ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 03,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

THE FLORA AND FAUNA OF THE REPUBLIC OF UZBEKISTAN

Isakov Otabek Nurdinjonovich

Andijan Region, Buloqboshi District,

Polytechnic College No. 1 Geography Teacher

Abstract: Nature conservation is a set of measures aimed at rational use of the nature and its resources surrounding us, conscious transformation in the interests of man, preservation and further enrichment of natural resources and nature in general, its beauty. Since the emergence of human society, it has been using natural resources for various purposes. As a result, there is a significant decrease in the number of flora and fauna, and even the threat of extinction of some species. This requires appropriate protection of nature to this day. The article discusses the important role of reserves, special reserves, biosphere reserves, national parks, nurseries, and natural monuments in protecting natural resources and the diversity of flora and fauna in our country, and their role in solving the most urgent problems of our time, such as protecting unique and endangered flora and fauna, preserving and multiplying those that are under threat of extinction.

Keywords:biodiversity, white and black saxaul, species of rattlesnakes, climate, fauna, flora, ephemeral, ephemeroids, gazelle, breeding rooms.

Introduction in order to ensure the implementation of the tasks of expanding the area of protected natural areas in the “Strategy for the Conservation of Biological Diversity in the Republic of Uzbekistan for 2019-2028”, approved by the Decree of the President of the Republic of Uzbekistan No. PF-6155 dated February 3, 2021 and the Resolution of the Cabinet of Ministers No. 484 dated June 11, 2019, a lot of work was carried out in 2021. By Resolution of the Cabinet of Ministers No. 58 dated February 8, 2021, the “Sudoche-Akpetki” state reserve with an area of 280,507 hectares was established in the Republic of Karakalpakstan. By Resolution No. 282 of the Cabinet of Ministers of May 5, 2021, the Regulations on protected zones of the Zamin, Nurota, Kyzylkum and Surkhan state reserves and protected natural areas were approved. Based on the model regulations, regulations on protected zones of 6 protected natural areas were developed and approved.

Also, by the Resolution of the President of the Republic of Uzbekistan “On measures to establish protected natural areas within the system of the State Committee of the Republic of Uzbekistan for Ecology and Environmental Protection” dated February 16, 2022 No. PQ-131, the “Central Kyzylkum” National Nature Park with a total area of 1,200,000 hectares in the Uchkuduk district of Navoi region; and the “Aqtog-Tomdi” State Reserve with a total area of 40,000 hectares in the Tomdi district were established in the form of a state nature protection institution. In connection with the establishment of these protected natural areas, work was carried out to increase the total area of protected natural areas to 11.2% of the territory of the Republic of Uzbekistan. In order to preserve endangered animal and plant species, establish ecological stability, and increase the number of rare and endangered species, various measures are being taken in our country to expand specially protected areas and bring them under state protection.

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 03,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

The territories of the established "Central Kyzylkum" National Nature Park and the "Aqtog-Tomdi" State Reserve are very important and have rich biodiversity. The National Nature Park and the State Reserve protect the unique natural complexes and objects of the Kyzylkum Desert, as well as rare animals and birds that are under threat of extinction, as well as plant species and landscapes in these areas. As a result of the establishment of the National Nature Park and the State Reserve, natural complexes and objects in the central part of the Kyzylkum Desert, including more than 30 species of rare animals and more than 10 species of plants included in the Red Book of the Republic of Uzbekistan, will be territorially protected. It should be noted that almost 80 percent of the population of a rare animal species - the gazelle in the Kyzylkum Desert - lives in these protected natural areas.

Climate. The climatic characteristics of the Central Kyzylkum National Park change from north to south. The climate of the northern part is mainly formed under the influence of the Central Asian anticyclone and cyclones coming from the west, while the climate of the southern part is influenced by tropical air masses. Therefore, the winters of this region are cold and long, with an average January temperature of -4-10° in the north and -1-2° in the south. The total amount of rain and snow that falls in the Central Kyzylkum is 21.4-34.7%, of which 3-5 mm precipitation accounts for 12.7-23.7%, 5-10 mm precipitation accounts for 8.5-14.5%, and 20 mm precipitation accounts for 2%. The maximum amount of main precipitation (3-5mm) occurs on average 3-15 times per year, and precipitation of 5 mm occurs 3-8 times. The distribution of runoff during the year is as follows: 1 mm falls at the expense of 50-63%, 5 mm at the expense of 24-44%, and 10 mm at the expense of 3-17%. In central Kyzylkum, the average temperature in January is -7°, -11°, in July the temperature is + 28, + 30°, in winter the minimum temperature can drop to -30, -33°. Throughout the year, northerly winds are stable (28-44%). The average speed reaches 4-7 meters per second. Northeasterly winds also blow often. Strong winds reach 20-25 m per second, occur more often in spring and summer. Soil. The formation of soil in the desert zone is greatly influenced by the lithological and chemical composition of the soil-forming rocks.

