ENSURING THE INTEGRATION OF SCIENCE AND EDUCATION ON THE BASIS OF INNOVATIVE TECHNOLOGIES.

International online conference.

Date: 19th September-2025

ENDANGERED MAMMALS IN UZBEKISTAN

Khakberdiyeva Shoira Tursunaliyevna

Doctor of Philosophy in Pedagogical Sciences (PhD)

Termez State Pedagogical Institute
Senior Lecturer, Department of "Chemistry and Biology"

E-mail: xakberdiyevashoira81@gmail.com

Turopova Mukhlisa Barot's daughter

PhD student at Termez State University of Engineering and Agrotechnology

E-mail:turopovamuxlisa223@gmail.com

Raimova Feruza Jumanazar's daughter

Teacher at school 33 in Muzrabot district of Surkhandaryo region. E-mail:feruzaraimova19950227@gmail.888com

Annotation: This article discusses the problem of endangered mammals. It analyzes the factors that contribute to the decline in the number of these animals, including habitat loss, climate change, poaching, and other negative impacts of human activity. It also provides information on international and local measures to protect mammals, protected areas, and recovery programs. The article draws attention to current issues related to nature conservation and calls on biologists, ecologists, and the general public to find solutions to this problem.

Key words: Natural diversity, Threat of extinction, Conservation of mammals, Ecological balance, Central Asian leopard, Turkestan lynx, Amu Darya muskrat, Argali wild sheep, Biodiversity, Impact of climate change, Illegal hunting, Conservation measures, Reserves and national parks, Natural heritage for future generations.

Introduction: The amazing diversity of nature is an invaluable asset for humanity, and mammals are an integral part of it. However, in recent centuries, as a result of human activity, many animal species have been threatened with extinction. Factors such as deforestation, climate change, illegal hunting, and habitat destruction pose a serious threat to the natural population of mammals. Today, the preservation of animals that are on the verge of extinction is important not only for maintaining ecological balance, but also for passing on the natural heritage to future generations.

Main part: Central Asian leopard (Panthera pardus tulliana). The Central Asian leopard lives mainly in mountainous areas, including subalpine grasslands, mixed forests and deserts. Their habitat extends from the Iranian plateau to parts of the Caucasus and Central Asia. They are usually nocturnal and roam their territories at night to hunt. Their fur is a pleasing yellow-gold color, decorated with black spots and rings. Their body is robust, strong, and their long tail serves to maintain balance.



ENSURING THE INTEGRATION OF SCIENCE AND EDUCATION ON THE BASIS OF INNOVATIVE TECHNOLOGIES.

International online conference.

Date: 19th September-2025

An adult leopard can be 90-190 cm long and weighs an average of 30-70 kg. The leopard is mainly a predator, feeding on deer, mountain goats, wild sheep and other medium-sized animals. They adapt their hunting habits depending on their habitat. Today, the Central Asian leopard is under threat of extinction, mainly due to hunting and poaching, destruction of natural habitats, and a decrease in the number of prey animals. A number of measures are being taken to preserve this species.

The creation of reserves and national parks, the fight against illegal hunting, research and monitoring of the leopard population, informing local residents about this species and involving them in its protection.

Turkestan lynx (Lynx lynx isabellinus). The Turkestan lynx is a subspecies of the Eurasian lynx. This predator is found mainly in Central Asia, the Indian Himalayas and the Tibetan mountains. It also has other names, such as the Central Asian lynx or Tibetan lynx. Its coat changes in winter and summer. In summer, it is brown or reddish, decorated with black spots. In winter, it becomes silver-gray or gray-brown. It has long whiskers and distinctive black tufts on the tips of its ears. Its body length is usually between 80-130 cm, and its weight is 15-30 kg. The Turkestan lynx lives mainly in forests, rocky areas, mountain slopes and open steppes. It prefers high mountain areas, but adapts to any area where there is enough food. It is a predator and hunts wolves, deer, and wild animals.

It also feeds on small mammals and birds. The Turkestan lynx lives alone. It is a nocturnal animal and is more active at night to hunt. During the breeding season, the female lynx gives birth to several cubs. The cub lives with its mother for 2 months and then begins an independent life. The Turkestan lynx is considered relatively vulnerable. Its population is decreasing in the region due to human activity, hunting, and climate change.

Amu Darya muskrat (Arvicola amphibius). The Amu Darya muskrat is a rodent that lives in water and on land, often called the water rat. This animal is characterized by its body adapted to water. It is found around many rivers, canals and reservoirs. Its body length is 14-22 cm. Its tail is about half the length of its body. It weighs from 70 to 250 grams. Its fur color is brown to black. It is covered with thick, silky soft fur. Its hind legs are strong and slightly webbed to facilitate swimming in water. The Amu Darya muskrat lives on the banks of rivers, lakes, canals and other reservoirs. It digs complex burrows underground.

