

---

## Bukhara Region Migrant Birds their Diversity and Protection

*Salimova Sarvinoz Farkhodovna*

*Bukhara State University, Department of Biology, Doctor of Philosophy in Pedagogical Sciences (PhD)*

*Mukhammedova Mokhinur Sodiqovna*

*Master, Bukhara State University, Department of Biology*

---

**Abstract:** The protection of sedentary and seasonal bird species in Uzbekistan, the identification of important habitats for birds, the study of which will arouse the interest of young naturalists in the field of ornithology. This article is about the protection of migratory birds in Bukhara region

**Key words:** Birds, indicator, red book, ornithology, conservation.

Birds are one of the most diverse vertebrates in the world. We know that birds are found in all habitats on earth, but also as an "indicator" species that is the first to show changes in environmental conditions. At the current stage of human society, one of the most pressing issues for human life is to stop the destruction of natural components in the region by identifying the negative changes in natural ecosystems, identifying their sources and positively eliminating this process. . Of course, this is not an easy task, but it is possible to smooth the process and mitigate the negative impact. Preserving biodiversity, which has been formed for thousands of years and has survived to the present day, is one of the main tasks facing humanity. [1-5]

It is known that the Republic of Uzbekistan acceded to the International Convention on Biological Diversity in May 1995 by a resolution of the Oliy Majlis. Over the past period, the country has done a lot of positive work in this area. The Red Book of Uzbekistan has been established in the country, which provides information on the number of endangered species in the country. We know that the diversity of ornithofauna in the territory of the Republic, according to today's data, consists of 466 species, of which 51 species of birds (including subspecies) are included in the "Red Book" of the Republic. It is of great scientific and practical importance to determine the current distribution of these species, to determine their number, to analyze the specificity of their bioecology and, most importantly, to identify the main meeting places of these species during wintering, nesting and spring and autumn migration. It should be noted that in our region, significant work is being done on environmental protection, especially on the protection of the bird world. [7-11]

### **Including:**

1. The Society for the Protection of Birds of Uzbekistan and its local branches, formed as a non-governmental non-profit organization in Uzbekistan, are actively involved in the protection of birds in our country. Registered with the Ministry of Justice on November 14, 2007, the society operates under the Institute of Gene Pool of the Academy of Sciences of Uzbekistan. At present, Nukus, Bukhara and Samarkand state universities, which unite hundreds of specialists and students, and the regional branches of the society operate at the National University of Uzbekistan. The main goal of the society is to protect sedentary and seasonal bird species in Uzbekistan, to identify important habitats for birds, to arouse the interest of young naturalists in the field of ornithology through the study of birds. .

2. At the end of 2005, Uzbekistan became a participant of another international program "Important Bird Areas" (IBA) "Important Ornithological Zones" (MOH). This program is also a unique example of the implementation of the Convention on Biological Diversity. IBA makes a significant contribution to the development of the World Bird Protection Organization (BirdLife International). This organization developed the concept of MOH in the 80s of the last century, and by 1989 it had published works on MOH in Europe and in 1994 in the Middle East. MOH is also designed for individual European countries. There are MOH projects in Africa, America, and partly in Asia. It is also planned to identify MOHs in the Pacific and Western Siberia. At the level of the MOH program, a list of places of international importance for the conservation of birds will be compiled. Such locations are determined based on standard global criteria. It is planned to identify the most important habitats of birds. At the same time, the indicator nature of the general state of biodiversity of birds is taken into account, and many MOHs are important for other animals and plants in terms of nature conservation. However, on the world map of the MOH (which marked more than 10,000 MOHs), the Asian region was in the form of a "white spot" until recently. That is, the bird's favorite habitat in the area was not mentioned. The region's ornithofauna covers more than 2,700 species, representing more than a quarter of the world's bird diversity. Population growth and active economic development in the region have a significant impact on natural ecosystems. As a result of human activity, degradation is taking place almost everywhere, and in some areas, steppes, forests and wetlands are completely disappearing. Such a pressure can be seen in the example of birds. 332 species in the region are threatened with global extinction. The IBA Asia Program was launched in 1996. Its goal is to preserve and protect birds in the region and biodiversity in general. In the spring of 2005, the IBA program was launched in Uzbekistan under the auspices of BirdLife International. Since then, a lot of work has been done to identify important ornithological areas (MOH) in the country. Based on the data collected in different years at the disposal of ornithologists in the country, a list of 56 potential MOHs was identified and registration forms were filled out for about 51 MOHs. Another important aspect of ornithological areas is not only the protection of rare or endangered species, but also due to the fact that birds meet in different habitats in the territory of the Republic - nesting, spring, autumn migration or wintering (wintering, flying). The main character or appearance of the birds in groups, such as solitary or gala, pure or mixed, also plays a decisive role in the groups. Therefore, the number of bird colonies found in the regions, especially in water bodies, the number of representatives of some species in the colony and its status are important. In determining the important ornithological areas, the conditions of use around the world have been agreed, according to which the birds are divided into 4 categories, and each category, in turn, is regrouped according to certain characteristics of the birds. [12-18]

