



ACADEMICIA
An International
Multidisciplinary
Research Journal
 (Double Blind Refereed & Peer Reviewed Journal)



DOI: 10.5958/2249-7137.2021.01415.4

SPECIES COMPOSITION AND DISTRIBUTION OF BIRDS IN THE ORNITHOFAUNA OF UZBEKISTAN

Rakhmonov Rashit*^{*}; Rayimov Avaz*^{*}, Karmova Lobar^{**};
 Rustamova Moxinur***^{***}**

*PhD,
 Bukhara State Medical Institute, Bukhara, UZBEKISTAN

**Teacher,
 Department of Biology, Bukhara State University Bukhara, UZBEKISTAN

***Student,
 Bukhara State University, Bukhara, UZBEKISTAN

ABSTRACT

Occurrence of 81 species out of 104 species of birds admitted to hunting in Uzbekistan in the Bukhara region. In particular, for the first time in the Bukhara region, 81 species of birds that are allowed to hunt have been analyzed, belonging to 7 genera and 14 families.

KEYWORDS: *Phalacrocorax Carbo, Anser Anser, Anas Platyrhynchos, Anas Crecca, Netta Rufina, Aythya Ferina, Fulica Atra, Pterocles Orientalis.*

INTRODUCTION

The purpose of the study: to determine the species composition, number and ecological characteristics of birds hunted in Bukhara region, to develop recommendations for sustainable use.

Object of research: Information on the species of birds of prey in Bukhara region, as well as the biology and ecology of the population dynamics of birds found in the regions. The subject of the research is to improve the fauna of species of birds hunted in Bukhara region, their distribution, number, bioecological features, the impact of anthropogenic factors on wildlife, measures to protect the species and sustainable use. Mankind has long been engaged in hunting hunted species in a variety of ways by studying their behavior and habitat. The development of society has led to the improvement of hunting methods and the expansion of the purpose of hunting. This, in turn, led to the conduct of the hunting industry on the basis of certain rules and the

conduct of scientific research in the field. In our country, special attention is paid to the improvement of normative and legal documents aimed at the conservation of biological diversity, protection and rational use of wildlife, as well as the implementation of program measures. In particular, as a result of the work carried out in this direction, the status of endangered species has been given, the area of protected natural areas is being expanded, opportunities for public control over the protection of wildlife have been created and hunting tourism has been introduced. The Action Strategy for the further development of the Republic of Uzbekistan sets the task of "ensuring the comprehensive and effective use of natural, mineral, industrial, agricultural, tourist and labor potential of each region to accelerate socio-economic development." Based on these tasks, scientific research aimed at studying and substantiating the fauna, bioecological properties of game animals in Bukhara region, their sustainable use, identification and assessment of the impact of anthropogenic factors on hunting objects and their habitats is of great importance. [1;2;3;4]. The use of wildlife is very multifaceted, and in Uzbekistan this activity is carried out mainly by hunting animals for amateur, partly for sports and other (scientific, medical) purposes. The order of the State Committee of Ecology and Environmental Protection of the Republic of Uzbekistan dated March 22, 2006 No. 27 "On approval of the rules of hunting and fishing in the territory of the Republic of Uzbekistan" states that some animals allowed for sport, amateur and industrial hunting in Uzbekistan. presented in the form of. Taxonomic analysis of this list revealed that only 104 species of birds are allowed to be hunted in Uzbekistan (Table 1).

