

Status of Large Carnivores /LC/ in Armenia

The Science Center of Zoology and Hydroecology of National Academy of Science of RA and Yerevan State University in the frames of their scientific themes are and have always been examining the vertebrate large carnivores including large carnivore mammals and birds in the territory of Armenia,.

A number of scientific works, made by the research workers of the Science Center of Zoology and Hydroecology NAS during many years have been devoted to the following.

Examination of LC distribution and change of the areal (area of distribution) within the whole territory of the republic.

Examination of landscape-biotopical distribution

Evaluation of the current state of the population, their protection and rational use, as well as other works.

The information received from these works has also been used in making up the “Red Data Book of Animals” of RA approved by the Government decision #71 of RA, passed on January 29 for the selection of endangered animals.

Unfortunately I shall announce that the number of animals included in the new edition of the “Red Data Book” has considerably raised, in comparison with the previous one.

It should also be mentioned that during making the new “Red Data Book of Animals” of RA, the current condition of the animals of Armenia has been evaluated by the special scale worked out by International Union for Conservation of Nature and Natural Resources. (§IUCN Red List and criteria, 2001, version 3.1):

In the end of 19th and at the beginning of 20th centuries 16 species stated below were included in the list of LC mammals, the 2 of which - Felis manul and Hyaena hyaena – are not met in the territory of the republic any more. Felis manul has been seen only in two places in Armenia- Urts mountain range and Meghri region, the latest in 1935. The data on the existence of Hyaena hyaena in Armenia has been missing since 1940.

The following 6 species have been selected out of List of carnivore mammals of Armenia as LC mammals, 2 of which only Canis Lupus and Felis Lynx are not included in the “Red Data Book of Animals” of RA; the rest 4 listed and have different categories of endangerment.

1. Canis lupus, /Wolf /
2. Felis lynx, /Lynx /
3. Hyaena hyaena (Linnaeus, 1758), /Striped hyena/
4. Ursus arctos, / Brown bear /
5. Pantera pardus, /Leopard/

Ursus arctos Linnaeus, 1758

CARNIVORA

Ursidae

U. a. syriacus Hemprich et Ehrenberg, 1828



Status - According to the IUCN (International Union for Conservation of Nature and Natural Resources) Red List Criteria it is evaluated as Vulnerable-VU B1 b(iii).

Distribution in Armenia

It is met in Ararat, Vayots Dzor, Syunik, Tavush, Lori, Kotayq and Gegharqunik marzes. Sometimes it can enter Aragatsotni and Shirak marzes. It was marked at an altitude of 400-600 to 3000 m above sea level.

Quantity and its change tendencies

The quantity is not known, but it is stable. The fact that bears often go to villages doing damage fruitful gardens does not testify to their large quantity. More probably is this a result of degradation of biotopes and lack/shortage of fodder resources that leads to the fragmentation of the populations. There is no data about the number of bears in unfree conditions. It is conserved in Yerevan Zoo.

Main factors of Endangering

Poaching, extermination of biotopes, trouble caused by people.

Conservation measures

It is conserved in Khosrov and Shikahogh State Reserves, in Sevan and Dilijan National Parks and in a number of sanctuaries as well.

It is necessary to strengthen control over antropogenic impact on biota, to carry out observation for the specification of taxonomic form and subspecies status.

Panthera pardus (Linnaeus, 1758)

CARNIVORA

Felidae

Panthera pardus ciscaucasica (Satunin, 1914) =

Panthera pardus saxicolor Pocock, 1927



Status - According to the IUCN (International Union for Conservation of Nature and Natural Resources) Red List Criteria it is evaluated as Criticale CR C2a(i) + D:

Distribution in Armenia

This species inhabites southwestern and southern Armenia- from central and eastern boundaries of Khosrov Forest State Reserve (Khosrov and Khachadzor places) up to Armenia-Iran boundary at mountain ranges Geghama, Zangezur, Vayots Dzor, Bargushat and Meghri. The border of the area of distribution crosses/pass Azat river in the north-west, in the north- through Vardenis mountain range, in the west it crosses semidesert belts of the Ararat plateau, in south-west and east it passes borderline territories with Azerbaijan and passing belt between Alpine meadows and nival belt, in the south- through Araks river -lengthwise Armenia-Iran boundary. Panthera pardus lived in the north-eastern regions of the republic till the beginning of 70s.

Quantity and its change tendencies

In Armenia the highest possible number of the population of Panthera pardus is 10-15 individuals including mature, young individuals and the cubs. Population is propagative and makes up 0,008-0,01% of the world's population (about 1300 individuals). The present extent of occurrence of Panthera pardus is 7497,2 kms² (sq kms) or 25,2% of the territory of Armenia. The area of occupancy makes up 2856,8 kms² (9,6%). It includes permanent and temporary habitats and routes (passage, pass) . The predator lives permanently (constatntly) only in the central and eastern parts of "Khosrov Forest" Reserve (207.9 kms²) and to the north of Ernadzor (Nyuvadi) (207.9 kms²). The above mentioned areas are situated in the northwest and in the southwest of the distribution area and are separated from each other by rather narrow, crossing network route.

It is totally dependent on the functioning of such passages as the result of such structure of the population.

Main factors of Endangering

Among more dangerous factors is the fragmentation of the area of distribution generally caused by poaching and human economic activity: gathering of mushrooms and plants, mining, fellings, forest fires, grazing. Mountainous biotopes are not homogeneous and this fact deepens negative influence on the area of fragmentation.