As a result of the diversity of soil-forming rocks in Central Kyzylkum, various soils have formed. Sandy soils have formed in the region under the influence of wind erosion. In addition, the type and amount of salts in the parent rock also affect the salinity of the desert zone soils. The Kyzylkum desert is mainly composed of desert-sand soils. Although the soil layers distributed in the Central Kyzylkum region are very sparse and not rich in humus, they play an important role in the life of the plants growing in them. After all, the vital activity of plant species that have been forming for millions of years plays an important role in the formation of soil and increasing its fertility. Although the soil in the Kyzylkum region is not very well formed, the sand content in it is rich in minerals, which creates certain advantages for the development of plants. Sandy soils are widespread in Kyzylkum. In places where natural vegetation is widespread, unique sandy soils have formed. Such areas are densely covered with ephemerals in the spring. However, starting in May, as soon as warm days begin, these plants cease their life activity.

There are more than 600 plant species in the Central Kyzylkum National Nature Park. The most common of them are spring-growing ephemerals and ephemeroids - rang, kong'irbosh, yaltirbosh, tulip, boychechak, chuchmoma, kavrak, etc. With the onset of summer, they end their vegetation period and turn yellow. Then, plant species adapted to drought and saline soils grow. Plants such as juzgun, white saxaul, rabbit bone, sand acacia, kandim, and selenium grow on the fortified sands of the region. Wormwood, burgan, and tashburgan are widespread on lands with

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 03,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

gray-brown soil. In the salt marshes of the region, karasaksavul, yulgun, balykko's, sarsazan, and in the barren lands, sedge grows. As a result of the establishment of the Central Kyzylkum National Nature Park and State Reserve, natural complexes and objects in the central part of the Kyzylkum Desert, including more than 30 rare animal species and more than 10 plant species included in the "Red Book" of Uzbekistan, will be brought under territorial protection. It is noted that in these protected natural areas, about 80 percent of the population of a rare animal species - gazelles in the Kyzylkum Desert lives. In order to effectively organize the monitoring process in the National Nature Park, 7 wagons have been brought. Also, work is underway to deliver, install and technically support photo traps.

In particular, the gazelle is a mammal of the gazelle family, which is protected in the Central Kyzylkum National Park. Its body length is 94-115 cm, height 60-65 cm, and weight 25-30 kg. The female is mostly hornless. The male's horn is black, thick, and jointed (up to 40 cm long). It is distributed in Central Asia and Western Asia, including the Caucasus, Turkmenistan, Uzbekistan, the southern regions, and the steppes and steppes of Kazakhstan. It grazes in herds of 4-7 in spring and summer, 15-20 in winter, sometimes several hundred. It feeds on cereals and ephemeral plants in the spring, and on sorrel and wormwood in the fall; In winter, it feeds on twigs and fruits of bushes. The gazelle has thin legs and runs fast (up to 60 km per hour). It gives birth to 1 to 2 young in April-May. It reproduces well in captivity, but does not live long. Its number has decreased significantly due to heavy hunting for its meat and skin. Special nurseries have been established in Bukhara and Surkhandarya for the breeding of gazelles.

Another common plant under protection in the Central Kyzylkum Desert is the saxaul. The saxaul is a plant belonging to the family of the Solanaceae, reaching a height of 1.5-2 meters, with a trunk diameter of up to 1 m. The saxaul lives for 50-60 years. White and black saxaul species are found in the Kyzylkum Desert of Uzbekistan. The leaves of the saxaul are pointed, underdeveloped, cone-shaped, and the flower-bearing shoots grow from old branches. The green shoots of the saxaul serve to accumulate organic matter. Most of the annual young branches fall off in the fall, especially with the onset of cold weather, while a smaller part turns into wood and remains. It begins to bloom in April, and fruits in October. Black saxaul (H.aphyllum) is a leafless shrub or tree, up to 4-9 meters high, widely distributed in saline soils, saline sands, and barren areas. It reproduces by seeds. It is used to create groves. Black saxaul forms large groves, and differs from white saxaul in the darkness of its trunk and branches, and the structure of its leaves. White saxaul is a large shrub up to 2.5 m high, at least up to 5 m, with small leaves. White saxaul is mainly planted to strengthen sand dunes. Saxaul species found in the Kyzylkum desert play an important role in protecting the soil from erosion. Also, white and black saxaul species have a particularly good ability to filter groundwater and are well adapted to grow in sandy and sandy sandstone deserts.

References:

1. Decree of the President of the Republic of Uzbekistan dated February 3, 2021 No. PF–6155.
2. Approved by the Resolution of the Cabinet of Ministers dated June 11, 2019 No. 484
3. “Strategy for the Conservation of Biological Diversity in the Republic of Uzbekistan for 2019-2028”.
4. S. Dadayev, O. Mavlonov “Zoology” “Economy-Finance” Tashkent Publishing House
5. 2008.
6. G. Shagiakhmetova “Protected Natural Areas in the Republic of Uzbekistan” article.
7. uznature.uz
8. www.arxiv.uz