 3. പ്രാർംഗ്ര



The cheetah is a very unusual cat. The body is relatively short; the legs are very long, well proportioned, but strong. The legs could have belonged to a dog. They are straight, hard and do not have the cat's contractible claws. Nor does the cheetah have the cat's distinctive stealthy gait. For all that the cheetah is unmistakably a cat. Ears are rather short, rounded. Tail is long. The coarse, short fur of the cheetah has round black spots measuring from 2 to 3 cm across. The general coloration is yellowish, sandy or reddish. The back, flanks (both sides) and legs are thickly covered with small all-round dark spots. There are no spots on the front part of the muzzle, on neck and on the abdomen. Spots along the back sometimes are distributed in stripe; In the top part of the tail they form rings. The muzzle is practically (almost) white. The outer parts of the ears are black and lighter to the top. It inhabits the lowlands or slightly hilly parts of the deserts. It avoids mountains. Rapidly reducing in quantity species. It in the 18th century it dwelled in the plains of Central Asia, South Kazakhstan and east Trans Caucasus. [HOBUKOB Γ . A., 1956: Дмитриев Ю. Д., 1973; Красная книга СССР, 1984]

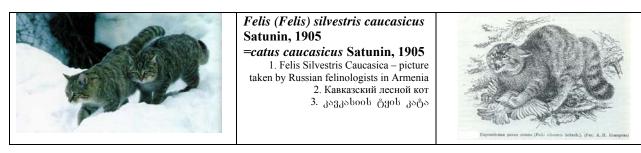
	Inventory number	Harvest Location	Date	Collector
1	№ 45-738 (stuffed animal)	Merv, Turkmenistan	1894, I	F. (T.) K. Lorenz

Tribe *FELINI* s. str. Genus FELIS Linnaeus, 1758

> 1. Кошки 2. Cats 3. კატები

Felis (Felis) silvestris Schreber, 1777 1. Дикая [европейская, лесная] кошка, европейский (дикий) кот 2. (Еигореаn) wildcat 3. ტзов добо

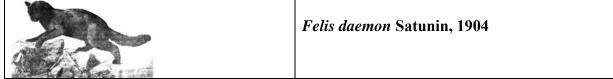
Hardly larger than a tabby, the European wild cat *(Felis silvestris)* has in most places retreated into the mountains like its larger relatives. Wildcats are still fairly common in most of the Europian mountains that shelter the larger predators and, because their of small size, even survive in a few lowland forests. Thus today, the wildcat still pads through the Ardennes and the lowland scrub of remote areas in Spain, Corsica, Sicily, eastern Europe, the Balkans, and the Caucasus. [Banfield A.W.F., 1974; Ricciuti E.R., 1979]



Subgenus FELIS s. str

Caucasus forest cat (Felis silvestris caucasica) – is a common carnivore. It prefers deciduous forests, rarely it is met in the dark coniferous forests, up to 1 500 - 2 000 m. The cat is middle-sized; it is a bit larger and more sturdy built than a domestic cat. It is dark-gray above, has black or dark-brown narrow stripes on the head and around the eyes, extending over the neck. There is a black stripe running along the back and barely distinguishable transversal stripes on the body. It is light gray below, with a touch of yellowish tint. The lower abdomen is ochre. The tail is of the same colour as the body with 2-3 rings before a black tip. In summer the fur is of a lighter colour than in winter. Young cats have more black spots and stripes. It makes its nest in the rock clefts, wood thickets, fallen trees or branches, seldom in hollows, in dens abandoned by foxes or badgers, lining it with hay, leaves and feathers. The nests are mostly tucked away in inconspicuous places, only in boggy thickets they may be visible. It stays at one and the same place. Does not migrate. Inhabits woods, shrubs, but is seldom found in sub alpine meadows, fields and reed beds. In Colchis it lives in swamped woods too. Sometimes stays close to human dwellings. Inhabits Southern and central Europe, the Caucasus at altitudes from sea level up to 2000 m. [H.Я.Динник, 1914; K.A. Сатунин, 1915; Новиков Г. А., 1956; Abuladze A., Bukhnikashvili A., Tarkhnishvili, 2001]

	Inventory	Harvest Location	Date	Collector
1	number \mathcal{N}_{2} 380-40 (stuffed animal)	Schara-Argunj,	1894, III	Purchased
2	N_{2} 373-40 (stuffed animal)	Karajaz (= Gardabani, on the boder of Georgia and Azerbaijan)	1910, 3, X	
3 4	№ 39-365 № 39k - 356	Batumi, Georgia Batumi, Georgia	1893, III 1893, XII	G.I.Radde,E.G.Konig G.I.Radde,E.G.Konig
5 6	<i>№</i> 39 <i>bb</i> - 359 <i>№</i> 39 <i>t</i> - 357 <i>№</i> 372 1-1a	Borjomi, Georgia Borjomi, Georgia Kojori, Georgia	1898 1898 1904	E.K. Juthner E.K. Juthner A.K.Satunin
7	(stuffed animal)			
8 9	№ 351 № 30-08 - 354	Sukhum-kala, Georgia Tuapse,Black Sea cost, North Caucasus, Russian Federation	1907,12,XI 1908, V	A. N. Kaznakov A. N. Kaznakov
10	№ 1-12 juv	Murovdagh, Mountain ridge, (MinorCaucasus)Karabakh,Azerbaijan	1912, XI	K.A.Satunin, I. M. Loos,
11 12	№ 866 № 880	Mskhaldidi, Georgia	1972, 23, I 1973, 3, V	G. Gogilasvili
13	№ 79-974 - 5-67 № 29-975 -	Mskhaldidi,Georgia Mskhaldidi, Georgia	1974,5,IV 1975, 23,IV	O. Orudji O.Orudji
14 15	5-6 № 73-976 -	Kokhiani forest, Georgia	1976,29,IV	0.Orudji
16	1-2 № 66-977 - 4-5	Lelobi forest, Georgia	1977,20, II	O.Orudji
17 18	№ 6-977 - 1 № 92-985	Kokhiani forest, Georgia	1977,25,IV 1985	O. Orudji
19 20	№ 93-985 - 4 № 47-986	Didgori forest, Georgia Kokhiani forest, Georgia	1984,X 1986,22,XII	O.Orudji O.Orudji
	VA			



Although the existence in Transcaucasia of a Black Wild Cat was known long ago, the animal has never been described nor scientifically named until1 K. A.Satunin named it *Felis daemon* ("Demon" being the hero of several Caucasus legends, and also of the poem by Lermontoff with the same title). The Transcaucasian Black Cat was reported in the Transcaucasia (south of the Caucasus mountains). It was classified as Felis daemon, but demoted to the status of feral domestic cat or melanistic Caucasian wildcats. Its colouration varied from black with a reddish tinge to reddish-brown, slightly paler on the underparts, insides of the legs and under the tail. A reddish tinge is common in outdoor living black cats and is due to the blaching effect of sunlight. It had white hairs scattered in the

fur, again quite common in mixed breed black cats. It is probably an introgressive hybrid of wildcat and domestic cat. The whiskers, as well as the eyebrow-bristles, are brown. The tail is considerably longer than in *Felis catus*. Claws white, transperant, and with a mother-of-pearl luster. Satunin wrote that *Felis demon* is was not scarce in woods of the southern slopes of the chief range of the Caucasus (Nookhinsky district of Gouv Elizabethpol (Karabakh) and the Zakatala Province. It used to be found, (according to Hochenacker) also in the mountains of the Lesser Caucasus. According to Radde, this cat inhabited the Kopet-Dagh Range in Transcaspia. [Satunin A. Felis daemon // Proc. Zool. Soc. Lond.- 1904. – V.II, 161]. The investigation revealed that the Caucasus Black cat, which was discribed as *Felis daemon* in the beginning of the 20th c. as *Felis daemon* turned out to be a common domestic balck cat.

1 2	Inventory number <i>№ 380-40a[*] (stuffed animal)</i> <i>№</i> 112-13	Harvest Location Giry (Caspian Sea region) Chaikent, Elisavetpol Gouv. (= Karabakh), Azerbaijan	Date 1897 1913	Collector F. (T.) K. Lorenz N.A.Smirnov
3	№378 №1-12 juv,	Murov dag,	1912, XI,	A.K.Satunin; I. M. Loos
4	<u>№</u> 19-974	Mskhaldidi, Georgia	1974, 3, III	O.Orudji
		= Felis caudata Satun 1. African Wild Cat 2.Афри	(Chaus) ay, 1874 in, 1915 канская я кошка степная)	

The African Wild Cat or desert cat (*Felis silvestris lybica*) is a subspecies of the wild cat (*F. silvestris*). It is shorter than that of the European subspecies. It was first domesticated by the Ancient Egyptians at least 4,000 years ago, and is generally believed to be the ancestor of the domestic cat. The African Wild Cat has soft brown to yellow gray fur covered with round black spots. It has black stripes on the tail. There are rare black spots on the abdomen. In summer fur is darker. *Felis silvestris libyca* is distributed to the east of Caspian Sea. The African wild cat is found in Africa in the Middle East, Transcaucasus, Central Asia and Kazahstan in a wide range of habitats: steppes, savannas and bushland.

In Transcaucasus it is found in reeds, riparian forests, foothills, on slopes in the forests in Azerbaijan, Nakhichevan, and Armenia. It is not found higher than 2000 m above sea level. Many biologists make a distinction between various geographical breeds. Some even consider them separate subspecies of *Felis silvestris*. [К.А. Сатунин; 1915; Новиков Г. А., 1956; Дмитриев Ю. Д., 1973; Арабули А., 1978] http://www.zooeco.com/eco-mlek407q10-1.html

	Inventory number	Harvest Location	Date	Collector
1	№ 42 - 386	Serakhs	1886	G. I. Radde and A. Walter
2	№ 65-16 - 387	Krasnovodsk(=Turkmenbashi) (near Iran border)	1916, XII	N.A.Smirnov;
3	№ 65-16 - 382	Krasnovodsk (now Turkmenbashi) (near Iran border)	1916, XI	N.A.Smirnov

Subgenus CHAUS Gray, 1843

11 the Bass	Felis(Chaus)Chaus Güldenstadt,1776	Content
all the set	=cato lynx,typical	
THE T	DeWinton, 1898	
12 150 2	1. Jungle cat, chaus	1257 221
	2. Камышовая кошка	
App (Fel) duer (sold), (Pro. 3, 0, Rompool)	3. ლერწმის კატა	- Alle

* The stuffed cat is totally black which distinguishes it from the common forest cat. Satunin described it as a subspecies and called it a "demon cat" – Felis silvestris caucasicus aberr. daemon Sat, 1905. Such cases are rare in nature, and it is a genetic anomaly – Melanizm.

Jungle cat (Felis chaus), also called the swamp lynx (although not closely related to the lynx) due to the pointed ears and the long legs, resembles a small lynx (hence the name "swamp lynx"). It is a medium-small cat, but is now considered the largest remaining species of the wild cat genus Felis. The jungle cat dwelling in the Caucasus is typical Felis chaus chaus Schreb. The crania of the Jungle cat differs from that of the European wildcat it is bigger and more massive. The body is relatively short. The hight of the animals differs: the biggest representetives of the species live in Palestine and in the Caucasus. Females are smaller than males. The fur is nearly all one color with black top hair above. Most of the top hair on the chest, abdomen and flanks has white tips, which make a special tint to its fur. It may have a black line along the chine. Dependent on the subspecies the colour of the fur is yellowish-grey to reddish-brown. The pelage is generally sandy gray to tawny brown and lacks distinct markings on the body. While vertical bars are visible on the fur of kittens, these bars disappear in adult cats. The muzzle is reddish brown. On the flanks and abdomen the fur is reddish yellow or pale red. The fur is rather long thick and fluffy, but between the soft hair there is coarser top hair, which makes its fur rather coarse. The tail is long and is brown-gray above and yellowish-brown underneath. The tail has several dark rings and a black tip and the ears have black tufts. The summer coat is pale, thin and coarse. Felis chaus is found in a wide variety of habitats, most often in wet grasslands and reed thickets near stagnant or slowly flowing water. It inhabits reed beds along rivers and lakes, but it is not found in rainforests. Although some populations reside in dry areas, F. chaus is never far from a pool of water. Jungle cats living close to bodies of water are able to swim and dive. The jungle cat lives in heights up to 2400 m, but is more common in the lowlands. This species has been hybridized with domestic cat, producing the "chausie" breed. Felis chaus inhabits Asia and North Africa, including Indochina, Thailand, Burma, India, Sri Lanka, Mesopotamia, and North Egypt. Afghanistan and Transcapia define the northern border of its range. In the Caucasus, Jungle cat frequents the thick belt of reeds along the shore of Kizlyar Bay in the north-west part of Caspian Sea, and in the south-west of Caspian sea. It is found in the vallies of river Kura; it is found near Е(Y)revan. [Н.Я. Динник, 1914; К.А. Сатунин, 1915; А.И. Аргиропуло; С.Б.Насибов Ю.Х. Гидаятов, 1985; Parker, 1990; Nowak, 1991; IUCN Cat Specialist Group, 1996. "IUCN Cat Specialist Group: Species Accounts: Jungle Cat (Felis chaus)" (On-line). Accessed November 30, 2001 at http://lynx.uio.no/catfolk/sp-accts.htm. http://www.piterhunt.ru/index.htm]

	Inventory number № 731-10-730	(stuffed	Harvest Location	Date	Collector A.N.Kaznakov
1	<i>animal</i>)	(stuffed	Karajaz (now Gardabani, on the boder of Georgia and Azerbaijan)	1910, 6, XI	Α.Ν.ΚαΖΝακον
2	№ 15-05 - 408		Karajaz (now Gardabani, on the boder of Georgia and Azerbaijan)	1905, 6, II	A.N.Kaznakov
3	№ 16-10 - 412		Ekaterinenfeld, Georgia	1910, XII	S.Smirnov
4	№ 22-07 - 410		Jalama, Azerbaijan	1907	A.M.Kobylin
5	№ 419		Tsitsamuri (Dusheti r-n), Georgia	1924, XI	G.A.Kozhevnikov
6	<u>№</u> 422		Shulaveri, Borchaly(on the boder of Georgia and Azerbaijan)	1925, 15, I	P.Dvali
7	<u>№</u> 423		Zaqatala, bank of the Alazani river	1926, 14, I	K. Krell

Genus LYNX Kerr, 1792 - РЫСИ

Lynx are placed in the genus or subgenus *Lynx*. Garcia-Perea (1992), ITIS (2006), Wozencraft (2005), Werdelin (1981), and Myers et al. (2008) are authors who recognize the generic status of *Lynx*. Others, however, such as McKenna and Bell (1997) and Hemmer (1978), consider *Lynx* to be a subgenus within *Felis*. *Felis* was the original genus into which these wild cats were originally placed. Lynx (plural lynxes or lynx) is characterized by tufted ears, long legs, short tails, large paws, and short heads.