Conservation measures

It is conserved in "Khosrov Forest" and "Shikahogh" Reserves, Arevik National Park and Zangezour Sanctuary.

It is necessary to take measures to reduce fragmentation factor of the area of distribution. Particularly it is necessary to unite biotopes with rich fodder supplies with large (reserves, national parks) and small (sanctuaries) protected areas.

Hyaena hyaena (Linnaeus, 1758)

CARNIVORA

Hyenidae



Status - According to the IUCN (International Union for Conservation of Nature and Natural Resources) Red List Criteria it is evaluated as Regionally extinct- RE.

Distribution in Armenia

Up to 40s it was seldom met in the semidesert landscapes of the Ararat Plateau, but later there is no data about the existence of *Hyaena hyaena* in Armenia. Probably it can be met in the semidesert belt between Karabakh and Araks River.

Quantity and its change tendencies

Most probably this species no longer lives in Armenia. They are kept in the Yerevan Zoo.

Main factors of Endangering

Poaching and degradation of biotopes.

Conservation measures

Data deficient. To strengthen control over poaching and agricultural activity.

Felis Lynx -

Felis Lynx dinniki is widely spread in Armenia: Ararat, Alaverdi, Ijevan, Hrazdan, Ghapan, Meghri regions.

This species is widely distributed in Armenia, but the number of its population isn't large. It can be seen from Lake Sevan basin to the southernmost regions of Armenia. Lynx mainly lives in the broad-leaved forests, but it was also met in open forests. In case of food shortage it may rise up to the alpine belt and come down to semi-desert belt. It feeds mainly on hare and other rodents.



Canis lupus.

Canis lupus cubanensis.

Today *Canis Lupus* (wolf) is considered a common species in Armenia and is widespread all over the country. This species can be found everywhere in Armenia, but few in number. The wolf is known for its great ecological flexibility, inhabits different sites, in Armenia it prefers open landscapes and avoids forests. In the mountains it is spread out from the mountain foot to sub-alpine meadows, can inhabit not far from settlements. The lairs are for breeding, they are usually natural shelters: rock cracks, bushes, etc. Wolves are active mainly at night time.



Activities implemented by WWF Armenia in the field of large carnivores

Since 2002 WWF Armenia has been implementing a project on Conservation of Leopard in the Southern Caucasus. There were several phases of the project. This is the regional project implemented in three countries of the Caucasus (in Georgia and Azerbaijan respectively by WWF Caucasus Program Office and WWF Azerbaijan).

The ongoing phase of the project is aimed at ensuring positive trend of endangered leopard populations as indicator of improving the nature conservation management and stabilizing the ecosystem processes in the Caucasus. In Armenia the project area includes Ararat, Vayots Dzor and Syunik Marzes.

The project activities include, but not limited to:

Field monitoring activities inside and outside protected areas, including field studies and camera-trapping. Monitoring includes wide range of animals, including leopard prey species (bezoar goat, Armenian mouflon, other mammals) as well as brown bear, lynx, wild cat and others.

Training of protected areas staff to implement field monitoring

Technical assistance to protected areas

Communications activities and awareness raising in relevant communities

In the frame of regional activities of the project the regional “Strategy for the Conservation of the Leopard in the Caucasus Ecoregion” was developed in 2007 with participation of relevant specialists and stakeholders from the Caucasus Ecoregion. In 2008 it was presented to the Ministry of Nature Protection of Armenia for comments and views. The MoNP expressed positive view on the strategy.

Later in 2008 in the frame of the same project the “National Action Plan for Leopard Conservation in Armenia” was developed on the basis of the regional strategy. It was developed by Armenian experts with large involvement of relevant stakeholders. The draft action plan for submitted to the MoNP and no additional comments were received. It is a comprehensive action plan, which includes all aspects of leopard conservation, such as research and monitoring of leopard and prey species and their habitats, establishment of well-managed system of PAs (Econet) to ensure safe existence of the leopard and its prey, ensuring efficient work of stakeholders involved in leopard, prey and habitat conservation, ensuring assistance to leopard conservation by local population and national security forces, development and implementation of awareness-raising strategy, action plan and environmental education system in relation to leopard conservation, ensuring international cooperation and coordinated activities in leopard conservation within the transboundary

areas of the leopard range. WWF Armenia activities are aimed at implementation of some activities from the Action Plan.

Since 2007 WWF Armenia implements the project “Biodiversity Protection and Community Development: Implementing Ecoregional Conservation Plan Targets in South Armenia” financed by the Norwegian Government. The overall goal of the project is to help ensure effective protection of biodiversity and sustainable management of natural resources in southern Armenia, providing an operational model that can contribute to development in the Caucasus region.

Project activities are implemented in Ararat, Vayots Dzor and Syunik Marzes. So far project activities were implemented in Khosrov Forest and Shikahogh State Reserves, preparatory work for establishment of Gnishik PA in Vayots Dzor Marz, also community development activities and others. For 2010-2011 activities are planned for Zangezur Sanctuary and Arevik National Park (Syunik Marz), Gnishik PA, also community development activities.

In the frame of this project in 2008 the “Large Mammals Monitoring Program for Shikahogh Reserve” was developed and later on submitted to the MoNP. It is a detailed program and schedule of monitoring to be implemented by the reserve staff. The species to be monitored include also large carnivores such as Caucasian Leopard, Eurasian Lynx and Brown Bear. The program presents the methodology of monitoring, monitoring protocols and other necessary materials. Later on in the frame of the project the monitoring training was implemented for the reserve staff to provide relevant knowledge and technical capacities for the monitoring implementation.