TABLE 1 OCCURRENCE AND HUNTING OF BIRD SPECIES ALLOWED HUNTING IN UZBEKISTAN IN BUKHARA REGION

No	Species allowed to hunt in Uzbekistan	Species officially hunted in Uzbekistan	Occurrence and hunting of permitted species in Bukhara region
1	<i>Phalacrocorax carbo</i> (Linnaeus,1758)	O	O
2	<i>Anser anser</i> (Linnaeus,1758)	O	O
3	<i>Anser albifrons</i> (Scopoli,1769)	OH	OH
4	<i>Anser fabalis</i> (Latham,1787)	OH	H
5	<i>Eulabeia indica</i> (Latham,1790)	OH	H
6	<i>Cygnus bewickii</i> (Yarrell,1830)	OH	OH
7	<i>Tadorna ferruginea</i> (Pallas,1764)	OH	OH
8	<i>Tadorna tadorna</i> (Linnaeus,1758)	OH	OH
9	<i>Anas platyrhynchos</i> (Linnaeus,1758)	O	O
10	<i>Anas poecilorhyncha</i> (Foater,1781)	OH	H
11	<i>Anas crecca</i> (Linnaeus,1758)	O	O
12	<i>Anas falcata</i> (Georgi,1775)	OH	H
13	<i>Anas strepera</i> (Linnaeus,1758)	OH	OH
14	<i>Anas penelope</i> (Linnaeus,1758)	OH	OH
15	<i>Anas acuta</i> (Linnaeus,1758)	OH	OH
16	<i>Anas querquedula</i> (Linnaeus,1758)	OH	OH

17	<i>Anas clypeata</i> (Linnaeus,1758)	OH	OH
18	<i>Netta rufina</i> (Pallas,1773)	O	O
19	<i>Aythya ferina</i> (Linnaeus,1758)	O	O
20	<i>Aythya fuligula</i> (Linnaeus,1758)	OH	OH
21	<i>Aythya marila</i> (Linnaeus,1761)	OH	OH
22	<i>Clangula hyemalis</i> (Linnaeus,1758)	OH	H
23	<i>Bucephala clangula</i> (Linnaeus,1758)	OH	OH
24	<i>Melanitta nigra</i> (Linnaeus,1758)	OH	H
25	<i>Melanitta fusca</i> (Linnaeus,1758)	OH	H
26	<i>Mergellus albellus</i> (Linnaeus,1758)	OH	OH
27	<i>Mergus serrator</i> (Linnaeus,1758)	OH	H
28	<i>Mergus merganser</i> (Linnaeus,1758)	OH	OH
29	<i>Tetraogallus himalayensis</i> (G.R.Gray,1843)	HO	H
30	<i>Alectoris chikar</i> (J.E.Gray,1830)	O	HO
31	<i>Ammoperdix griseogularis</i> (Brandt,1843)	HO	HO
32	<i>Perdix perdix</i> (Linnaeus,1758)	HO	H
33	<i>Perdix dauuricae</i> (Pallas,1811)	HO	H
34	<i>Coturnix coturnix</i> (Linnaeus,1758)	HO	HO
35	<i>Phasianus colchicus</i> (Linnaeus,1758)	O	OH
36	<i>Rallus aquaticus</i> (Linnaeus,1758)	HO	HO
37	<i>Gallinula chloropus</i> (Linnaeus,1758)	HO	HO
38	<i>Fulica tra</i> (Linnaeus,1758)	O	O
39	<i>Burhinus oedicnemus</i> (Linnaeus,1758)	HO	HO
40	<i>Pluvialis squatarola</i> (Linnaeus,1758)	HO	HO
41	<i>Pluvialis fulva</i> (Linnaeus,1758)	HO	HO
42	<i>Pluvialis apricaria</i> (Linnaeus,1758)	HO	HO
43	<i>Charadrius hiaticula</i> (Linnaeus,1758)	HO	HO
44	<i>Charadrius dubius</i> (Scopoli,1786)	HO	HO
45	<i>Charadrius leschenaultia</i> (Lesson,1826)	HO	HO
46	<i>Charadrius asiaticus</i> (Pallas,1773)	HO	HO
47	<i>Charadrius veredus</i> (Gould,1848)	HO	HO
48	<i>Charadrius alexandrinus</i> (Linnaeus,1758)	HO	HO
49	<i>Eudromias morinellus</i> (Linnaeus,1758)	HO	HO
50	<i>Vanellus vanellus</i> (Linnaeus,1758)	HO	HO
51	<i>Vanellochettusia leucuraus</i> (Lichtenstein,1823)	HO	HO
52	<i>Lobivanellus indicus</i> (Boddaert,1783)	HO	H
53	<i>Arenaria interpres</i> (Linnaeus,1758)	HO	HO
54	<i>Himantopus himantopus</i> (Linnaeus,1758)	HO	HO
55	<i>Recurvirostra avosetta</i> (Linnaeus,1758)	HO	HO
56	<i>Haematopus ostralegus</i> (Linnaeus,1758)	HO	HO
57	<i>Tringa ochropus</i> (Linnaeus,1758)	HO	HO