Subgenus CARACAL Gray, 1843



It is a peculiar (distinctive, original) desert cat, somewhat marginal between the species of genus Felis and genus Lynx. The word "caracal" is derived from the turkish word "caracalac", meaning "black ear." The beautiful Turkmen legend tells that caracal saves wounded prince who loses his way in the Kara-Kum sands. Caracal is an average sized animal. It looks like lynx, but its body is more slender and thin, and its legs are thinner. Its tail is longer and is the third of the length of the body. The tops of its long ears end in the form of tassels 5-6 cm in length. The fur cover is short and very close to skin. The colour is reddish-sandy-yellow with prominent quantity of gray hair. Its throat, abdomen and inner parts of the legs are whitish. Above the upper lip it has big black spot on both sides. It is found in the Central Asia (Turkmenia) and Trans Caspian deserts. [Новиков Г. А., 1956; Красная книга СССР, 1984]. [http://www.zooeco.com/eco-mlek407q4.html]

	Inventory number	Harvest Location	Date	Collector
1	№ 65-16 - 32	Kizilarvan	1914, 23,X	N.A.Smirnov
2	№ 65-16 - 320	Krasnovodsk (now Turkmenbashi).	1915, 15, I	N.A.Smirnov

http://ua.photoclub.com.ua/photo/55494/	Felis (Lynx) lynx Linnaeus, 1758	
	1. Рысь	
	2. (Canada, European, northern)	
	lynx	
	3. ფოცხვერი	

Subgenus LYNX s. str.

There are extant The Canadian lynx (Lynx canadensis), Eurasian lynx (Lynx lynx), Iberian lynx (Lynx pardinus), and bobcat (Lynx rufus). The Eurasian lynx is significantly larger than the other species, while the Iberian lynx is significantly smaller. The Lynx is easily recognized for their unusual facial hair. Their cheeks have long pale ruffs which form a pointed beard on each side of their face near the throat area. All lynx have short tails and characteristic tufts of black hair at the tip of the ears. They have a ruff under the neck, which has black bars (not very visible), resembling a bow tie. They have large paws padded for walking on snow and long whiskers on the face. The body color varies from light brown to gray; and occasionally, is marked with dark brown spots, especially on the limbs. Short and stubby tail is black at the tip.



In the Caucasus there are two forms of lynx, which differ from each other by color and geographic range: *Lynx pardina orientalis* Satunin, 1905 µ Lynx dinniki, Satunin, 1915. Lynx dinniki, Satunin, 1915, differs from ordinary (common) *Lynx lynx L.*, by shaply expressed spottiness on the body and legs. *Lynx pardina orientalis* Satunin, 1905 – is comparatively small; spots on skin are more rounded; dorsal spots show the tendensy to form longitudional spots. The fur is short. The variety with long fur is rare. Heir coat color varies from buff to tawny but also some are colored a rich, dark gray often streaked with chestnut, and the belly is grayish-white also with black spots. Mountain and plain lynxes are distinguished. The variety with almost round spot is widespread. It has an almost entirely brownish-reddish or rustyyellow back and is white below. The ears are brown at the base and black at the tip and at the edges; Long-legged, with tassel-topped ears, and gorgeous fur of sandy to reddish-gray color, the lynx, like the wolf and the bear, is a forest animal which has been driven into the wildest of mountains. [H.Я.

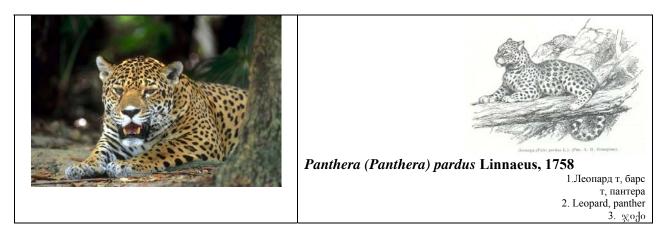
Динник, 1914; К.А. Сатунин, 1915]. Caucasus subspecies Felis lynx dinniki was once widespread throughout the territory, from deciduous forests up to rocky alpine, but giving preference to forest with dark and difficult to traverse underbrush; it occurs in the mountains and the upland, at altitudes from sea level to 2500 m above it. Lynx survived only in the most isolated regions of the Caucasus mountains. In Transcaucasus there are *Felis lynx dinniki* and *Lynx pardina orientalis* Satunin; but *Lynx orientalis Satuni* prevailes. [Новиков Г. А., 1956; Гинеев А.М., 1985; Banfield A.W.F., 1974; Ricciuti E.R., 1979, Abuladze A., Bukhnikashvili A., Tarkhnishvili, 2001; Аристов, Барышников, 2001; Арабули А., 2003; Гинеев А. М., 2008]

	Inventory number	Harvest Location	Date	Collector
1	<i>№</i> 426-444(stuffed	Tschatach	1897, I	G.I.Radde
	animal)			
2	№ 433(stuffed animal)	Lelobi forest, Georgia	1923, II	I.Chkhikvishvili
3	№ 432 47-06 (stuffed	Lelobi forest, Georgia	1924, VII	A.Tsiklauri
	animal)			
4	<i>№</i> 44b - 429	Tbilisi, Georgia	1882,20, V	G.I.Radde
5	Nº 44r - 430	Psebai, Kuban, North	1896	G.I.Radde
		Caucasus, Russian Federation		
6	№ 11-08 - 448	Borjomi, Georgia	1908, III	E.K. Juthner
7	№ 11-08 - 463	Borjomi, Georgia	1908,15,IX	E.K. Juthner
8	№ 3-09 - 456	Borjomi, Georgia	1908,23,XII	E.K. Juthner
9	№ 9-13-454	Borjomi, Georgia	1913, 25, I	N.A.Smirnov

Genus PANTHERA Oken, 1816

1. Большие кошки 2. Leopards and lions 3. ავაზა

Подрод PANTHERA s. str.



Panthera pardus = leopard, panther – uncommonly beautifil cat, one of four big cats in genus *Panthera*. Inspite of its wide popularity, for many reasons, leopard is not well studied. Leopard lately lived in the Caucasus, but now it occasionally appear in the Transcaucasus



In Roman times and until the early Middle Ages hundreds of leopards, together with Asiatic lions (Panthera leo persica) and Caspian tigers (Panthera tigris virgata), were trapped throughout Asia Minor. The large cats were pitted against gladiators and other animals in circuses and in the arenas, and later on incited to kill or maim Christians. The Anatolian leopard even owes its subspecies name P. p. tulliana to Marcus Tullius Cicero, the Roman administrator and orator, who was perhaps the first to record information about leopards in Asia Minor in the 1st century BC, when he was governor of Cicilia. Within the vastness of the Caucasus the leopard (Panthera pardus) prowls, not in great number, but nevertheless often enough to qualify as part of European fauna. The presence of the leopard on the fringes of Europe should not be surprising. Not other cat has adapted to a wider geographical and ecological range. It is adaptable to climate and environment and lives in equatorial jungles, dry grasslands, rocky areas and on the cold plateaus of Himalaya. The body is more slender, oblong, than the tigers' body. The legs are strong, middle height, with smaller than tigers, paws, but claws are larger; they are pressed at the sides. Ears are short, rounded without brush (tussle); relatively thin tail is half longer of the body. The pelage is thick but not fluffy. It has handsome dark yellow coat with black rosettes. The general color is of yellowish tint, yellowish-reddish, yellow with the gray tint. This leopard is seldom seen by human eyes, for it lives in mountain wilderness of central Asia, above the tree line at heights of between 11.000 and 12.500 feet; during the winter it descends to a level of арргохітаtely 6.000 feet. [Н.Я. Динник, 1914; К.А. Сатунин, 1915; Новиков Г. А., 1956; Banfield A.W.F., 1974; Ricciuti E.R., 1979, Abuladze A., et al, 2001]

http://www.anatolianleopardfoundation.nl/Leopard%20in%20Turkey.html



Caucasus panther is one of the northern species of leopard and is paler in color than southern subspecies. Panthers (leopard) of the northern slopes of the Caucasus differ from panthera of Transcaucasus (especially from Lenkoran) by their much paler and grayish color and smaller size. There are no forms of reddish or chestnut color, the most characteristic for the majority of this genus. The color is light grayish with slightly marked yellowish tint. Only the upper part of the head and the broad stripe along the dorsum are more intensive rusty-reddish-chestnut in color than the upper part of the body to the flanks and to the belly the reddish color disappears. The inner part of the neck and legs are pure white. The short rounded ears are totally black. The black spots on the head are small. Along the dorsum there are large oblong spots. The flanks are covered with black rosettes of 3 to 5 oblong, very close to each other, black spots. The under part of the body is noticeably darker of the general tint (shade) of the body color. The tail is light. Its base is covered by oblong, narrow spots. On the distal part of the tail the spots are rounder and larger. To the end they make several irregular rings.

The pelage of Lencoran specie of the Nearer Asian/Caucasus leopard (*Panthera pardus ciscaucasica*) is rough and rather long. The main tin on the whole upper part of the body and on the outer parts of the legs is reddish gray. The cheeks are whitish. The front part of the muzzle is light-reddish-grizzly. It has big black-brown spots at the corner of the lips. The body is coverd with black spots, making rossetes on dorsum, flanks and on the back. The tail is fluffy.

Claws are white. They are found in Minor Asia, Ciscaucasus, Cis Caspian and Trans Caspian regions. The leopard was thought to have disappeared from the region in the 1960s. Recent rapid investigation conducted through WWF initial support in 2001 has shown that about 20 individual leopards have survived in the Southern Caucasus: Lesser Caucasus Mountain Chain and Talysh Mountains (assessments of condition of the leopard population in Greater Caucasus requires additional study). Nevertheless, the situation with the leopard population in the Caucasus is critical. Founded in 1989, the Centre for the Recovery of Endangered Species (NACRES) chose a leopard for its logo, not only because the animal remains a dynamic symbol of Georgian culture and literature, but also because it remains the most endangered mammal species in the South Caucasus and has been considered extinct in Georgia for more than fifty years. However, at the end of April 2004, NACRES remote-sensing cameras placed in the arid lands of the Vashlovani Reserve (Georgia) in the extreme southeastern part of the country near the Azerbaijani border took pictures of a magnificent male leopard. A picture of a Caucasian leopard was taken by a camera trap in February 2007in Southern Armenia. In the Caucasus leopard is the permanent resident of South Armenia and the adjoining region of Azerbaijan. It is protected in the Khosrov Reserve in Armenia.

The Persian leopard, Panthera pardus tulliana, once inhabited almost all of the Caucasus. However, the population declined drastically in late 19th – early 20th centuries. Only a few leopards now inhabit the most remote places of the North Caucasus. The number of leopards here is too small for the species to reproduce itself; only occasional 'visits' of the Persian leopards from bordering countries help to maintain the population. Therefore, natural restoration of the leopard here is impossible; only reintroduction can help return the species to the Northern Caucasus. [H.Я.Динник, 1914; К.А. Сатунин, 1915; Новиков Г. А., 1956; Красная книга СССР, 1984 http://www.armeniandiaspora.com/forum/showthread.php?t=4218 http://bio.cenn.ge]

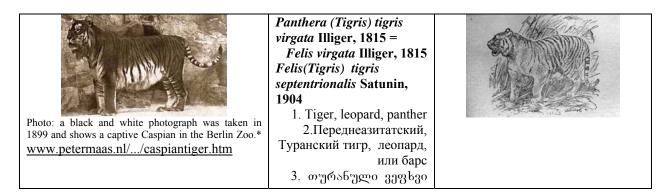
	Stuffed animal's inventory number	The locale of the animals capture		Collector
1	№ 37 – 343 (stuffed animal)	The southern Nakhichevan region of Djulfa, Azerbaijan	1871	Sergejev
2	№ 342f (stuffed animal)	The southern Nakhichevan region of Djulfa, Azerbaijan	1915,	Baraiantz
3	№ 379 - 340	The southern Nakhichevan region of Djulfa, Azerbaijan	1871	Sergejev
4	№ 38-14 - 345	Kopet-Dagh Range in Transcaspia	1914, 5, XI	Karaev
5	№ 45-137 - 337	Kara-such,	1913, I	Babaiants
6	№ 456-13 - 338	Kara-such,	1913	Babaiants
7	№ 63-16 - 337	Kopet-Dagh Range in Transcaspia	1915, X	N.A.Smirnov
7	№ 27-16 - 339	Iran,	1916, II	
8	№ 1-54 - 765	Saguramo, Georgia	1954, 8, III	I.Chkhikvishvili

Subgenus TIGRIS Gray, 1843

Panthera (Tigris) tigris Linnaeus, 1758 1.Tiger, leopard,panther 2. Тигр 3. адарао



At the circus spectacles of ancient Rome the lions were the leading performers, not the tigers; tigers were tried but declined to fight before a crowd. They devour almost any kind of animal including leopards; some individuals have cannibalistic insticts and eat other tigers, including their own young. On occasion they are reported to consume fish, turtles and crocodiles in addition. All of them like to bathe frequently; they are also able to climb trees. The range of the tiger is enormous, reaching from the Arctic circle to the Equtor. The species had to adapt itself to extreme differences in climate and environment, and the variety living in the far north turned out to be its most handsome and largest representative, measuring up to 10 feet in length.



The Caspian tiger was the second largest tiger. The body of this subspecies was quite stocky and elongated with strong legs, big wide paws and unusually large claws. The ears were short and small and gave the appearance of being without hair at the tips. Around the cheeks the Caspian tiger was generously furred and the rest of the pelage was long and thick. The colouration resembles that of the Bengal tiger. The skin specimen in the British Museum has a yellow-gold colour over the back and flanks, while the sides of the body are lighter that the back and the striping also varies from light to dark brown. The chest and abdomen is white with yellow stripes, while the facial area is yellow with brown stripes on the forehead and obvious white patches around the eyes and cheeks. Outer portions of the legs are yellow and the inner areas white. The tail of this subspecies is yellow and has yellowish white stripes. In winter, the hair is very long, and the tiger has a well-developed belly mane and a short nape mane. The skin specimen in the Georgian National Museum is 173 cm; tail 110 cm; The pelage is very short on the upper part of the body and long at balley. The main colour of the upper part of the body, flanks and legs is reddish-yellow; it is more intensive and bright on the front part of the body through the dorsum. The lower part is white. The body is covered (from the dorsum to the flanks) with stripes. The stripes are black on the back part of the body and belly. The flanks and the outer part of the body and legs are light reddish-brown. There are ten rings on the tail.

