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VERTEBRATE DIVERSITY AND ZOOBIOLOGY IN CENTRAL ASIA

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Annotation: The role of Central Asian animals in human life, their conservation and reproduction, especially efforts aimed at preventing the extinction of rare species in nature, can be seen. Several ways to preserve them were shown. Due to the diversity of the natural conditions of Central Asia, its fauna is also unique and colorful. Central Asia, with its natural conditions, is rich in various vertebrate species. This region, with its desert, mountainous and forested areas, creates various ecological environments, which provide favorable conditions for the life of various animals. Research on the biology of vertebrates, their habitats and their role in the ecological system is important in ensuring the ecological protection of Central Asia. This knowledge helps to preserve animals and manage their reproduction.

Keywords: Central Asia, vertebrates, biodiversity, adaptations, threats, conservation.

Introduction. Central Asia is a region with a unique and diverse vertebrate fauna. Climatic conditions, relief, and historical features of the formation of ecosystems have had a significant impact on the species composition and distribution of animals. In this work, we consider the main groups of vertebrates living in Central Asia, their adaptation to local conditions, and factors threatening their existence.

Main part. Features of the vertebrate fauna of Central Asia.

Geographical location and climate: Central Asia is located in a temperate climate zone, with hot, dry summers and cold winters. The relief of the region is diverse: from deserts to mountain systems. These factors determine the diversity of habitats and, accordingly, the species composition of animals. The main groups of vertebrates:

Mammals:

Predators: wolf, jackal, fox, hyena, leopard, snow leopard, lynx.

Central Asian predators

Artiodactyls: saigas, gazelles, kulans, wild boars.

Artiodactyls of Central Asia



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Rodents: gophers, jerboas, gerbils, mice, rats.

Rodents of Central Asia

Chiroptera: Various types of bats.

Birds of prey: Golden eagle, eagle, falcon, falcon.

Birds of prey of Central Asia

Singing birds: Lark, nightingale, starling, various types of sparrows.

Waterfowl: ducks, geese, swans.

Reptiles: Lizards: Agamas, geckos, roundheads.

Central Asian lizards

Snakes: snakes, vipers, snakes.

Central Asian snakes

Turtles: steppe tortoise.

Amphibians:

Frogs: Green frogs, lake frogs.

Toads: Green frogs.

Fish:

Chuchuk suv baliqlari: sazan, sazan, qorabaliq, perch.

Migratory fish: Otyur, beluga.

Adaptation of animals to environmental conditions

Animals of Central Asia have various adaptations that allow them to survive in harsh conditions:

Physiological adaptations: development of thermoregulation, ability to fast for long periods, accumulation of fat reserves.

Behavioral adaptations: nocturnal lifestyle, migration, creation of burrows and shelters.

Morphological adaptations: development of long limbs for fast running, thick fur for protection from the cold, special claws for digging holes.

Threats to biodiversity

Anthropogenic impact: land degradation, environmental pollution, poaching, climate change.

Competition from domestic animals: the spread of domestic animals leads to a decrease in the number of wild species.

Introduction of alien species: The introduction of new species of animals can disrupt established ecosystems.

The following scientists have made a special contribution to the organization of vertebrates in Central Asia, especially in Uzbekistan.

On fish: prof. G. Komilov, on reptiles: prof. O. P. Bogdanov, on birds: prof. A. K. Sagitov, prof. D. Yu. Kashkarov,

R. N. Miklenburshev, M. M. Ostapenko, on mammals: prof.

O. P. Bogdanov, prof. G. S. Sultanov, dos. V. I. Taryannikov.

Conclusion: The vertebrate fauna of Central Asia is rich and diverse. However, as a result of anthropogenic impact, many species are under threat of extinction. To preserve

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biodiversity, it is necessary to take measures to protect nature, establish reserves and national parks, and conduct educational work among the population. Vertebrates are of great importance in human life. They are carriers of pathogens of a number of infectious diseases (plague, tularemia, rabies, encephalitis, etc.). Due to the diverse natural conditions of Central Asia, its fauna is also unique and colorful. In Central Asia, there are desert, mountain and forest areas, which contain a variety of vertebrate and invertebrate animals. There are predators, herbivores, and migratory birds that are often seen here.

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