



ISSN: 2350-0328

**International Journal of Advanced Research in Science,  
Engineering and Technology**

**Vol. 9, Issue 11 , November 2022**

# **Protected Natural Areas and Their Significance in Improving the Ecosystem of Our Republic**

**Khakimov Uktam, Adilov Sobit, Mamanazarov Jaloliddin  
Babaeva Zarifakhon, Buzanov Yigitali**

Dotsent, Senior researcher, Navoi Branch of the Academy of Sciences of the Republic of Uzbekistan,  
Navoi, Uzbekistan

Junior researcher, Navoi Branch of the Academy of Sciences of the Republic of Uzbekistan, Navoi, Uzbekistan

Director, "Central Kyzylkum" National Nature Park, Navoi, Uzbekistan

Researcher, "Markaziy Kyzylkum" National Nature Park, Navoi, Uzbekistan

Researcher, "Markaziy Kyzylkum" National Nature Park, Navoi, Uzbekistan

**ABSTRACT:** In the era of continuously developing digital technologies, the environmental condition of nature is changing day by day. Such drastic changes bring very negative consequences. Among them, the decrease in the genetic purity of each species in the worlds of fauna and flora, the decrease in the number and quality of organisms and the disturbance of the balance of environmental factors necessary for the growth and development of organisms are the reason. In this article, detailed information is provided on the reasons for the disturbance of the ecological balance in nature, measures to prevent them, specially protected natural areas and their importance, as well as the activities organized in our republic for the protection and preservation of nature.

**KEYWORDS:** rare and endangered species, specially protected areas, natural annals, phonological observation, genetic purity.

## **I.INTRODUCTION**

As a result of the continuous impact of mankind on nature for several centuries, the ecological balance existing in nature has been disturbed. As a result, some species have completely disappeared and some species have decreased in number. In order to prevent such tragic consequences, to reduce the continuous impact of man on nature, to preserve the natural environment and natural biodiversity of organisms, specially protected natural areas have been established around the world. Also, such areas have been established in our republic, and necessary measures are being taken to expand the area of specially protected areas and to protect the plant and animal species living in these areas. Including the total area of specially protected areas established in our republic

Making up 12.9%, the main purpose of creating such areas is to save endangered and threatened species of animals and plants, to establish ecological stability in nature, to increase the number of rare, endangered and threatened species, and to increase the number of species in our country. various measures are being implemented in order to expand the area of specially protected areas and bring them under state protection. Such activities have been implemented step by step in the territory of our republic after we gained independence.

The main goal of each protected area established in our country is to treat each plant and animal species present in a certain area as a single historically unrepeatable species, to ensure its genetic purity, and to ensure its unique place and stability in any biological community. Protected natural areas are divided into the following categories depending on their purpose and regime:

- state reserves;
- complex (landscape) order reserves;
- nature parks;
- state nature monuments;
- areas intended for preservation, reproduction and restoration of certain natural objects and complexes;
- protected landscapes;



ISSN: 2350-0328

# International Journal of Advanced Research in Science, Engineering and Technology

Vol. 9, Issue 11, November 2022

- territories designated for the management of certain natural resources;

Also, in order to expand the area of protected natural areas in our republic, preserve and restore ecologically valuable natural objects and complexes, rare and disappearing species of flora and fauna, in cooperation with the State Committee for Ecology and Environmental Protection and the administration of Navoi region, Uchkuduk In connection with the establishment of the 1,200,000-hectare national nature park "Central Kyzylkum" in the district and the establishment of a nature reserve with an area of 40,000 hectares in the Tomdi district, the Decree No. 131 of the President of the Republic of Uzbekistan dated February 26, 2022 on measures to establish protected natural areas was approved. According to the decision, the State Ecological Committee approved the executive structures of the "Central Kyzylqum" National Nature Park and the Oktog-Tomdi State Reserve for a period of two months and passed the state registration in the prescribed manner, and qualified specialists of the "Central Kyzylqum" National Nature Park and the "Oktog-Tomdi" State Reserve filled with A "Nature Chronicle" is organized for each separate protected area in the regions, and in these chronicles, changes in the flora and fauna of the national nature park, research on their numerical increase or decrease, and changes are recorded. In addition, during the activity, phenological observations are made, and future plans are made based on them. The aim is that the data representing other aspects during one or another stage of development of the animal or plant species under consideration will be accurate and reliable. Also, carrying out propaganda activities among the population will lead to a decrease in the impact of the population on these protected areas. Each employee operating in the territory of the National Nature Parks will be charged with issues and tasks such as participating in raids according to the regime.

The protection and rational use of each protected natural area in our republic is carried out under state control, that is, by the State Committee for Nature Protection of the Republic of Uzbekistan and local protection authorities.

Protected natural areas in our republic are considered as a whole system, the main goal of which is to preserve biodiversity for a long time, increase it and turn it into a continuous ecological species.

## II. SIGNIFICANCE OF THE SYSTEM

In the era of continuously developing digital technologies, the environmental condition of nature is changing day by day. Such drastic changes bring very negative consequences. The study of methodology is explained in section III, section IV covers the experimental results of the study, and section V discusses the future study and conclusion.