Less than a century ago, their historical range reached the Caucasus, eastern Turkey and the southern fringes of the Caspian Sea eastward across Central Asia as far as the Sea of Okhotsk, south through eastern China to the Indian sub-continent, and the whole of Southeast Asia as far as the Indonesian islands of Sumatra, Java and Bali has been radically reduced. The area included plains and foothills of south Kazakhstan and Central Asia, south east of Trans Caucasus. This former range has contracted and been fragmented dramatically in recent decades. In the Caucasus the last tigers were killed in the suburb of Tbilisi in 1922, and in 1848 in Armenia. Ever since, it was not found in the Caucasus. It is included in the International Red Data Book. It was extinct in the USSR on the edge of 1950s-1960s. The last "pure blood" *Panthera tigris virgata* lived in 1959 in Hamburg Zoo. Its extinction is the tragic precedent. In closing, as ode to tiger, we include beautiful poem by famous English poet William Blake - "The Tyger" (from Songs Of Experience). In 19-20 c. tigers were frequent at the bottom of the and mountainside of the Talysh mountains in the south east corner of the Caucasus. Its favourite place were reeds. In 1866, according to Gustav Radde, tigers were killed at hot mineral springs in the suburbs of Lencoran. The skins were purchased by Gustav Radde for the Caucasus Museum and the *stuffed animasl* were made [H.Я.Динник, 1914; К.А. Сатунин, 1915; % обо 30000 об., 330000 од., 530000 об., 1959; Верешагин H.К., 1959; Строганов C. У., 1962; А.Чегодаев, 1983; Красная книга СССР, 1984]

Tyger Tyger, burning bright, In the forests of the night; What immortal hand or eye, Could frame thy fearful symmetry In what distant deeps or skies. Burnt the fire of thine eyes! On what wings dare he aspire? What the hand, dare sieze the fire!	And what shoulder, & what art. Could twist the sinews of thy heart? And when thy heart began to beat, What dread hand! & what dread feet! What the hammer! what the chain, In what furnace was thy brain What the anvil, what dread grasp, Dare its deadly terrors clasp! When the stars threw down their spear And water'd heaven with their tears: Did he smile his work to see Did he who made the Lamb make thee! Tyger Tyger burning bright, In the forests of the night: What immortal hand or eye, Dare frame thy fearful symmetry! 1794	William Blake	"The Tyger"
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	Inventory number №335 - 36e (stuffed animal)	Harvest Location Lelobi forest, Georgia	Date 1922,4,XII	Collector <i>Pesants:</i>
1				A.Tsiklauri, C.Bekauri
2	№36-334	Lencoran, Talysh, Azerbaijan	1866, IV	O.Bekauri G. I. Radde

Super Order CETARTIODACTYLA

Recent molecular evidence has radically reordered the classification of order Cetacea, notably proving that whales and dolphins belong within the Artiodactyla order. To accommodate the merging of these orders, a hybridized name "Cetartiodactyla" has been created. Cet·ar·ti·o·dac·ty·la (seet är'tee-oh dak ti'lah) is a a hybridized word coming from the Latin *cetus*, a large sea creature or whale, combined with Greek *artios*, complete of numbers, even and *daktulos*, a finger or toe. Some authors, to avoid the taxonomic implications of including the Cetacea within Artiodactyla, retain the two orders, but group them in a superorder, also entitled Cetartiodactyla. [Rohrs, M., Thenius E., 1990; Grauer, D., Higgins D. 1994; Milinkovitch, M. C., Thewissen J. G. M. 1997; Montgelard, C., Catzeflis F., Douzery E.. 1997; Gatesy, J., 1997; Gatesy, J., et al., 1999; Naylor, G. J. P., Adams D. C. 2001; Thenius, E., 1990; Nowak, R. M. [Ed], 1991; Nikaido, M., Rooney A. P., Okada N., 1999; Springer, M. S., et al., 2004; Hernandez-Fernandez, M., Vrba E. S., 2005; Price, S. A., Bininda-Emonds O. R. P., Gittleman J. L., 2005; Boisserie, J.-R. Lihoreau, F. Brunet, M., 2005] http://academsovet.ru/article

Order CETACEA Linnaeus, 1758

This order includes the largest animals that have ever lived. Because they reverted to the primordial sea, they now resemble other marine types such as sharks, bony fishes, and the ancient reptile ichthyosaur, but their anatomy and their behavior clearly demonstrate that they are mammals. Whales, dolphins, and porpoises, which form the order Cetacea, although now completely modified for an aquatic life, still carry evidence that they evolved from terrestrial mammals a long time ago. Cetaceans live, breed, rest, and carry out all of their life functions in the water. [Гептнер В.Г., и др., 1976]

Sub order ODONTOCETI Flower, 1867 Super family DELPHINIDAE s. lato

Family DELPHINIDAE Gray, 1821

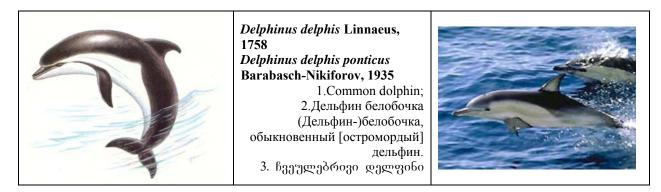
"Diviner than the *dolphin* is nothing yet created," the poet *Oppian wrote* in Halietica, 1800 years ago

This family includes the well-known, speedy and agile dolphins, the porpoise (the smallest cetacean), and the rapacious 30-foot killer whale. Dolphins are distinguished from porpoises by having a short beak. Porpoises have blunt heads. Dolphins and porpoises are more common in warmer seas than in colder waters. According to recent studies, the genus *Delphinus* includes two nominal species, the long-beaked and short-beaked common dolphins. It is very possible that the Black Sea population could be referred to the short-beaked species. There are no extant seals in the Black Sea, but three dolphin species are common here, particularly the short-beaked common dolphin (*Delphinus delphis*). In summer, all three are drawn to northern and eastern coasts by strong upwellings and can sometimes be seen below the cliffs of Karadag, an extinct volcano in Crimea. Only the harbor porpoise (*Phocaena phocaena*) enters the shallow Sea of Azov, where it is often encountered by divers. [Черноморская афалина, 1997; coccods5codn n., 5o5ms 6, 1999]

Sub Family DELPHININAE s. str.

Triba DELPHININI s. str.

Genus DELPHINUS Linnaeus, 1758



Black Sea dolphins—along with their Mediterranean relatives – seem to be the smallest representatives of this species. This is the dolphin that played such an important role in the theater and literature of ancient Greece and Rome. A pictographic seal from Crete representing a dolphin is estimated to date from 3500 to 2200 B.C. The dolphin's stylized form – a short beak, large eye, arched back, and flukes – is seen on the mosaic floor of the ancient Lazy (Colchi) church in Palestine and on wall paintings at the Black Sea coast of the Caucasus. Classical literature abounds in references to a friendly and co-operative relationship between dolphins and humans; as if the each recognized the other as a kindred spirit from a different medium. Pliny, in the first century, describes several incidents involving friendship between boys and dolphins, including some boys riding dolphins across bays. The "boy on a dolphin" motif has been repeated many times in classical sculpture. The National Museum of Georgia is proud to have some of them in its collections.

The common dolphin is a small cetacean. Some authorities regard it as an endemic sub-species, *D. delphis ponticus*, though, obviously, many more taxonomic studies are needed before this view can be confirmed or rejected. The body of common dolphin is streamlined; the narrow beak is separated from the reclining forehead by a deep groove. The dorsum in this species is dark brown or black, and the venter is white. The flanks are colored with overlapping bands of grey, beige, and green. The eye is incircled by a black ring, which is joined by a stripe to the groove at the base of the beak. There is a white stripe above this black one. A greenish band leads from the lower jaw to the base of the pectoral fin. The males are little larger than females.

D.delphis is distributed predominantly offshore, but also visits precoastal waters following the seasonal migrations of small fishes. Common dolphins have never been recorded in the Sea of Azov; although, they have been observed occasionally in the Kerch Strait. In the Bosphorus and the Sea of Marmara they are quite common during the year except for December and January. It seems that it would be possible for Mediterranean and Black Sea dolphins to have contact with each other, but, as of now, there is no direct evidence for this. Black Sea dolphins are the fastest swimmers in genus. [Динник Н.Я., 1914; Барабаш-Никифоров И.И., 1940; Цалкин В.И., 1940; Клайнберг С.Е., 1956; ЗъЗъзъ ъ ლ., 1960; Гептнер В.Г., и др., 1976; Арсеньев В.А., 1980; Северо-Западная часть Чёрного моря, 2006; Klinowska, M., 1991; Birkun, Jr., А.А., et al.,1992; Згуровская Л., 1996; Öztürk, B., Öztürk, A.A., 1997]

The common dolphin is listed in the *IUCN Red Data Book*⁵ This species together with other cetacean species in the region is protected by the Berne and Bonn conventions, CITES⁶ and ACCOBAMS⁷.

ſ		Inventory number	Harvest Location	Date	Collector
	1	<i>№ 11-07</i>	Black Sea, Pitsunda (Abkhazia,Georgia)	1907	A.I.Brenner

Family PHOCOENIDAE Gray, 1825

Genus PHOCOENA G. Cuvier, 1817

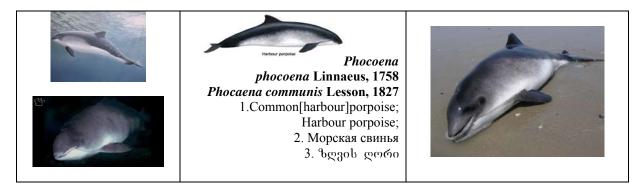
⁵ <u>http://www.iucnredlist.org/info/introduction</u>

⁶ CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. http://www.cites.org/eng/disc/what.shtml

¹ The Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area—A cooperative tool for the conservation of marine biodiversity in the Mediterranean and Black Seas. The purpose of ACCOBAMS is to reduce threats to cetaceans in Mediterranean and Black Sea waters and improve our knowledge of these animals.

ACCOBAMS is the first Agreement binding the countries in these two subregions, and enabling them to work together on a matter of general interest. <u>http://www.accobams.org/2006.php/pages/show/9</u>

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The harbour porpoise is the smallest whale and seldom exceeds a length of 6 feet. It is frequently referred to as "puffing-pig" because of the snuffling sounds it makes when breathing. The Harbor porpoise is dark gray or dark brown on the dorsal side, lighter gray on the flanks, and white on the ventral side. The flippers are also dark in color with a dark stripe that extends to the eye. The flippers are small, oval, and rounded at the tips. The low, wide dorsal fin is triangular in shape and found slightly behind the center of the body. In some individuals, small nodules are found on the leading edge of the dorsal fin. The flukes are small and curved, and have a median notch.

Harbour porpises inhabit inshore waters such as bays, channels, and harbours. They seldom venture more than twenty miles offshore. The harbor porpoise is a coastal species, limited to the cold temperate and subarctic waters of the Northern Hemisphere. In the Eastern North Atlantic, it ranges from the Kara Sea south to Senegal, Africa, including the North Sea, the Baltic Sea and the Western Mediterranean.

http://ourworld.compuserve.com/homepages/jaap/phocoena.htm

There is an isolated population in the Black Sea. In the Western North Atlantic, this species ranges from southern Greenland to North Carolina, USA, and there is also a population around Iceland. In the Eastern Pacific, it ranges from Alaska (up to Point Barrow) south to California. In the Western Pacific, the species ranges from the Bering Sea to northern Japan. There is no clear migration. Most of the travelling seems to be related to movement of food resources.

There are three subspecies known for the harbor porpoise: *Phocoena phocoena phocoena Linnaeus*, 1758 (North Atlantic, Baltic Sea);*Phocoena phocoena relicta* Abel, 1905 (Black sea); *Phocoena phocoena vomerina* Gill, 1865 (Eastern North Pacific Harbor Porpoise).

Phocoena phocoena relicta Abel, 1905 is a single representative of the genus and family in the Black Sea fauna. http://209.85.129.132/search?q=cache:Zz8T5wUqtvIJ:www.marinespecies.org/cetacea/aphia.php%3Fp%3Dtaxdetai ls%26id%3D368868+Phocoena+phocoena+relicta&cd=8&hl=ru&ct=clnk&client=firefox-a

Nevertheless, to date there are no comparative genetic and/or morphometric data, which could be reliable criteria for this animal's recognition as a distinct sub-species. Most zoologists of the former USSR do not acknowledge the existence of the family Phocoenidae, and continue to list *Ph. phocoena* among Delphinidae. http://www.grid.unep.ch/bsein/redbook/txt/phocoena.htm?%20MAMMALIA

Porpoises are distinguished from dolphins by their blunt snouts, which lack beaks or "upper lips", and by peculiar, flattened, spade-shaped teeth, instead of the conical teeth of the dolphins. Dorsally the color of this species is dark slate grey to blackish, with light grey to white underparts. The flanks are greyish, and black stripes run from the flippers to the mouth and lower lip. The typical circumlittoral zone of the harbour porpoise distribution represent coastal, relatively shallow waters along the perimeter of the Black Sea. Every spring significant numbers of porpoises move through the Kerch Strait to the Sea of Azov and return by the winter. It is very rare to the south of Novorosiisk. [Динник Н.Я., 1914; Цалкин В.И., 1940; Томилин А.Г. 1957; ЗоЗозо о. с., 1960; Гептнер В. Г. и др., 1976; Klinowska M., 1991; Северо-Западная часть Чёрного моря: Биология и экология: проект «Наукова думка», 2006]

In the National Museum of Georgia there is the stuffed animal from the North Sea.