58	<i>Tringa glareola</i> (Linnaeus,1758)	HO	HO
59	<i>Tringa nebularia</i> (Gunnerus,1767)	HO	HO
60	<i>Tringa totanus</i> (Linnaeus,1758)	HO	HO
61	<i>Tringa erythropus</i> (Pallas,1764)	HO	HO
62	<i>Tringa stagnatilis</i> (Bechstein,1803)	HO	HO
63	<i>Actitis hypoleucos</i> (Linnaeus,1758)	HO	HO
64	<i>Xenus cinereus</i> (Guldenstadt,1775)	HO	HO
65	<i>Phalaropus lobatus</i> (Linnaeus,1758)	HO	HO
66	<i>Phalaropus fulicarius</i> (Linnaeus,1758)	HO	H
67	<i>Philomachus pugnax</i> (Linnaeus,1758)	HO	HO
68	<i>Calidris minuta</i> (Leisler,1812)	HO	HO
69	<i>Calidris subminuta</i> (Middendorff,1851)	HO	H
70	<i>Calidris temminckii</i> (Leisler,1812)	HO	HO
71	<i>Calidris ferruginea</i> (Pontoppidan,1763)	HO	HO
72	<i>Calidris alpine</i> (Linnaeus,1758)	HO	HO
73	<i>Calidris alba</i> (Pallas,1764)	HO	HO
74	<i>Limicola falcinellus</i> (Pontoppidan,1763)	HO	HO
75	<i>Lymnocyptes minimus</i> (Brunnich,1764)	HO	H
76	<i>Gallinago gallinago</i> (Linnaeus,1758)	HO	HO
77	<i>Gallinago megala</i> (Swinhoe,1861)	HO	H
78	<i>Gallinago stenura</i> (Bonaparte,1830)	HO	HO
79	<i>Gallinago solitaria</i> (Hodgson,1831)	HO	H
80	<i>Gallinago media</i> (Latham,1787)	HO	HO
81	<i>Scolopax rusticola</i> (Linnaeus,1758)	HO	H
82	<i>Numenius phaeopus</i> (Linnaeus,1758)	HO	HO
83	<i>Limosa lapponica</i> (Linnaeus,1758)	HO	HO
84	<i>Cursorius cursor</i> (Latham,1787)	HO	HO
85	<i>Glareola pratincola</i> (Linnaeus,1758)	HO	HO
86	<i>Glareola maldivarum</i> (J.R.Forster,1795)	HO	H
87	<i>Pterocles orientalis</i> (Linnaeus,1758)	O	O
88	<i>Columba livia</i> (Gmelin,1719)	O	OH
89	<i>Streptopelia decaocto</i> (Frisvaldszky,1838)	HO	HO
90	<i>Streptopelia orientalis</i> (Latham,1790)	HO	H
91	<i>Streptopelia senegalensis</i> (Linnaeus,1766)	HO	HO
92	<i>Sturnus vulgaris</i> (Linnaeus,1758)	HO	HO
93	<i>Sturnus roseus</i> (Linnaeus,1758)	HO	HO
94	<i>Acridotheres tristis</i> (Linnaeus,1766)	HO	HO
95	<i>Pica pica</i> (Linnaeus,1758)	HO	HO
96	<i>Podoces panderi</i> (Fischer,1821)	HO	HO
97	<i>Pyrrhocorax pyrrhocorax</i> (Linnaeus,1758)	HO	H
98	<i>Pyrrhocorax graculus</i> (Linnaeus,1766)	HO	H
99	<i>Corvus monedula</i> (Linnaeus,1758)	HO	HO
100	<i>Corvus dauricus</i> (Pallas,1776)	HO	H

101	Corvus frugilegus (Linnaeus,1758)	HO	HO
102	Corvus corone (Linnaeus,1758)	HO	HO
103	Corvus cornix (Linnaeus,1758)	HO	HO
104	Corvus ruficollis (Lesson,1830)	HO	HO

Note: O - officially hunted species; NO - occurs, non-hunted species; ON - occurs, not officially hunted species; N – a rare species in Bukhara region.