These data show that in determining important ornithological zones, not only the number of species, but also their flight routes, including the composition of the gala they form, the number of birds in the gala, the number relative to the world population and the natural conditions of the place where they are recorded, plays a decisive role. However, the requirements of at least one of the criteria listed in the definition of an important ornithological area must be met. Otherwise, this area cannot be a protected ornithological point. Similarly, each point being identified or recommended for designation may simultaneously meet the requirements of more than one of the criteria conditions.

In this case, this point is primarily recommended as a protection zone as the most suitable place for bird protection. Important registered ornithological zones include Todakol, Shurkul reservoirs, Kagan fishery, Vardonze natural monument, Jayron ecological center, Karakir, Zikri, Dengizkol, Bukhara and Navoi regions. Ayogogitma lakes, Khojadavlat settlement, Karnabchol, Bukantau, Aktau, Nurata, Mingbulak basin, Aksay, Shokhdor (Rogate) lake near Zarafshan city and its surroundings, Sarmishsay settlements. It should be noted. These centers are now considered to be centers of international importance for the organization of bird protection. In the course of the research, the species composition of the ornithofauna of the region was analyzed, and the main centers for the collection of rare and endangered species were identified. Natural and

anthropogenic factors affecting the lives of birds were also identified and a number of suggestions and recommendations were made to eliminate them. It should be noted that this activity has played an important role in the organization of the protection of ornithofauna of the region. [19-24]

3. A special "nursery" established in cooperation with the United Arab Emirates to raise one of the few rare species of international importance "Yorga Tuvalak" in the Karakir massif of the region is of special importance in the protection of this species. . A similar event is being held in Navoi region, which borders Bukhara region. Emirates Center for Conservation of Houbara LLC has been operating here since 2007. According to the information received, from 2012 to 2013, the society took care of more than 220 quails in the nursery and released them into the wild. As of January 1, 2014, 1,600 quails were in the nursery and 500 birds were released this year.

4. From the waters of the region, all documents related to the inclusion of Dengizkol in the Ramsar Convention as a body of international importance and the inclusion of the Todakol and Kuyimazor reservoirs on the border of Bukhara and Navoi regions in this Convention have been formalized. There are 45 species listed in and around these basins in Uzbekistan and the International Red Data Book, of which 22 species are listed in the International Union for Conservation of Nature and Natural Resources (IUCN). Endangered species are included in the Red List. Ten of these rare species are involved in nesting and reproduction in these basins and their associated habitats. [25-26]

5. Lake Karakir is registered as an "ornithological order" of national importance for its role in the life of waterfowl and underwater birds flying through the deserts of the Kyzylkum. Today, this reservoir has become one of the main centers of concentration of water and underwater species flying along this route.