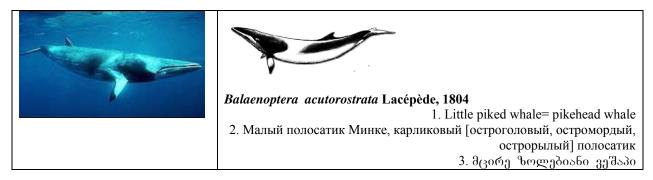
	Inventory number	Harvest Location	Date	Collector
1	№ 160b (stuffed animal)	North Sea	1899	purchased

Sub order MYSTICETI Flower,1864

1. Baleen whales 2. Гладкие (настоящие киты)

Family BALAENOPTERIDAE Gray, 1864

Genus BALAENOPTERA Lacepede, 1804



The minke or little piked whale seldom exceds 30 feet in total length. It has a typically streamlined body, a medially ridged and pointed rostrum, a small mouth, and throat pleats. A good distinguishing mark is the yellowish color of the baleen plates. The dorsal color is dark slate grey; the flanks are lead grey, and the under parts from lower lip to flukes are white, including the undersurfaces of fins and flukes. A diagnostic feature of this species is the occurrence of a broad white band across the upper surface of the pectoral flippers. They are swift swimmers and quite playful, at times gamboling about ships and leaping out of the water, often belly uppermost. Minke whales are migratory. Usually the adults migrate towards the poles, and the juveniles remain in temperate seas all summer. The minke whale rarely frequents tropical waters. It is rarely met in the deep seas. In the Black sea waters it has only been seen once or twice. One was washed ashore near Batumi in May 1880. Its bones were sent to the Caucasus Museum by Komarov. Its skeleton is still preserved in the collection of the National Museum of Georgia. [Каталог Кавказского музея, Т.3; Динник Н.Я., 1914; Sergeant, D.E., 1963; Banfield A.W.F., 1974]

	Inventory number	Harvest Location	Date	Collector
1	№1-50 (skeleton)	Black Sea, Batumi (Adjaria, Georgia)	1880.17.V	K.V.Komarov

Order – ARTIODACTYLA Owen, 1848

1. Artiodactyles, even hoofed, pardigitale] mammals, even-toed [pardigitale] ungulates, pardigitates 2. Парнокопытные, парнопалые 3. წყვილჩლიქოსნები

Artiodactyla are also called even-toed ungulates and are distinguished by their foot structure. Today they are native throughout the world; except for Australia and New Zealand. The evolutionary history of "artiodactyls" (the ungulate members of the Cetartiodactyla) is relatively well known, since, due to their large bones, fossils are plentiful. Artiodactyls are indigenous to every zoogeographic region. The approximately 240 ungulate members of this order show incredible diversity in size, form, dietary preferences, and climatic tolerance. This order contains the majority of domesticated mammal species, including cattle, reindeer, camels, pigs, goats, and sheep. Artiodactyls fall into two rather dissimilar groups - Suina and Ruminantia. The Suina have four toes, simple back teeth, short legs, and, often, their canine teeth have evolved into tusks. Some authorities believe that the Suina is not a natural group; it may be that the hippopotamidae may be more closely related to ruminants. The Suina are primarily omnivores with simple stomachs. The Ruminantia have longer legs and only two toes-called a "cloven hoof". Their teeth are better adapted to chewing tough grasses and multi-chambered stomachs. Referred to as cudchewers, they feed, while there is no danger, on large amounts of low-nutrition vegetation and swallow it rapidly. Later, in safety and at rest in a secluded place, the food is regurgitated into their mouths where it is mixed with saliva, chewed and swallowed again. Finally, molecular biology suggests that some artiodactyls-closely related to the Hippopotamidae—returned to the sea eventually to become whales (Cetacea). There are several species of ungulate mammalian in the Caucasus. Common for the given territory, a wide spread representative of ungulates is chamois (Rupicapra rupicapra caucasica). Besides the open pastures of cliffy high mountains, chamois inhabit the forest zone. Recently the differentiation of chamois populations into two groups - alpine and forest are observed. Typical alpine species is Caucasian goat (tur) (Capra caucasica), Capra Severtzowi. Unique representative of the mammalian fauna is bison (Bison bonasus pseudospecies). The present population genetically is presented by intraspecific hybrid 99 of 100 morphological features, which coincides with the morphological features of the

animals dwelling in the territory before. [Туркин Н. В., Сатунин К. А., 1902; Н.Я.Динник, 1914; Сатунин, 1920; Ricciuti E.R., 1979 Nowak, R. M., 1991; Гептнер В.Г., Наумов Н.П., 1961; **ъбъбуто ът., 1982;** Соколов В.Е., 1986; Соколов В.Е., Парнес Я.А., 1993; Соколов В. Е., Темботов А.К., 1993; Rooney N. M, Okada N., 1999; Арабули А., 2002; Hernandez-Fernandez, M., Vrba E. S, 2005] http://www.ultimateungulate.com/Cetartiodactyla.html

Sub order SUIFORMES Jaeckel, 1911 Family SUIDAE Gray, 1821 Genus: SUS Linnaeus, 1758 Sus scorfa Linnaeus, 1758

Sus (Latin) a pig. Scrofa (Latin) a breeding sow. It is a native of the Old World, with an enormous range that extends from Europe through the Atlas Mountains of North Africa and most of Asia to the east Indies. During the 19th century, hunting clubs in the United States introduced it to the Ozark mountains where it has become established and is called a razorback. It is a relative of the peccarry or javelina, which is indigenous to the Southwestern United States and Central and South America. The wild boar is both the ancestor of the domestic pig and a modern-day relative. Over 9,000 years ago (~7,000 B.C.E.), this wild hog was domesticated into the pig. However, although the two forms are still considered one species, only the wild variant is discussed here. Wild boar (wild hog or wild pig) is a large strong animal, resembling in many cases the common domestic pig, but differs from it not only by appearance, height, and development of some parts of the body, but also by intellect and courage. One characteristic by which the domestic pig is differentiated from the wild boar is coats. While the domesticated individual is virtually hairless, its wild sibling will have a thick, short bristly coat with a spiky ridge of hair running along the spine. This feature has given the name "razorback." Many cultures and civilizations have considered the boar to be a noble animal, well worthy of being hunted by kings and eaten by many. It figures prominently in heraldry. [Гептнер В.Г., Haymon H.Π., 1961; Banfield A.W.F., 1974; Dmitriev Yuri., 1988; Oliver, W. L. R., et al., 1993; Wilson, D. E., Reeder D. M, 1993]



These are large, massive creatures with extremely developed heads, necks and chests. The head is long and pointed. The upper canines form tusks which curve out and upwards. Adult boar males have strongly developed tusks. The tusks are found on the males only. The lower canines are like razors, self-sharpening by rubbing against the upper canines. Some will have side whiskers and a spiky mane. The back is rounded and the legs are relatively long. The tail is long with a simple tuft. The color of the boar and the forest's general color makes a perfect match and makes them invisible even if somebody comes rather close to them. General color of Caucasus wild boar is more or less monotonous dark-brown, and sometimes reddish brown, brownish or grayish brown. The coarse and bristly coat is black but hair tips are gray-brown, gray, yellow gray and in some parts of the body – white. Those tips and chestnutbrown down give the animal its color. The coat is usually turning grayish with age. The head of the animal is lighter than the rest of the body. The face, cheeks, and throat are slightly grizzled with whitish hairs. The bristle on the ears, chin, legs (espacially the front legs), knees, are pure black color. The longest hair is on the back; there it constitutes a mane. On the head it is curly.

Piglets are born with a pattern of light stripes along their torso. Their parti-colored pelage is beautiful (dark-brown with light reddish-gray stripes). These fade between the second and sixth month, reaching adult colouration at one year of age. Wild boars rest in tight groups with bodily contact. They make shelters of sorts by spreading cut grass on top of tall, standing grass, and crawling underneath. The resting place, used several times before being abandoned, is made of numerous troughs lined with leaves and branches. They are quick runners, strong swimmers, and love to wallow in the mud. Wallowing is a favorite activity. After wallowing, the wild boar rubs against trees and bushes. If left alone wild boars are harmless, but when alarmed they become very dangerous. Boars are thinner than pigs. The common thing in the Caucasus is to cross the wild boar and domestic pig. In the Caucasus wild boar is found everywhere: by the sea coast, in the swamplands covered with thick rushes, in impenetrable midwood, and

in the thick forest of acanthoid and creeping bushes. They are found in the forestes in the slopes of the Caucasus. Boars climb up a treeline and higher and spend days and weeks in alpine meadows. They are found at an elevation of 5000 feet in the middle of winter, chiefly in the southern parts of the mountain slopes. In summer they climb up at an elevation of 9000 feet. [Н.Я.Динник, 1914; Верещагин Н. К., 1959; პაპავა ა. ლ., 1960; Гептнер В.Г., Наумов Н.П.,1961; არაბული ა., 1972; Banfield A.W.F.,1974; არაბული ალ., 1977]

	Inventory number	Harvest Location	Date	Collector
1	№ 27 133g (stuffed	Psebai, Kuban, North	1894	Noska
1	animal)	Caucasus, Russian Federation		
2	<i>№</i> 22 133 <i>m</i> (stuffed	Karajaz (now Gardabani, on the	1896 juv	G. I. Radde
-	animal)	boder of Georgia and Azerbaijan)		
3	\mathcal{N}_{2} 3 133 (stuffed animal)	Karajaz, (on the boder of Georgia	1897	N.M.Romanov,
		and Azerbaijan)	1000	C I D 11
4	№ 41 133p (stuffed animal)	Tbilisi region, Georgia	1898	G. I. Radde
5	№ 1. 22-05, (stuffed animal)	Gioli forest (Azerbaijan),	1905	S.Korot'ko
6	№ 29 68-12 (stuffed	Karajaz (now Gardabani, on the	1912,16,XII	A.N.Kaznakov;
U	animal)	boder of Georgia and Azerbaijan)		E.V.Pfizenmayer
7	№ 44-25 (stuffed animal)	Poili , Elisavetpol Gouv.(Karabakh), Azerbaijan	1925, 15, I	I.Chkhikvishvili
	№ 133e - 14	Karajaz (now Gardabani, on the	1897	N. M.Romanov
8	VI= 1JJC = 17	boder of Georgia and Azerbaijan)	107/	14. 141.Romanov
	№ 133 c juv	Tedshen (Turkmenistan)	1886,20,III	G.I Radde,
9			1000,20,111	A. Walter
10	№ 22-05 - 31	Oltin (Kars district) Turkey		S. Korot'ko
11	№ 25-07 - 32	Zeinal-Khan, Azerbaijan	1907, 30,III	R.H.Schmidt,
11				A.B.Schelkovnikov
12	№ 68-12 - 28	Karajaz (now Gardabani, on the	1912,16,XII	A.N.Kaznakov
12		boder of Georgia and Azerbaijan)		E.V.Pfizenmayer
13	№ 13i-14 - 2-	Airindja, Elisavetpol	1913, XII	A.N. Kaznakov E.V.
10		Gouv.(Karabakh), Azerbaijan		Pfizenmayer
14	№ 13-143 - 26	Airindja, Elisavetpol Gouv.	1913, XII	A.N.Kaznakov;
	N 00 14 00	(Karabakh), Azerbaijan	1010 101	E.V.Pfizenmayer
15	<u>№</u> 88-14 - 23	Bzib (Kuban r-n),North Caucasus, Russian Federation	1913, XII	Th.D.Pleske
16	№ 13-144	Airindja, Elisavetpol	1913, XII	A. N. Kaznakov; E.V
16		Gouv.(Karabakh), Azerbaijan	,	Pfizenmayer
17	№ 139-132 - 9	Sogut-Bulagh (Soganlugh) (= Ponichala, Georgia)	1913	A. N. Kaznakov
18	№ 13-14г - 8	Airindja , Elisavetpol Gouv. (= Kirovabad = Giandzha), Azerbaijan	1913, XII	A. N. Kaznakov
	№ 13-14ii	Karajaz (now Gardabani, on the	1914, I	A.N.Kaznakov;
19		boder of Georgia and Azerbaijan)		E.V.Pfizenmayer
•	№ 13-146 - 13	Karaiaz, (on the boder of Georgia	1914, I	A. N.Kaznakov; E.V
20		and Azerbaijan)	, -	Pfizenmayer
21	№ 43	Poili, Elisavetpol Gouv. (=	1914, III	E.Jungebauer
21		Kirovabad = Giandzha), Azerbaijan	, î	Ŭ
22	№ 13 ₁₀ -14 - 7	Karajaz (now Gardabani, on the	1914, I	A.N.Kaznakov; E.V.
22		boder of Georgia and Azerbaijan)		Pfizenmayer
23	№ 146-63 - 595	Kvareli, Georgia	1962, 13,II	G. Gogilashvili
24	№ 602 1-64	Kisiskhevi (Telavi r-n), Georgia	1964, 7, II	Zurashvili
25	№ 135g-980	Mtskheta, Georgia	1980, 6, XII	O. Orudji.

Suborder: RUMINANTIA Scopoli, 1777

1. Жвачные 2. Ruminant 3. მცოხნელები

Family: CERVIDAE Gray, 1821

 1. Оленевые, олени, оленьи, плотнорогие

 2. Antlered ruminants, deer (and allies) 3. ගრმები

Cervids are found in a wide variety of habitats, from the arctic tundra to tropical forests. Only one deer species, the reindeer (*Rangifer tarandus*), has been fully domesticated. Antlers are the defining characteristic of this family. Because the entire antler is alive, growth is not limited to the base (as in horns) which results in branching patterns which are often species-specific. Unlike the horns of bovids, the regular shedding of antlers makes them a current marker of an animal's status: their size and shape are in direct correlation to age and dominance. In the vast majority of species, antlers are borne only by males - only in the reindeer, *Rangifer tarandus*, do females regularly grow antlers. [H.Я.Динник, 1914; Верещагин Н. К., 1959; Гептнер В.Г., Наумов Н.П.,1961; Dmitriev Y., 1988; Banfield A.W.F., 1974; Ricciuti E.R, 1979]

Sub family: CERVINAE Baid, 1857

1. Настоящие оленьи 2. True crevine Old World (Plesiometacarpal) deer 3. ნამდვილი ირმები

Cervine deer are adapted to a wide range of lowland habitats, including forests, swampland, floodplains, and grasslands. Excluded from higher altitudes by goats and sheep (Caprinae), only a few members of the Cervinae are found in high-elevation or mountainous regions. Southern Asia was the center of evolution for this subfamily, and the Cervinae remain one of the most dominant ungulate groups in Eurasia. Early deer arose in the tropics. Today, the tropics retain the majority of cervine diversity. Two tribes are recognized: Cervini - "true" deer and Muntiacini – muntjacs. The taxonomy of this subfamily has undergone some significant changes in the past few decades. The tribe Muntiacini is now included within the Cervinae. Also of note is the description of several new muntjacs (*Muntiacus* sp.) from southeastern Asia, raising the number of species in this genus from as few as five recognized species (in 1990) to eleven. Within the Cervini, the number of species has remained relatively constant, but the traditional genus *Cervus* has been divided into four different genera (each formerly being a subgenus). [Ricciuti E.R.,1979; Geist, V. 1998; Pitra, C., J., 2004; Wilson, D. E., Reeder D. M., 2005] http://www.ultimateungulate.com/Cetartiodactyla/Cervinae.html