## III. METHODOLOGY

This year, in order to determine the routes for the animal world census and monitoring of the "Markaziy Kyzylkum" National Nature Park under the authority of the State Committee for Ecology and Environmental Protection, as well as to conduct the 2022 autumn animal count, from the Department of Natural Areas Protected by the State Ecology Committee, "Markaziy Kyzylkum" National Park Together with the experts on protected natural areas from the directorate of the nature park, the regional Department of Ecology and Environmental Protection, the inspectors of the "Central Kyzylqum" National Nature Park and all scientific staff, as well as the employees of the conservation department of the "Central Kyzylqum" National Nature Park, the "Central Kyzylqum" National Nature Park According to the order of the administration of the nature park No. 01/05 of 15.11.2022 on determining the routes of the fauna census in the territory of the national nature park and conducting the autumn fauna census of 2022, taking into account the nature of the natural complexes in the territory of the nature park, 2 number of routes (the length of the first route is 260 km. the length of the second route is 120 km. these routes are self-counting routes), one stationary (from the "Shanishkol" base point) polling point was determined, and on November 17, 2022, from 8:00 a.m. to 18:00 p.m. on November 18, an animal count was conducted.



**Figure 1. An autumn wildlife census was held together with the staff of "Markaziy Kyzylkum" National Nature Park.**

A scientific approach to enumeration along the designated routes was entrusted to the responsible persons. The enumeration routes were mainly determined for the enumeration method in the autoroute style and stationary enumeration work was carried out with stops every 2 kilometers and depending on the nature of the natural complexes. In addition, on November 18, 2022, from 8:00 a.m. to 9:00 a.m., on the coast of "Shanishkol", an animal count was carried out from the "Shanishkol" base counting point to count water birds. was determined by recording animal tracks. The results of the count were recorded in the count statement. The enumeration area covered by enumeration routes was 76,000 hectares.

#### IV. EXPERIMENTAL RESULTS

**The total number of animals encountered during the census period is given in the table below:**

№	Animal name	Number of occurrences	Male	Female	One year old	Kiddy	Sex uncertain	Total
1	Goitered Gazelle	13	12	17	7	-	-	36
2	Steppe Cat	12	9	5	-	-	-	14
3	Fox	7	3	2	1	-	3	9
4	Corsac Fox	4	2	-	-	-	2	4
5	Wild Boar	3	2	2	8	6	-	18
6	Great Gerbil	12	20	14	-	-	8	42
7	Tolai Hare	7	6	3	3	-	6	18
8	Large Souslik	9	9	9	-	-	3	21
9	Wolf	3	5	3	-	-	3	11
10	Black-bellied Sandgrouse	7	16	26	-	-	55	97
11	Long-legged Buzzard	7	7	-	-	-	-	7
12	See-see	3	2	3	-	-	4	9

	Partridge							
13	Eagle	2	1	1	-	-	-	2
14	Pander's Ground-Jay	16	7	5	-	-	4	16
15	Griffon Vulture	4	-	-	-	-	4	4
16	Marsh Harrier	2	1	1	-	-	-	2
17	Whooper Swan	1	3	3	-	1		7
18	Green-winged Teal	4	4				141	145
19	Mallard	4	23	-	-	-	89	112
20	Red-Crested Pochard	2	3	-	-		29	32
21	Greylag Goose	2	2	7	-	-	5	14
22	Pallas's Sandgrouse	4	7	8	-	-	-	15
23	Common Pheasant	5	4	3	-	-	-	7

During the census, nests of birds of prey with traces of life in trees and bushes were recorded. Their total number was 12 along the route.





**Fig. 2 Photograph of the counting processes using tracks during the autumn fauna census in the "Markaziy Kyzylkum" National Nature Park**

#### **V. CONCLUSION AND FUTURE WORK**

In conclusion, it should be noted that deep understanding of the importance of preserving biological species, rational use of biological resources available on earth to meet the economic and social needs of people, and the formation of scientific and practical skills for nature protection, stabilization of the balance in nature, and careful treatment of each existing species issues are the main issues of today. The results of any scientific activities will be more effective if the purpose of each protected area that is being created includes: In this:

- preservation and control of the biological resources of the protected area, including the biological diversity of each species of flora and fauna;
- to carry out reproduction without harming endangered and endangered species and breeds;
- to ensure the genetic purity of each species in the breeding of endangered and threatened animal and plant species;
- to carry out both theoretical and practical propaganda work on nature conservation among the population;

To the extent of the positive effects of any activity carried out, it is necessary to preserve the genetic fund of plants and animals, to reduce the negative impact of the human factor on nature and to take restrictive measures against some endangered species, to identify natural processes that affect the organisms present in the territories, to carry out environmental monitoring and society between nature and all its natural resources, it leads to the improvement of ecological knowledge and their control. In the current technical and technological era, everyone realizes that it is necessary to prevent the decline of natural resources, including the world of flora and fauna, to preserve and preserve special plant and animal species with the help of laboratory, analytical or field methods.

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