As a result of the taxonomic analysis, it was found that the data on the number of geese and ducks from the species hunted in practice today, the amount of quotas allocated for their hunting and the volume of hunting are presented in general rather than at the species level. As a result, the figures for each round in this category remain uncertain. In particular, according to the 7 th Statistics Committee of the State Statistics Committee, in 2014, 7,471 geese and 39,937 ducks were hunted in the country, but there is no data on the volume of hunting of geese and ducks by species. [5;6;7;8;9]. There are 81 species of 104 species of birds allowed to be hunted in Uzbekistan in Bukhara region, including 7 species of birds of prey in Bukhara region, 81 species of 14 families were analyzed for the first time (Table 2).

TABLE 2 TAXONOMIC ANALYSES OF GAME BIRDS IN BUKHARA REGION

№	Class	Category	Family	Number of species
1	Aves	Pelecaniformes	Phalacrocoracidae	1
		Anseriformes	Anatidae	19
		Galliformes	Phasianidae	4
		Gruiformes	Rallidae	3
		Charadriiformes	Burhinidae	1
			Charadriidae	13
			Recurvirostridae	2
			Haematopodidae	1
			Scolopacidae	21
		Columbiformes	Glareolidae	2
			Pteroclididae	1
		Passeriformes	Columbidae	3
			Sturnidae	3
		Corvidae	7	
Жами	1	7	14	81

The three goals of the International Convention on Biodiversity to which the Republic of Uzbekistan has acceded, namely the protection of biodiversity, including the protection, use and equitable distribution of benefits, require in-depth theoretical and practical study of game species. The research is aimed at improving the organization of hunting, optimization of hunting management, sustainable use of hunting grounds and the system of quotas and permits for hunting animals, as well as other issues in the field of hunting on a scientific basis through the study of hunting farms and their species. serves as a solution.

REFERENCES

1. The Red Data Book of Uzbekistan. Volume 2. Tashkent, 2019. P. 102-175
2. Rakhmonov. R.R., Rayimov A.R. (2019). Ecological positions of hunting species in Bukhara region. *International Journal of Genetic Engineering*, 7 (1). P. 15-18. <http://doi:10.5923/j.ijge.20190701.03>
3. Rakhimovich, R. R., & Rustamovich, R. A. (2019). Structure and distribution of animals in the Bukhara region. *January–February*, 34.
4. Rustamovich, R. A. (2020). Analysis Of Summer Nutrient Content In The South-West Kyzylkum Region Of *Acridotheres Tristis*. *Solid State Technology*, 63(5), 6145-6151.
5. Rayimov A.R , Rakhmonov R.R. (2019). The role of *Acridotheres Tristis* in Biotic Connection. *International Journal of Virology and Molecular Biology*, 8 (1). P 1-3. <http://doi:105923/j.ivmb.20190801.01>
6. Rustamovich, R. A., & Rakhimovich, R. R. (2019). The distribution and number of *Acridotheres tristis* in different habitats in the Kyzylkum region. *European science review*, 2(1-2).
7. Rakhmonov, R. R., Naimovich, Z. A., & Khudoikulova, N. I. (2021). Possibilities of Introduction of Hunting Tourism in Hunting Farms of Bukhara Region. *International Journal of Progressive Sciences and Technologies*, 24(1), 253-256.
8. Murodovich, T. M., & Ergashovich, K. A. (2019). The role of environmental factors in the re-breeding of waterfowl in the steppe zone. *Asian Journal of Multidimensional Research (AJMR)*, 8(10), 71-79.
9. Turaev, M. (2012). Ecological Change in the Aral Region: Adaptations by the Spoonbill and Black-Crowned Night Heron. In *Disaster by Design: The Aral Sea and its Lessons for Sustainability*. Emerald Group Publishing Limited.