Tribe *CERVINI*, Weber, 1928 Genus: CERVUS Linnaeus, 1758

(Настоящие) олени
 Red deer, wapitis, elks
 Бъдждото обддоо

Subgenus CERVUS Linnaeus, 1758



Cervus (Cervus) elaphus Linnaeus, 1758

 1. (Настоящиеолени

 2. Red deer, wapitis, elks

 3. бъдраодо обдадо

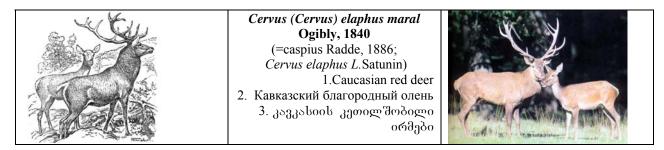


There is much confusion over the common name of this species. Early English settlers applied the name "elk" to this animal in America, although in Europe the same name was applied to *Alces alces*, which is known in America as the



moose. Later, English explorers of western Canada referred to it as the "red deer", which is more accurate since it is the American representative of the Old World species, which is generally smaller. The name "wapiti" comes from its Shawnee Indian name meaning "white rump". A **deer** is an animal which belongs to the family **Cervidae**. A number of broadly similar animals, from related families within the order Artiodactyla, are often also called *deer*. Deer are easily recognized by the

possession of antlers (on the males at least). Antlers are replaced each year. During the period of growth the antlers are nourished from the heavily vascularized velvet. Upon the maturity of the antler, the blood supply is cut off at the base of the antler (the burr); the skin dries and peels off, or is rubbed off, revealing the polished, bony antler. Eventually a ring of cells breaks down beneath the burr, and antler breaks off or drops off. A scab grows over the stump, and the cycle begins again the following year. Beginning with the fourth set in the fourth year of life, the normal set of six points on each side appears. Depending on their species, male deer are called *stags, harts, bucks, or bulls*, and females are called *hinds, does, or cows*. Young deer are called *calves or fawns* (not to be confused with fauns, a kind of nature spirit). Hart is an expression for a stag, particularly a Red Deer stag past its fifth year. Deer are widely distributed and hunted, with representatives in all continents except Australia, Antarctica, and Africa. It is found in the Caucasus and Kopetdag.



Deer stag past its fifth year. Deer are widely distributed and hunted, with representatives in all continents except Australia, Antarctica, and Africa. It is found in the Caucasus and Kopetdag.

Caucasus red deer, like its west-European relative is strong and extremely slender delicate animal. Especcialy beautiful is its long dry head with big dark and expressive eyes. The head is decorated with majestic antlers, which arise from large burrs, placed high on the cranium behind the orbits. The antlers of the Caucasus red deer are such as the antlers of the typical *Cervus elaphus*, but they differ by much greater size, less developed crown and by less number of branches. Dinnik, the explorer of the Caucasus fauna wrote that he saw not less than a hundred antlers in Borjomi and more than two hundred in the Caucasus museum: "We could say that antlers with more than 9 branches is rare in the Caucasus". Standing or running, red deer is beautiful. Its carriage is proud and noble. R. Lydekker in his work "The Deer of all lands. London. 1899.- P.75" .- studied and described the skins and stuffed animals from different parts of the Caucasus. He named it *Cervus elaphus maral* and described as following: "they are relatively high, strongly built, relatively thick neck, long head, more pointed muzzle, big, but relatively plain in construction antlers with 6 or 8 branches in comparison to its European relative. The second branch is weakly developed, and nearly always with dotted fur in summer.

The color of the Caucasus deer changes according to the season. This feature distinguishes Caucasus deer from Asian moral. Asian moral has the same yellowish-graish-brown color throughout the year. Caucasus deer in summer is red, in Autumn reddish-gray, in winter graish-brown. The summer fur, which cover the upper part of the body and flanks strongly differ from color in winter; it is always red-haired, but not so bright red as chamois is in summer. The intensivity of color of the red deer is individual. In Georgia red deer are still found in the Lagodekhi and Bordjomi Natural reserves, in the Gardabani sanctuary, the Tusheti, Baniskhevi, in the W. Zoreti and Liakhvi valleys; Its altitude range in Georgia (Caucasus) extends from sea level up to 3100 m above it. [H.Я.Динник, 1914; Верещагин Н. К., 1959; Гептнер В.Г., Наумов Н.П., 1961]

	Inventory number	Harvest Location	Date	Collector
1	№ 76 (stuffed animal)	Borchaly (on the boder of Georgia	1912	
		and Azerbaijan)	1017 117	
2	№ 78 11-15г (stuffed animal)	Sogut-Bulagh (Soganlugh) (= Ponichala, Georgia)	1915, IV	Chidjavadze
3	№ 616 150-977 (stuffed animal)	Lagodekhi, Georgia	1923	D. Sologub
4	№ 1360 - 77	Psebai, Kuban, North Caucasus, Russian Federation	1894	G.I.Radde
5	№ 136в 21-04 - 53	Borjomi, Georgia	1904, IX	A. N. Kaznakov
6	№ 100-10 - 52	Borjomi, Georgia	1910, 9, IX	A. N. Kaznakov
7	№ 108-15 - 50	Sogut-Bulagh (Soganlugh) (=	1915,21,XI	Chidjavadze
		Ponichala, Georgia)		
8	№ 5-56 - 546	Zoological institute	1956,15,VII	Ekvtimishvili

Sub family: ODOCOILEINAE Pocock, 1923

1. Лосиные 2. Elk 3. ლოსისეპრი

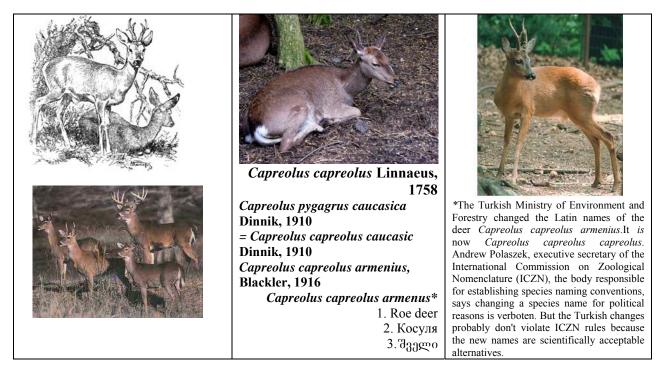
Triba *CAPREOLINI* Simpson, 1945 Genus: CAPREOLUS Gray, 1821

 1.
 Косули

 2.
 Roe

 3.
 Эздэрдо

In the Alps, Carpathians, Caucasus, and similar ranges throughout the continent, the roe deer (*Capreolus capreolus*), the most common deer in Europe, adds grace and elegance to the higher slopes. The roe deer (*Capreolus capreolus*) thrives where woodland is broken by meadows and fields. [Walther, F. R. , 1990; Wilson, D. E., Reeder D. M, 1993]



The roe deer in the Caucasus is a big graceful and light animal, with long and slender legs, a long neck and small head. The muzzle is relatively short; the ears are big and wide, the tail is small and buried in the fur. The males have small antlers, with 3-5 branches, which they drop in October-December. New ones begin to grow from the end of March to the beginning of May and are fully grown in July. In summer the fur is yellowish- or gold-red, very lustrous, and the belly is light-coloured. In winter the fur is grey with different tints ranging from dark-brown to reddish. The spot around the tail is mainly white, sometimes yellowish. Before the first molt the young roe are spotted. In spring and autumn roe deer make seasonal vertical migrations. The roe deer is at home in a variety of temperate habitats, ranging from mountains to steppe. One geographical race of this highly adaptable animal lives in a belt across Eurasia from the Atlantic to the Pacific. *Capreolus capreolus* lives near water, in thin woods with thick underbrush and tall herbage, glades and clearing, and riverside reeds. It occurs up to 2500 m above sea level. It inhabits Europe, except extreme north areas, Asia Minor, and The Caucasus. [H.Я.Динник, 1914; Верещагин H. K., 1959; Гептнер В.Г., Наумов Н.П..,1961; Heptner. V. G., Nasimovich A. A., Bannikov A. G., 1989]

	Inventory number	Harvest Location	Date	Collector
1	№ 141 60-07(stuffed animal)	Lagodekhi	1907	L.L.Mlokosevich
2	№ 120 (stuffed animal)	Bzib river (Kuban), North	1914, IX	
2		Caucasus, Russian Federation		
3	№ 113 (stuffed animal)	Borchaly(on the boder of	1923	
3		Georgia and Azerbaijan)		
4	№ 137вв	Ertso-Tianeti, Georgia	1904	

5	№ 137cc-13в	Ertso-Tianeti, Georgia	1904	
6	№ 60-07 - 143	Lagodekhi, Georgia	1907	L.L.Mlokosevich
7	№ 62-11 - 135	Zurnabad , Elisavetpol Gouv. (= Kirovabad = Giandza), Azerbaijan	1911,1,VII	E.V.Pfizenmayer
8	№ 81-15 - 10z	Zurnabad, Elisavetpol Gouv. (= Kirovabad = Giandzha), Azerbaijan	1915, 5, X	Meyer
9	№ 88-15 - m138	Zurnabad , Elisavetpol Gouv. (= Kirovabad = Giandzha), Azerbaijan	1915, 28,X	I.Chkhikvishvili
10	№ 13-181z	Bjely-kliuch (Trialeti), Georgia	1918, 10, I	N.L.Pastukhov
11	Nº 111	Borchaly(on the boder of Georgia and Azerbaijan)	1924, XI	
12	<u>№</u> 112	Borchaly(on the boder of Georgia and Azerbaijan)	1925,13,XII	I.Chkhikvishvili
13	<u>№</u> 488	Karajaz (now Gardabani, on the boder of Georgia and Azerbaijan)	1928, 20,VI	
14	№ 489	Karajaz (now Gardabani, on the boder of Georgia and Azerbaijan)	1928, XI	I. Chkhikvishvili
15	<u>№</u> 448	Borchaly(on the boder of Georgia and Azerbaijan)	1930, 29, XI	I.Chkhikvishvili
16	<u>№</u> 2	Tsiv-gombori gorge Georgia	1944,25,VIII	I.Chkhikvishvili
17	№ 5-56	Tbilisi State Zoologic Institute, Georgia	1956,13,VII	Ekvtimishvili
18	<u>№</u> 62-977	Gomareti, Georgia	1977, 21, IV	O.Orudji

Family: BOVIDAE Gray, 1821 (=CAVICORNIA Illiger, 1811)

1. Hollow-horned ruminants, Horned ungulates; Antelopes, Cattle, Sheep, and Goats 2. Полорогие 3. ფრურქიანები

The Bovidae – group of hoofed mammals, which includes cattle, antelopes, and gazelles among many others, became remarkably successful as grasslands creatures. The bovids not only possess a hoof but are also true ruminants: they have stomachs of many chambers and chew cud. They can gulp down food and move on, digesting it later at their leisure, perhaps in a haven away from predators. The young are helpless for only a short period; the offspring of many species are on their feet in minutes. This is one of the many adaptations for surviving predation that bovids evolved on the wide-open grasslands. Bovids differ from other hoofed animals in that they have horns throughout the year; the horns do not shed annually as in deer. The bovids include all the domesticated sheep and cattle as well as a host of wild species almost worldwide in distribution – the major regions of absence being South America and Australia – and vary in size from about 30 centimeters in height to over 2 meters. The greatest concentration of bovids, both in number of species and individual animals, is found on the savannas of eastern and southern Africa. In the Caucasus dwell the representetives of all four subfemiles of this large family: bisons (Caucasian bison), antelopes (goitered [Persian] gazelle, saigas, alpine chamois), goats (bezoar (wild goat), Caucasian turs). [H.Я.ДИННИК, 1914; Bepeщагин H. K., 1959; Гептнер В.Г., Наумов Н.П., 1961; Dmitriev Y., 1988; Heptner. V. G., Nasimovich A. A., Bannikov A. G., 1989]

Sub family: BOVINAE Gill, 1872

Bovinie
 Бычьи

Triba *BOVINI* Simpson, 1945 Sub triba BISONTINA Flerow, 1979 Genus: BISON H. Smith, 1827

 1. Bisons

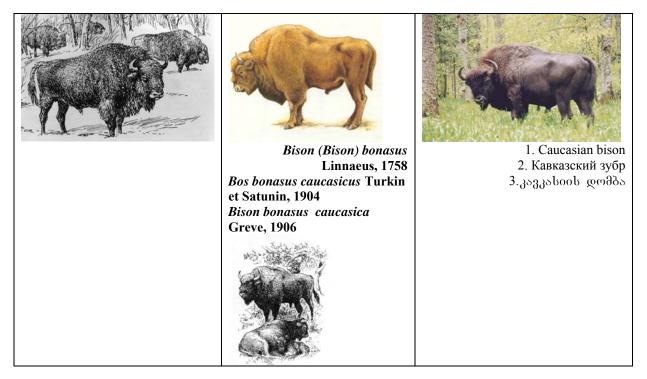
 2. Бизоны

 3. довебддо

Sub genus BISON H. Smith, 1827 Family: – Bison H. Smith, 1827

Bisons, European wisents and American bisons
 Зубры
 денддь

Centuries ago, some of the wild oxen living on the territory of Europe and Asia moved to America via the isthmus that existed in those years between Asia and North America. Gradually, they became what we know as the American bison. The oxen that remained "at home" developed into the European bison. The second part of the 19th century spelled tragedy for both branches of the bison family. But the destruction of the European bison began much earlier. Chronicles tell us how many bison were killed on one occasion or another. Bison left the open grazing lands in the steppes and went into the forests where hunters could not find them. The natural conditions were not propitious, but the bison survived because hunting these animals was prohibited. In August 1914, the First World War began, and Byelovezhskaia Pushcha was overrun by the German army. German zoologists induced the German Command to issue an order protecting the bison, but it was not very effective. Poachers continued the hunting, and in February 1921, the last bison cow was killed. This marked the end of the last free-living group of bison. But a few still lived in nature preserves and zoos. During the period of revolution had been killed 36 bison, which lived in the Gatchina Park near Petrograd in 1917. The bison living in the park near Minsk had been killed in 1918. The revolutionary solders had destroyed the bison living in the Crimea. In 1927, the last Caucasian bison was killed. Still, the American and European bison were more fortunate than many other animals: a society for the salvation of bison was formed in the United States, and in 1923 an International Society for the Protection of the bison was set up in Europe. Fortunately these societies managed to obtain results - both the American and European bisons were saved from total destruction. [Н.Я.Динник, 1914; Верещагин Н. К., 1959; Гептнер В.Г., Наумов Н.П., 1961; Dmitriev Y., 1988; Heptner. V. G., Nasimovich A. A., Bannikov A. G., 1989]



A unique representative of the Caucasus mammalian fauna is bison (Bison bonasus pseudospecies). In the beginning of 20th century on the territory of the country there were two subspecies European bison: *Bison bonasus* L.,1758 and Caucasian *Bison bonasus caucasicus* Turkin et Satunin, 1904. The first evidence of existence of bison in the Caucasus was the cranium brought by Guldenshtedt from the caves in Ocestia. In 1835 baron Rozen, the governor in the Caucasus, sent the skin of the Caucasus bison to the Imperial Academy of Science. The skin was the proof of its existence in the Caucasus. Great prince Mikhail Romanov answered the request of professor Usov and in the end of the 1860s sent small Caucasus bison to Moscow Zoo. In 1866 count Sumarokov-Elston , the governor of Kuban district, sent the skin of a young Caucasus bison and in 1869 the skin of an adult animal to the Caucasus Museum.