These burrows often have a tunnel that allows it to enter and exit the water. It tries to live close to water. It feeds mainly on plants, roots, leaves and aquatic plants. In some cases, it can also feed on small aquatic animals. Water rats are usually solitary, but during the breeding season they live in pairs.

The breeding season begins in spring or summer. Females give birth to 5-8 young 2-3 times a year. Young muskrats grow quickly and begin an independent life in a short time. The Amu Darya muskrat is classified as "least concern" by the International Union for Conservation of Nature (IUCN). However, in some areas, its population may decrease due to environmental factors and human activities. Water pollution and habitat destruction threaten this species.



ENSURING THE INTEGRATION OF SCIENCE AND EDUCATION ON THE BASIS OF INNOVATIVE TECHNOLOGIES.

International online conference.

Date: 19th September-2025

Wild sheep - argali (Ovis ammon). Argali is one of the largest species of mountain sheep, living mainly in Central Asia, the Himalayas, Tibet and the Altai Mountains. Their name "argali" is taken from the Mongolian language and means "wild sheep". Height, 85-135 cm. Length 136-200 cm. Weight of males 97-328 kg, females 43-100 kg. Horns Males have large spiral-shaped horns, which can reach a length of 190 cm. Females have smaller horns. Skin color, From light yellow to reddish-brown in summer, and darker in winter.

Argali mainly lives in high mountainous areas, but is also found in steppe and forested areas. They prefer areas at an altitude of 3000-5000 meters. It feeds mainly on grasses, shrubs, and other plants. In winter, when food is scarce, it eats dry plants and roots. The breeding season begins in autumn. Females give birth to 1-2 young at a time. Young argali reach sexual maturity in 3-4 years. Argali are classified as "near vulnerable" by the International Union for Conservation of Nature (IUCN).

Conclusion: The issue of endangered mammals is one of the most pressing environmental problems today. As a result of human activity, many species are losing their natural habitats, which is seriously damaging biodiversity. However, if appropriate measures are taken, it is possible to slow down this process and even save some species. Expanding protected areas, combating illegal hunting, adhering to the principles of sustainable development and raising public awareness are the most important tools in this regard. Everyone can contribute to the preservation of nature - this is of incomparable importance not only for animals, but also for future generations.

REFERENCES:

- 1-S. Dadayev, Q. Saparov; 0'zR oliy a o'rta-maxsus ta'lim vazirligi. T.Cho'lpon nomidagi nashriyot-matbaa ijodiy uyi, 2011. 512 b.
- 2- S.Dadayev/O. Mavlonov; OʻzR oliy va oʻrta maxsus ta'lim vazirligi, Nizomiy nomidagi Toshkent Davlat pedagogika un-ti. "TIQTISOD-MOLIYA" 2008, 184 b.
- 3- S. DADAYEV, S. TOʻYCHIEV, P. HAYDAROVA Oʻzbekiston faylasuflari milliy jamiyati nashriyoti Toshkent-2006
- 4. Haqberdiyeva S. T. The role of pedagogy and psychology in improving the methodology of teaching biology based on a general approach to secondary schools //Texas Journal of Multidisciplinary Studies. -2022.-T. 6. -C. 115-118.
- 5. Haqberdiyeva S. T. Improving the Teaching Methods of Biology in General Secondary Schools on the Basis of A Competency-based Approach //Academicia Globe. -2022. T. 3. $-N_{\odot}$. 03. -C. 132-136.
- 6. Tursunaliyevna H. S., Nozima A. Effectiveness of using innovative technologies in teaching the morphology of bacteria //Journal of Universal Science Research. -2023. T. 1. No. 10.-c. 60-66.
- 7. Xakberdiyeva Hilola Abdusaid qizi 2022 METHODS OF FISH GROWING AND STUDY IN FISHERIES. EURASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES Issue 02 22-28.



International Conferences | Scientific Online | Conference Proceedings

ENSURING THE INTEGRATION OF SCIENCE AND EDUCATION ON THE BASIS OF INNOVATIVE TECHNOLOGIES.

International online conference.

Date: 19th September-2025

- 8. Turopova M., Bekmurodov A. Surxondaryo viloyati sharoitida na'matak (*Rosa canina* L.) nematodalari // Qoʻqon DPI. Ilmiy xabarlar. 2025-yil 4-son. 622-626 b.
- 9. Xakberdiyeva Hilola Abdusaid qiz 2021 Fish growing in Yangiyer fishing farm of syrdarya region of the republic of uzbekistan Galaxy international interdisciplinary research journal (giirj) Issn (e): 2347-6915 1311-1316 bet.