#### **List of used literature:**

1. SALIMOVA S. General structure of spinal animals features //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 3. – №. 3.
2. Ахмедова Г. У. Салимова С. Ф. Собственные имена в ономастике немецкого языка //Молодой ученый. – 2016. – №. 7. – С. 1139-1141.
3. SALIMOVA S. General structure of spinal animals features //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 3. – №. 3.
4. SALIMOVA S. Ta'lim natijalarini baholashga kompetentli yondashuv mohiyati //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 3. – №. 3.
5. Farhodovna S. S. Formation of professional skills of future biology teachers and development of its criteria //ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL. – 2021. – Т. 11. – №. 2. – С. 769-772.
6. Farhodovna S. S. IMPROVEMENT OF METHODOLOGICAL COMMUNICATION SYSTEM //Archive of Conferences. – 2020. – Т. 4. – №. 4. – С. 77-78.
7. SALIMOVA S. FORMATION OF PROFESSIONAL SKILLS OF FUTURE BIOLOGY TEACHERS AND DEVELOPMENT OF ITS CRITERIA: FORMATION OF PROFESSIONAL SKILLS OF FUTURE BIOLOGY TEACHERS AND DEVELOPMENT OF ITS CRITERIA //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2020. – Т. 10. – №. 9.
8. SALIMOVA S. Method of improving self-study works of students in biology by means of informational resources //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2020. – Т. 2. – №. 2.
9. SALIMOVA S. General structure of spinal animals features //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 3. – №. 3.

10. SALIMOVA S. General structure of spinal animals features //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 3. – №. 3.
11. SALIMOVA S. Ta’lim natijalarini baholashga kompetentli yondashuv mohiyati //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 3. – №. 3.
12. SALIMOVA S. Method of improving self-study works of students in biology by means of informational resources //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2020. – Т. 2. – №. 2.
13. Salimova S. IMPROVING THE METHODOLOGICAL TRAINING AND RESEARCH ACTIVITIES OF FUTURE BIOLOGY TEACHERS //European Journal of Research and Reflection in Educational Sciences Vol. – 2019. – Т. 7. – №. 12.
14. Salimova S.F. Improving the professional competence of future biology teachers //Archive of Conferences. – 2021. – С. 69-71.
15. Salimova S. General structure of spinal animals features //Центр научных публикаций (buxdu. uz). – 2021. – Т. 3. – №. 3.
16. Salimova S. Ta’lim natijalarini baholashga kompetentli yondashuv mohiyati //Центр научных публикаций (buxdu. uz). – 2021. – Т. 3. – №. 3.
17. Salimova S.F. Formation of professional skills of future biology teachers and development of its criteria //Academica: an international multidisciplinary research journal. – 2021. – Т. 11. – №. 2. – С. 769-772.
18. Salimova S.F. Improvement of methodical communication system //Archive of Conferences. – 2020. – Т. 4. – №. 4. – С. 77-78.
19. Salimova S. Formation of professional skills of future biology teachers and development of its criteria: formation of professional skills of future biology teachers and development of its criteria //Центр научных публикаций (buxdu. uz). – 2020. – Т. 10. – №. 9.
20. Salimova S. Method of improving self-study works of students in biology by means of informational resources //Центр научных публикаций (buxdu. uz). – 2020. – Т. 2. – №. 2.
21. Salimova S. General structure of spinal animals features // Центр научных публикаций (buxdu. uz). – 2021. – Т. 3. – №. 3.
22. Salimova S. General structure of spinal animals features // Центр научных публикаций (buxdu. uz). – 2021. – Т. 3. – №. 3.
23. Salimova S. Ta’lim natijalarini baholashga kompetentli yondashuv mohiyati // Центр научных публикаций (buxdu. uz). – 2021. – Т. 3. – №. 3.
24. Salimova S. Method of improving self-study works of students in biology by means of informational resources //Центр научных публикаций (buxdu. uz). – 2020. – Т. 2. – №. 2.
25. Salimova S. Improving the methodological training and research activities of future biology teachers //European Journal of Research and Reflection in Educational Sciences Vol. – 2019. – Т. 7. – №. 12.