The Caucasus bison in many ways differs from the European bison: it is smaller in height, it has slender legs; the hooves are not as big but they are narrow relatively. Its mane is not very developed; it has pelage on the front body and on the head; its horns are thinner; and its pelage is lighter. The distinguishing feature is beautiful curly fur on the back and flanks. Caucasus bison change migrate according to the season. In summer they dwell in the upper borders of the forest. They feed on alpine meadows in the morning and in the evening. Most of the day they sleep. Caucasus bison is a very silent animal. In the Caucasus the calves appear in May. Because of the complete extinction of the Caucasian subspecies, at present the hybrid forms are created - Caucasian-Bielovezh Bison bonasus (Bison bonasus *caucasicus et Bison bonasus caucasicus*). In the beginning of the 20^{th} century there were two sub species – of the plain and alpine on the earth. In 1927, the last alpine bison vanished from the face of the earth. Genetically the present population is presented by intraspecific hybrid. After twenty years of selection they were set free. Thirty years of natural selection crowned with formation of alpine bison. According to the conducted analysis, 99 of 100 morphological features of the present alpine bison coincides with the morphological features of the animals dwelling in the territory before. Later bisons were settled in other regions of the Caucasus, but at present time nearly all of them have been destroyed by poachers. The largest in the world population of free bison, about 700 specimens, are as before, in the West Caucasus. [Туркин Н. В., Сатунин К. А., 1904; Н.Я.Динник, 1914; Верещагин Н. К., 1959; Гептнер В.Г., Наумов Н.П., 1961; Красная книга СССР, 1984, Dmitriev Y., 1988; Heptner. V. G., Nasimovich A. A., Bannikov A. G., 1989]

	Inventory number	Harvest Location	Date	Collector
1	№ 393 87-09 (stuffed animal with skeleton)	River Urushtek region	1909, IX	K. D. Ulagai

Family: ANTILOCAPRIDAE

Sub family: ANTILOPINAE Baird, 1857 (= GAZELLINAE Coues, 1889)

Газелевые
 გაზელისებრი

Triba ANTILOPINI Simpson,1945 Genus: GAZELLA Blainville, 1816

1. (Собственно) газели *pl* 2. Gazelles 3. გაზელები



The goitred [Persian] gazelle, *Gazella (Gazella) subgutturosa*, Güldenstaedt, like all gazelles is very graceful animal. Its' head and ears are relatively small and legs wonderfully thin. The males have horns. They are black. The form of horns resemble lyre. It's name refers to its appearance only as it does not have a true goiter. The neck enlargement appears only in the mating season. The tail is black in colour, conspicuous against the white buttocks when raised in flight. The general color is reddish-gray or sandy-brown transforming into reddish-gray and resembling the winter color of the roe deer. The low part of the body is white. On both sides of body, there is yellowish stripe. Sometimes it is hardly seen. The pelage on head and crown is light ashy-gray. The reddish-brown stripe, which stretches from the forehead close to the nose, becomes dark-brown. *Gazella (Gazella) subgutturosa* in the end of the 19th century and in the beginning of the 20th century was dwelling in the most territory of plain sub deserts, deserts and foots of the mountains of Kazakhstan, central Asia and Eastern Trans Caucasus. In Trans Caucasus it was dwelling in the length of Kura-Arax lowland and in Tbilisi suburbs. The natural regions of their habitat in the beginning of the 1930s in Trans Caucasus were Shirvan and Mugan-Milsk steppe. By the end of 1930s, the intensive economic cultivation of the steppes reduced the quantity of animals. It is an inhabitant of deserts and semi-desert biotopes with solid or sandy ground fixed by plants, hilly plains, and plateaus. The goitred gazelle inhabits Azerbaijan, Kazakhstan and Turkmenistan coasts. It is protected in Shirvan Reserve and other

	Inventory number	Harvest Location	Date	Collector
1	№ 151 (stuffed animal)	Amos	1894	
I		ElisavetpolGouv.(Karabakh),Azerbaijan		
2	№ 61-10 154	Different places of the Caucasus and North	1910,8,VII;	Accidental
2		Persia		purchase
2	№ 61-10-149	Different places of the Caucasus and North		Accidental
3		Persia		purchase
4	№ 89-14-150	Adji-kabul lake, Azerbaijan		
5	<u>№</u> 49 490	Adji-kabul lake, Azerbaijan.		

reservs in Central Asia. [Н.Я.Динник, 1914; Верещагин Н. К., 1959; Гептнер В.Г., Наумов Н.П., 1961; Красная книга СССР, 1984; Dmitriev Y., 1988; Heptner. V. G., Nasimovich A. A., Bannikov A. G., 1989]

Sub family: CAPRINAE Gill, 1872

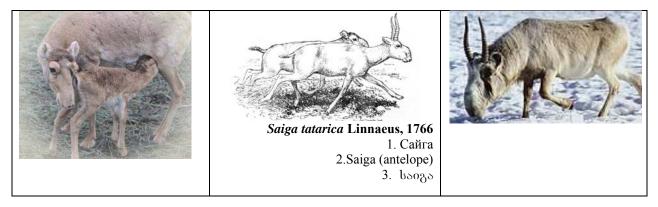
Козлообразные
 ововбьотбо

These animals mainly inhabit rocky and mountain areas.

Triba SAIGINI Simpson,1945 Genus: SAIGA Gray, 1843

1 Saigas. 2. Сайгаки. 3. საიგა

Saiga antelopes are among the most ancient hoofed animals living in this country, and until quite recently, they were also the most numerous. Unlike small steppe dwellers, the large animals, particularly on totally treeless grasslands, can find no shelter from summer heat, winter cold, or other elements of the harsh Eurasian climate. They have adapted to escaping the worst weather by migrating, often over great distances. No other animal has demonstrated this more graphically than saiga (*Saiga tatarica*), an antelope-like ungulate that once ranged across the grassy and dry steppes but has now disappeared from most of its European habitat. At the beginning of the last century, travelers wrote about countless herds of saigas roaming the steppe lands of Europe and Asia. But in the second half of the last century, the situation changed.



The saiga (*Saiga tatarica*) is one of the most typical of the grassland animal of the world; it is also one of the most bizarre in appearance. The saiga is a sandy-coloured animal that lives in herds. The saiga, *Saiga tatarica* Linnaeus, has a peculiar appearance; the remarkable feature of the animal is the inflated and trunk-like nose with downward-pointing nostrils. Such a huge proboscis is unknown among other bovids. The function of a huge snout is uncertain, although scientists suspect it filters the steppe dust in the dry summer, or in wintertimes warms the cold air before it enters the lungs. It may be an adaptation for warming and mistening the cold, clear air of the treeless steppes on which the saiga lives. The saiga is an extremely fast runner. Food for this animal is exclusivly the grasses of the steppes. Able to exist for long periods without water, the saiga gets moisture from the low grasses and shrubs on which it feeds. Thirteen percent of the plant eaten by the saiga are not consumed by other animals because they are so salty or even poisonous. But through ruthless hunting to obtain their horns (they were highly prized by the Chinese as an aphrodisiac), the saigas were practically wiped out; by the 1920s only a few thousand were left. The enforcement of protective legislation, along with an improvement in environmental conditions and the animal's high reproductive potentional, helped the animal to come back. Subsequently, strict control of hunting allowed the herds to again increase in numbers, and today over 2 million saigas roam the steppes. The remarkable recovery of this species gives cause for hope that artiodactyls will continue to flourish on the grasslands of the world for many years

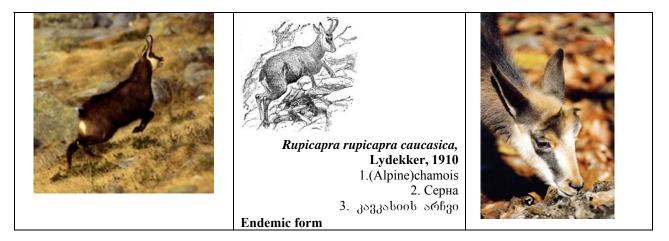
to come. In recent times the species was found from Poland to the Caucasus and the Caspian sea. [Н.Я.Динник, 1914; Сатунин, 1920; Дмитриев Ю. Д., 1973; Дмитриев Ю. Д., 1975; Dmitriev, 1988; Сайгак, 1998]

	Inventory number	Harvest Location	Date	Collector
1	№ 165 90-14 (stuffed animal)	Askania nova (Tavris), Ukraine	1914,1,VIII	Falzfein

Triba *RUPICAPRINI* Simpson,1945 Genus: RUPICAPRA Blainville, 1816



Chamois (*Rupicapra rupicapra*) is French for a wild goat. *Rupes* (Latin), genitive *rupis*, a rock or cliff; *capra* (Latin) a she-goat. Recently the differentiation of chamois populations into two groups – alpine and forest are observed. The chamois is graceful symbol of rocky areas and alpine meadows, share the high peaks of the Caucasus, the Alps, and many other European mountains with the ibex. No mountain animal has been described in European folklore and literature with more, admiration than the chamois. It is nimble, sure-footed and daring, leaping over precipitous stone walls to the most inaccessible crags when alarmed. The short, smooth summer coat is overall tawny or reddish-brown, while in winter it becomes a chocolate brown, with guard hairs covering a wooly under layer. The under parts are pale. The legs are usually darker, and there is a slight mane on the throat. The jaw, cheeks, and nose-bridge are strikingly white, and there is a black stripe running from the eye to the muzzle. The slender, black horns are found in both sexes. Rising vertically from the forehead, they are sharply curved backwards on their top like hooks. As a species, the chamois is still common and not threatened. However, several subspecies are on the IUCN's Red List of Threatened Animals (1996). *R. r. caucasica* is classified as vulnerable; there is insufficient data as to the current status of *R. r. asiatica*. [Ricciuti E.R.,1979; Walther, F. R., 1990; Nowak R. M., 1991; Shackleton, D. M.,1997]



Common for the West Caucasus, wide spread representative of ungulates is chamois (*Rupicapra rupicapra caucasica*). Some zoologists consider *Capra rupicapra caucasica* as very close relative of the alpine species. The others consider it as a separate species (*Capra rupicapra caucasica*). *Capra rupicapra caucasica* as its European relative is a very beautiful animal. They have very beautiful, expressive yellowish-brown eyes. The eyelashes are black-brown; the naked parts of the nose and lips are black. *Capra rupicapra caucasica* has rather narrow,

middlesized ears. It has a short massive body, an extraordinarily developed chest, and thick strong legs; its neck is slender, its head of middle size, and it is strongly narrowed to the end of the muzzle; graceful black antlers decorate the head of male and female Capra rupicapra caucasica. The average size of antlers of adult Caucasus chamois is up to 20-22 cm (the front surface). Most of the surface of the antlers is covered with ring like deepening. Close to the top the antlers are covered with small longitudinal (lengthwise) furrows. The tops are smooth and polished. The female has a much thinner and shorter antlers and they are less curved than the males' antlers. The distance between antlers is between $\frac{3}{4}$ to $1\frac{3}{4}$ cm. The antlers of young *Capra rupicapra caucasica* are short but at the bottom they are as thick as the antlers of adult animals. The antlers of the *Capra rupicapra caucasica* are very firm and strong. The coat of *Capra rupicapra caucasica* is bright red. Some of them in winter have beautiful chestnut-brown coats. The colour of the Capra rupicapra caucasica changes with the season. In summer the neck and nearly the whole body is covered with reddish or reddish-chestnut fur. The rusty black-brown stripes run from the back to the root of the tail. The most intensive is the color of the back becoming less intensive on the low part of the body. The chest is covered with dark-brown fur; the belly is light rusty-yellowish. The fur on the head is lighter than on the rest of the body. The ears on the outer part are coverd by grayish-brown hair that become black-brown to the top. The fur of the inside ears is dirty-white or, sometimes, white. The tail at the bottom has an ordinary reddish color, and its top is covered with long reddish-brown or black-brown hair. Most of the under part of the tail is hairless. The fur on the hind thigh and hind legs is lighter than on the front thigh. Nearly all pelage is wavy, thin at the bottom and thicker to the middle with sharp tops. The winter fur gradually becomes lighter in color. They feed in early morning and late evening. The alpine grass at that period of time is covered with drops of dew, which reduces their need for water. The rain, so frequent in high mountains, and snow substitute for other water sources. Chamois pasture with other animals. Rupicapra rupicapra is widespread in the Pyrenees, the Alps, the Apennines, the Carpathians, the Balkans, Asia Minor and the Caucasus. It has been introduced in New Zealand. In Georgia, it is distributed over the Greater Caucasus at altitudes from 450 m to 3800 m. Besides the open pastures of cliffy high mountains, chamois inhabit the forest zone. Rupicapra rupicapra (chamois) is a rare species that is on the verge of extinction [Н.Я.Динник, 1914; Верещагин Н. К., 1959; Гептнер В.Г., Наумов Н.П., 1961; Dmitriev Y., 1988; Banfield A.W.F., 1974; Ricciuti E.R, 1979]

	Inventory number	Harvest Location	Date	Collector
1	№ 192 140c (stuffed animal)	Psebai, Kuban, North Caucasus, Russian Federation	1894	Noska
2	№ 196 75-12 (stuffed animal)	Borjomi, Georgia	1912, IX	Romanov
3	№ 198 75-12z (stuffed animal)	Borjomi, Georgia	1912, IX,	Romanov
4	№ 397 1-29 (stuffed animal)	Lagodekhi, Georgia	1929, 14, I	L.L.Mlokosevich
5	№ 398 1-29 (stuffed animal)	Lagodekhi, Georgia	1929,14, I	L.L.Mlokosevich
6	№ 35-09 - 172	Maikop, Kuban, North Caucasus, Russian Federation		N.J. Dinnik
7	№ 140-7 - 186	Borchaly(on the boder of Georgia and Azerbaijan)	1904	
8	№ 55-11 - 171	Ushguli (Mestia r-n), Georgia	1911,1,VIII	A.B.Schelkovnikov
9	№ 111-11 - 174	Nucha (Nookha) (Juozbashevan waters)	1911, IX	A. N. Kaznakov
10	№ 15-17 - 195	Sandidjak, Dereimi	1916	
11	№ 11-6 - 590	Lagodekhi, Georgia	1960, 28, II	G.Gogilashvili, G.Djambazishvili
12	№ 11-60591	Lagodekhi, Georgia	1960, 27, II	G.Avaliani, G.Gogilashvili
13	<u>№</u> 47-69	Kvareli, Georgia	1963,30,VIII	Chokheli,
14	№ 45-63 - 597	Kvareli Georgia	1962, 7, II	G.Gogilashvili; G.Avaliani
15	№ 609-610	Mount Kazbek, Georgia	1970, 5, XI	G.Gogilashvili

Triba CAPRINI s. str.

Genus: CAPRA Linnaeus, 1758

1. Goats 2. Козлы

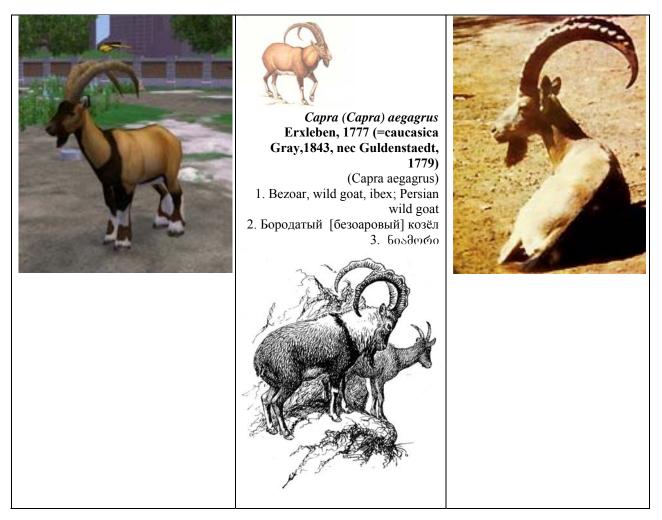
3. თხები

Subgenus CAPRA s. str.

 Горные [настоящие] каменные козлы
 Goats, ibexes, markhors 3. თხეдо

Capra (Latin), a she-goat, -icus (Latin) suffix meaning belonging to, thus caucasica can be translated as "of the Caucasus Mountains". Large, powerful wild goats – alpine ibexes (Capra ibex) – clatter up and down sheer, stony slopes. The ibex symbolizes the animals that still inhabit Europe's mountains. This ibex is one of the several types of wild goat that range over mountainous parts of Eurasia and northern Africa. As a general rule, ibexes shun the valleys. Of stocky build, with short legs characteristic of many mammals living in cold places, the wild goat is the ancestor of domestic goats. The domesticated goat is a descendant of the wild goats which live in the Caucasus, Iraq, Iran, Asia Minor and the Greek islands; it is estimated that the domestication took place eight or nine thousand years ago. All wild goats are handsome, powerful animals with massive, heavy ridged horns; one of them, the Alpine ibex, has actually become an object of awe and mystery. The German version of its name is "Steinbock," which in turn is applied to the tenth sign of the zodiac, Capricorn. In Germany, Austria and Switzerland a whole body of astrological folklore has been built around this animal. Not only have its horns and its blood found their way into pharmacies as medicines and potions, but also the balls of indigestible hair which occasionally are vomited by the Steinbock were preserved and sometimes gilded. Another folk story asserts that the Steinbock carries a cross in its heart, and it does. At least several of its flat heart cartilages happen to grow in the form of a cross. In spite of its aura the Alpine ibex has been badly over hunted. In its natural state it survives only in Italy's Gran Paradiso National Park; from here the Austrian and Swiss preserves have been restocked.

Ibex horns could be fashioned into charms, and other parts of the creature were believed potent against all sorts of diseases. The blood, for example, supposedly removed calluses. Balls of hair, stones, and other materials that remained undigested in the stomach, and the heart muscle, were considered general cure-alls. The information on cure properties of besoar stone was described by Alexandre Dumas in his book *Le Caucase (The <u>Caucasus</u>, <u>1859</u>). The Caucasus ibexes generally resemble the alpine species, but have horns with a more emphatic curve. The horns of the female are less imposing. In the Caucasus the two local varieties of ibex remain plentiful. At home well above the timberline, the alpine ibex seldom ventures below it except in the spring when it searches for fresh sprouts to eat. During the summer, the ibex remains close to the summits. When winter snows arrive they seek a middle ground on steep but sunny slopes below the heavy snow of the peaks but above the timberline. The shadowed recesses of the valleys and the woods, although shielded from the wind, can be colder than higher slopes exposed to the sun. Besides, snow slides off steep slopes and accumulates among the trees and in the valleys. The less snow cover, the better for the ibex, which must be able to get at the low vegetation on which it feeds. As a general rule, even when there is no snow cover, ibexes shun the valleys.*



The bezoar is a handsome animal, its blackish-brown markings contrasting with the lighter body color. Its summer coat is reddish-brown, turning brownish-gray in winter, with old males ashy-gray. The underparts and backs of the legs are white. The dark blackish-brown areas include the face, throat, chest, dorsal stripe, shoulder stripes, flank stripes, front of legs, and tail. The chin beard is long and black and, in old males, as wide as the chin. Callouses develop on the knees and sometimes on the chest. Males have large, laterally compressed, scimitar-shaped horns.



The front edge is sharp, forming a keel for some distance, above which are bold, sharpedged, widely separated knobs. Females grow short, slender horns and do not have beards. They are tawny-brown at all seasons, with a dark stripe from eye to muzzle. The highest peaks of the Alborz and Zagros mountains are home of the Persian wild goat (*Capra* (*Capra*) aegagrus). Bezoar dwell in the Eastern Caucasus, Turkey, northeastern Iraq, most of Iran and adjoining western Afghanistan. Its range overlaps that of the east Caucasian tur in the Caucasus, although the tur is at higher elevations. Goats are met on all heights 3900 meters over sea level. Its quantity has been significantly reduced. The regions most populated by bezoars are the Nakhichevan autonomous republic mountains and Lachin-Kelbaijar part of Azerbaijan. In Armenia it spreads from Azat river valley up to slopes of Zangezour, Meghri, Bargushat ranges. [H.Я.ДИННИК, 1914; Сатунин, 1920; Верещагин H. K., 1959; Гептнер В.Г., Наумов Н.П., 1961; Соколов В. Е., Темботов А.К., 1993;

	Inventory number	Harvest Location	Date	Collector
1	№ 230 (stuffed animal)	Murovdagh, Mountain ridge, (MinorCaucasus)Karabakh,Azerbaijan	1911, VII	A. N.Kaznakov
2	№ 211 (stuffed animal)	Murovdagh, Mountain ridge, (MinorCaucasus) Karabakh, Azerbaijan	1911, VII	A. N.Kaznakov
3	№ 400 2-29 (stuffed animal)	Tbilisi Zoo, Georgia	1929,12,XI	
4	№ 80-10 - 208	Negram, Nakhichevan, Azerbaijan	1913, IX	A.N.KaznakovE.V.Pfize nmayer

Темботов А.К., 1972; Красная книга СССР, 1984]

5	№ 135 ₅ -135 - 231			
6	№ 11-14 - 231			
7	№11-14 - 201			
8	№ 135 ₃ -14 - 201			
9	№ 135 ₃ -13 - 220			
10	№ 135-134 - 219			
11	№ 1-12 - 218	Negram, Nakhichevan, Azerbaijan	1913,1914, IX, IV, X	A. N.Kaznakov; E.V.Pfizenmayer, M.Bagirov

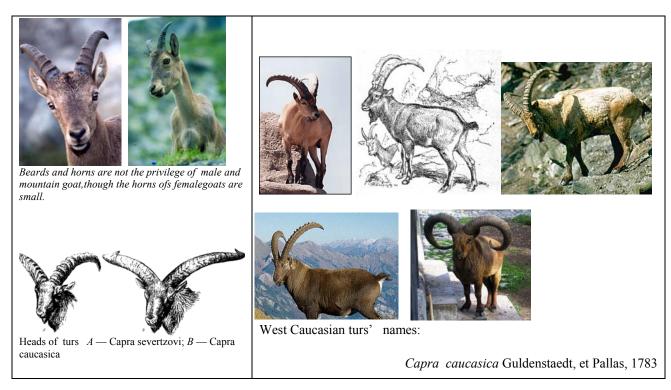
Group of species "Caucasica"

Capra (Turus) caucasica Guldenstaedt, et Pallas, 1783 – Western tur*

**Tur* is a Russian word meaning a Caucasian goat.



The snow-capped peaks of the Great Caucasus Mountain Range more than 5,000 meters into the sky. Numerous waterfalls tumble down from glaciers, eventually forming rivers that cut deep valleys from the rocky slopes. One of these glaciers, the mammoth Bezengi Glacier, stretches 13 kilometers, making it the largest in the Caucasus Mountains. This austere world is the home of endemic Caucasian turs. Relatively few animals are able to survive in the severe conditions at such high altitudes. Caucasian turs are a notable exception, perfectly adapted to the steep rocky slopes, alpine meadows, glaciers, and heavy snows. The animals easily scale steep, rocky slopes and glaciers, jumping spryly over wide fissures. The ranges of the two endemic subspecies – the West Caucasian and East Caucasian turs, overlap in the Chegem and Bezengia Valleys. In 1976, the area was set aside as a protected area called Kabardino-Balkarsky High-Mountain Zapovednik. Every mountain valley in Kabardino-Balkaria has a population of tur that differs in color, size, or form from the tur in other valleys. Below, emerald alpine meadows and dark green conifer forests teem with Caucasian chamois and endemic West Caucasian tur. The west Caucasian tur is a member of the *Capra ibex* complex, a grouping of several wild goat populations whose taxonomic distinctiveness is frequently debated. [Aiunts, K.P., Amirkhanov A. M., 1990; Akkiyev, B.I., 2000]



Capra caucasica Severtzow(v)i Menzbier, 1888
=Capra Severtzovi
=mid Caucasian tur
Capra caucasica raddei Matschie, 1901
Capra dinniki Satunin, 1905
1. West Caucasian mountain goat or tur. Kuban tur
2. Западно-кавказский горный козёл или тур. Кубанский тур
3. დასავლეთკავკასიური ჯიხვი ანუ სევერცოვის ჯიხვი

West Caucasian turs are: *Capra caucasica* Guldenstaedt, et Pallas, 1783, *Capra Severtzowi* Menzbier, 1888, *Capra caucasica raddei* Matschie, 1901, *Capra dinniki* Satunin, 1905. As these turs are from the western Caucasus, the name west Caucasian tur is certainly logical. Some authors prefer the name Kuban tur, named after the basin of the Kuban river which originates at the border of Russia and Georgia and flows northwards and westwards [Heptner *et al.*, 1989]. There are described subspecies of Kuban tur (west Caucasian tur). This tur has a chestnut coat with a yellow underbelly and darker legs. The horns are scimitar shaped and heavily ridged on the "mid-Caucasian tur" (*C. c. severtzovi*), *C. caucasica caucasica* and the *C. c. Dinniki*, although the validity of these names is questionable.

Capra caucasica caucasica differs from the animals of the Caucasus species of mountain goats (tur) by the curves of its horns. They are bent like a scimitar in a single plane and diverge in a wide "V" laterally from their base. The front surfaces of the horns are ridged strongly, but do not have the large knots of other ibex. In cross-section, the horns of males are in the form of rounded triangles. The horns curve slightly in a single plane. Females have thin, weak horns that are elliptical in sections and slightly curved. The length of horns of *Capra caucasicus* is only twice that of the radius. The same proportion for the horns of Capra sewertzovi is three times larger. The avarege size of horns of the adult animal is from 80 to 85 cm, but the distance between tips is 50-52 cm (the same distance between the Capra Severtzovi horns is 91 cm). The circumference at the bottom is 31 cm. The horns of adult females are thin and relatively weak. The body of *C. caucasica caucasica* is massive with a relatively long trunk; the legs are short but strong. In summer the coat varies from reddish-gray, rusty grey to rufous-brown, while in winter the coat is greyish-brown (in older animals this may be much lighter). Males, and occasionally females, grow a broad beard. In summer the beard is short and dark brown, becoming longer and fuller in winter. The chest is dark reddish-brown. Dense, long, curly reddish-brown wool grows on the foreheads of males and forms distinctive whorls, especially in winter. In summer the underparts are generally the same colour as the rest of the body, turning into a yellowish-grey or dirty white in winter, especially in females. There is no distinct dark dorsal stripe as in some other ibex species. The front surfaces of the legs are deep brown, becoming darker towards the hooves; a white spot may be present above each hoof. The back of the hip is white. The tail is short. It is covered with dark brown hair on the upper part and is naked on the other side. C. caucasica caucasica are confined to the western Caucasus mountains, and are found only in the high-montane region along the axis of the mountain range. C. caucasica caucasica inhabit several protected regions, including Kabardino-Balkarsky High-Mountain Zapovednik, the Caucasus and Yeberda Nature Reserves in Russia, and Pskhu-Gumista and Ritsa Nature Reserves in Georgia.

Capra caucasica dinniki is larger than the mid-Caucasian tur. Females are about 30 percent smaller than males. Both sexes of C. caucasica bear horns. Females have thin, weak horns that are elliptical in section and slightly curved. The horns of Capra dinniki Sat. are nearly always thick and short. The avarege size of horns of adult animals is from 55 to 66 cm.; the circumference at the bottom is from 26 to 29 cm. The horns are black and rather similar to those of an ibex, being scimitar-shaped and having prominent cross ridges on the front surface, but they are much more massive and relatively shorter. The distance between tips is 16-26 inches (41-66 cm) and sometimes more. The horns are triangular in cross section, with strongly rounded angles and bulging surfaces. The face of Capra dinniki is short and blunt. The hooves are large. The thick, long, narrow and prominent beard consists of brown, grayish or yellow-red or reddish brown hair. The short summer coat of Capra dinniki is yellowish-tan, greyish or yellowish-red; it is lighter on the back and flanks; it is darker on the head, and it is dark brown on the tail and near the hooves. The tail is brownish; the end of the tail is brown-black. The wool on the belly is dirty white. On the forehead the fur becomes longer and curves, in a whirlwind manner. The front part of legs is dark brown; the hooves are black. The winter coat is heavier, coarser and darker, varying from greyish to yellowish-brown or chestnat-brown., with a dark dorsal stripe. Capra caucasica dinniki lives in the most beautiful mountain country. A limited range at the extreme north western end of the Caucasus Mountains from Mt. Cugus eastward includes the upper reaches of the Belaya and Laba rivers. Boundaries with the mid-Caucasian tur are unclear. [Н.Я.Динник, 1914; Верещагин Н. К., 1959; Сатунин, 1920; Гептнер В.Г., Наумов Н.П., 1961; Соколов, Темботов, 1993; Красная книга СССР, 1984; არაბული ალ., 1988]

The Capra Severtzovi (=Severtzovi) Capra Severtzovi Menzbier is a big, strong, beautiful animal with huge horns. It is taller than other species of Caucasian stone goats. It has dark brown eyes and dark, horn-colored hooves, sharp enough at the edge to cling to rock ledges. The black horns of Capra Severtzovi are smoother, with smaller cross ridges, and the tips may be closer together. Its distinctive feature is that its horns are curving, sickle-shaped, in one plane; each horn touching the plane at full length. Horns of Capra Severtzovi extend up and out and incline back and out, terminating downwards and outwards. Occasionally their tips may then curve forward as well. The size of horns of an adult animal is up to 87 cm., the circumference at the bottom is up to 30 cm. The distance between the horns at their base is is very short - 1-1 $\frac{1}{2}$ cm, but at the tips the distance between the horns can range from 80 - 90 cm. Thus, the horns of *Capra Severtzovi* appear like a triangle with strongly rounded corners; sometimes so rounded that they resemble a circle. The grooves of the horns seldom completely encircle the entire horn; rather they form strong wavy, up and down, undulations between the edges of the horn. The summer coat of Capra Severtzovi is reddishgrey, with darker and browner patch on its forehead and chest. Similar patches may be found on the nape, the cheeks, and above the nasal bones, close to the forehead. The wool on the forehead and chest is longer and curlier than on the rest of its coat. It has an obvious greyish beard of soft hair which can sometimes be as long as 18 cm. Elsewhere, it has variegated color patches ranging from reddish to dark brown and even, around the lips, to dirty white. Relative to the size of the animal, the ears are small; they are covered with a reddish hair, and inside, dirtywhite. On the belly and groin, the dirty-white hairs are short. In the middle of the chest, there is a strip of dense rough dark-reddish-brown hair. The upper sides of the legs are darker, becoming black near the hooves; the belly and inner parts of the legs are dirty white. A darker dorsal stripe may or may not be present. Capra Severtzovi Menzbier are confined to the western Caucasus Mountains, and are found only in the high-mountain region along the axis of the mountain range, the western part of the Caucasus Range, between Malka and Baksan Rivers, to the east of Mt. Elbrus.

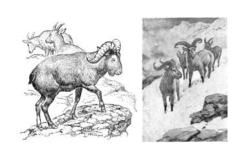
The caucasica race from Mt. Elbrus eastward to Mt. Dykhtau was described as a hybrid between severtzovi and the east Caucasian tur (cylindricornis). This is confirmed by recent researches in which is described a wide variety of hybrids from this area, often in large herds that include a number of different forms. Individual horns are said to vary from like those of cylindricornis, though often with cross ridges like those of dinniki, to long and scimitar-shaped like those of dinniki, but relatively smooth like those of cylindricornis. The Caucasian race is generally darker in colour than the severtzovi race, and with a dark dorsal streak. The winter coat is dark brown.

[Dinnik N., 1882; M.Menzbier, 1887; K. Satunin, 1905; Lydekker, 1913; Н.Я.Динник, 1914; Сатунин, 1920; Верещагин Н. К., 1959; Зъдъзъ э.ლ, 1960; Гептнер В.Г., Наумов Н.П., 1961; Красная книга СССР, 1984; ъбъдуто ът., 1988; Heptner. V. G., Nasimovich A. A., Bannikov A. G., 1989; Wilson, D. E., D. M. Reeder, 1993; Соколов, Темботов, 1993; Weinberg *et al.*, 1997; Weinberg, P. J. 2004]

In the National Museum of Georgia are stocked two specimens of West Caucasian turs.

	Inventory number	Harvest Location	Date	Collector
1	№ 144k-324	Psebai, Kuban, North Caucasus, Russian Federation,	1894	Noska
2	№144 1-331	Psebai, Kuban, North Caucasus,Russian Federation	1894	Noska





 Capra cylindricornis Blyth, 1840

 1. Dagestan [East Caucasian] tur

 2. Дагестанский [восточнокавказский]

 3.აღმოსავლეთკავკასიური ჯიხვი ანუ დაღესტნური ჯიხვი



Endemic subspecies	Dagestan tur resembles Kuban tur, but its horns have a slightly different shape, (photo by K. Mikhalov)

East Caucsian tur (*Capra cylindricornis*), or Dagestan tur, or Pallas tur after 18th century German zoologist Peter S. Pallas, or Caucasian bharal because its horns resemble those of a blue sheep (Tur oriental, Ostkaukasischer Tur, Tur du Caucase oriental), is found only in the eastern part of the Caucasus Range (in Dagestan, the North Caucasus). *Capra cylindricornis* sometimes considered as an independent species. It differs from other species of the Caucasian turs and represents the transitive form from goats to rams. According to Rouillier it is a goat with the ram horns. It has a somewhat smaller, but otherwise similar body to Kuban tur, but usually larger, lyre shaped horns. The horns are quite unusual for a goat, being smooth and rounded, curving above and behind the neck, with the tips turning inward and upward. Females have short, thin horns that grow outward, upward and back. The avarege size of horns of the adult animal is up to 70 cm., the circumference at the bottom is up to 25 cm.

The horns at the base and in the middle are triangular in cross section, but more rounded, than in the case of the horns of the other species of the Caucasian goats, that is why it has been named Capra cylindricornis. There are no strongly prominent hillocks on horns of the East-Caucasus tur. The substance of a horn (as the substance of the other mountain goats) is almost black. The distance between the ends is from 26 up to 35 cm. Horns of the females are thinner and shorter. The female is about 20 percent smaller than a male. A muzzle is hook-nosed. The beard of males is wide and consists of a bunch of short and rough dark-chestnut color hair. Fur on the lower part of the muzzle in front of a beard is short and smoothly-adjoining to the body. *Capra cylindricornis* is decidedly darker in color than the west Caucasian tur. The general color of winter wool of Capra cylindricornis is dark brown or chestnut-brown and rather monotonous on the whole body, with underparts slightly lighter and the tail, breast and lower legs much darker. Poorly appreciable (distinguished) dark strip stretches along a back. The fur on a back half of belly; the internal part of hips and groin area is almost white. In summer, wool has red-brown or gray-brown color, with underparts whitish and the tail, breast and lower legs darker. The coat is considerably lighter than in winter, but at the same time is darker than the summer coat of the western Caucasus turs. There is a small white rump patch. The Beard is dark and very short and difficult to detect in some animals. Hooves are black. It is an extremely good climber as are all goats.

The East Caucasian (Dagestan) Tur is found in Alpine zones at elevations of 800-4,200 meters / 2,700-14,000 feet to the east of the Caucasus Range (east of Mt. Dykhtau) in the Russian Federation republics of Dagestan and Northern Ossetia as well as in Azerbaijan. [Rouillier, C., 1841; Н.Я.Динник, 1914; Сатунин К.А., 1920; Верещагин Н.К., 1959; Зъдъзъ ъ. ლ., 1960; Гептнер В.Г., Наумов Н.П., 1961; Красная книга СССР, 1984; Соколов, Темботов, 1993; Weinberg P. J., 2002]

	Inventory number	Harvest Location	Date	Collector
1	№ 297 (stuffed animal)	Mount Kazbek, Georgia	1905, X	
2	№ 298 (stuffed animal	Sarybash, Zakataly Province, Azerbaijan		
3	№ 55-10 301	Sarybash, Zakataly Province	1910,3,VII	E.V. Pfizenmayer, A.B.Schelkovnikov
4	№ 55-10 - 303	Sarybash, Zakataly Province	1910,1,VIII	A.B.Schelkovnikov; E.V Pfizenmayer
5	№ 55 - 264	Sarybash, Zakataly Province	1910,12,IX	Abdul Salam Ogli
6	№ 69-12 - 251	Sarybash, Zakataly Province	1912, VII	Abdul Salam Ogli
7	№69-12 - 266-269	Sarybash, Zakataly Province	1912, XII	Abdul Salam Ogli
8	№ 45-12 - 1	Zelenchuk	1912,28,IX	E.V. Pfizenmayer
9	№ 11-14 - 264	Sarybash, Zakataly Province	1913, XII	Abdul Salam Ogli
10	Nº 295	Telavi, Georgia	1926,14,VII	I.Chkhikvishvili
11	№ 491	Gombor, Georgia	1927,11,XII	I.Chkhikvishvili
12	№ 1-50 - 539	Tbilisi State Zoologic Institute, Georgia	1956,15,VIII	Ekvtimishvili
13	№ 1-56 - 540	Tbilisi State Zoologic Institute, Georgia	1956,15,VIII	Ekvtimishvili
14	№ 48-62 - 600	Mount Kazbek, Georgia	1962, 22, X	G.Gogilashvili,

				Burchuladze
15	№ 607-608	Mount Kazbek, Truso gorge, Georgia	1971, IX	G. Gogilashvili

Genus: OVIS Linnaeus, 1758 Subgenus OVIS s. str.

Sheep are generally divided into three genetic groups: the Asian argali forms, the mouflon-like moufloni forms, and the mostly American pachyceri forms. Six subspecies have been named. Closely related, and sometimes regarded as conspecific with *O. gmelini/musimon*, is the Asian mouflon *O. orientalis*. Most or all of the mouflons of Europe descended from *O. orientalis*. This does not apply to all mouflon populations and that those of Caucasus are truly wild sheep. There is a huge amount of disagreement as to the taxonomy and relationships of these sheep.

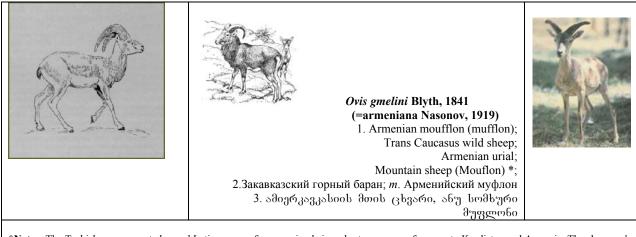
Ovis ammon Linnaeus, Blainville, 1816



1. Горный баран *m* бархар 2. Argali, (urical) mouf(f)lon,muf(f)lon,wild sheep 3. მთის ცხვარი; მუფლონი

Ovis (O.) orientalis Gmelin, 1774

Азитаский муфлон
 Asian mouflon, wild sheep
 მთის ცხვარი; მუფლონი



*Notes: The Turkish government changed Latin names of some animals in order to remove references to Kurdistan and Armenia. The sheep *ovis armeniana* will be known as *ovis orientalis anatolicus*. The old names threatened Turkish unity, stated Turkey's Environment and Forest Ministry.

Ovis (Ovis) ammon gmelini is the smallest of wild sheep. They are of a low height in comparison with Asian wild sheep. One old male in the Caucasus Museum is slightly higher than chamois; its horns are not long. Males bear relatively small, three-edged horns. The front surfaces of the horns are covered with wavy small crinkles. Some females have short, thin horns covered with wavy, small crinkles. The main color of the body is reddish or yellow brownish. The color of the head and the upper part of the body in summer is reddish-brown or chestnutreddish. In winter the pelage is of intensive brown color. A dark strip stretches along the back. The low part of the chest is brownish. The belly and the underparts are white. The males do not have beards; they have manes of not so long dark brown hair. Females do not have manes. Around the nose, lips, chin, and neck and in the ear, wool is white. The front legs from the hooves up to the forearm are reddish-white; the hind legs are white. The wool consists of rough hair. Hooves are black. Sheep settle slopes and plateaus in mountain-steppe, subalpine and alpine zones of mountains. In Armenia they are found at elevations of 800 to 3900 m. Ovis (Ovis) ammon gmelini dwells in certain places in the Caucasus (Yrevan district, Kars district on Iran-Turky border). They were common in Armenia and Nakhichevan autonomous republic. These sub species are on the edge of extinction, endemic with the narrow area and Lesser Caucasus. In Armenia the hunt on Armenian moufflon has been forbidden since 1936. It is protected in Khosrov reserve in Armenia and in Nakhichevan reserve. [Н.Я.Динник, 1914; Сатунин, 1920; Верещагин Н. К., 1959; Гептнер В.Г., Наумов Н.П., 1961; Красная книга СССР, 1984; Heptner. V. G., Nasimovich A. A., Bannikov A. G., 1989; Соколов В. Е., Темботов А.К., 1993]

	Inventory number	Harvest Location	Date	Collector
1	№ 482 (stuffed animal)	Kundagh, the Urmi(y)a Lake, a National Park, (Iran)	1913	
2	№ 342-143 40-14 (stuffed animal)	Koturchai (Iran)	1914	
3	Nº 78-08-357	Tbilisi region, Georgia	1908	N.A. Smirnov
4	№ 80-100	Nakhichevan, Azerbaijan	1910, 22,X	Von.K.A.Kutzschenbach; E.V Pfizenmayer
5	<u>№</u> 137-14	Negramski (Nakhichevan, Azerbaijan)	1914	Muslim Bagirov
6	№ 115-15 - 365	Khoish, Iran	1914, VIII	
7	№ 40-3 ₁₄ - 363	Kotur-Chai, Iran	1914, I	
8	№ 40-141 - 362	Kotur-Chai, Iran	1914, I	
9	<u>№</u> 81-15-368	Ashkhabad, Turkmenistan	1915, 5, X	E.V.Pfizenmayer, <i>I. M. Loos</i>
10	№ 359-162-356	Kundagh, the Urmia Lake, a National Park, (Iran)	1916,13,III	G.J.Vereschagin
11	№ 59-16 - 354	Kundagh, the Urmia Lake, a National Park, (Iran)	1916,13,III	G.J.Vereschagin
12	№400-16-370, juv	Kundagh, the Urmia Lake, a National Park, (Iran)	1916, 4, I	N.A.Smirnov
13	<u>№</u> 66-976	The southern Nakhichevan region of Djulfa, Azerbaijan	1975, 20,X	E. Tutberidze