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**AROUND TERRITORIES OF DENGIZKUL, KORA-KIR AND  
 ZAMONBOBO LAKES' SPECIES OF REPTILES PART AND NUMBERS'  
 IN SPRING**

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#### ABSTRACT

*The regional distribution and number of reptiles around the Dengizkul, Zamonbobob, Qoraqir lakes in the spring season were analyzed by biotopes. It is necessary to pay special attention to the work of protection, conservation of biological diversity and rational use of bioresources by studying reptiles around the Dengizkul, Zamonbobob, Qoraqir lakes.*

**KEYWORDS:** *Gymnodactylus Fedtschenkoi, Agama Lehmanni, Ophisaurus Apodus, Eryx Miliaris, Echis Carinatus, Testudo Horsfieldi, Phrynocephalus Mustaceus, Gymnodactylus Caspius, Natrix Tessellata, Vipera Ursini, Phrynocephalus Interscapularis Eremias Velox, Eremias Grammica.*

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#### INTRODUCTION

**The object of research:** To study the regional distribution and diversity of the number of reptiles in the spring season around Dengizkul, Zamonbobob, Kora-Kir. The main goal is to preserve biological diversity by studying the characteristics of reptiles in different habitats.

**The subject of the research** is to determine the number of reptiles around the lakes Dengizkul, Zamonbobob and Kara-Kir by studying their current status in different habitats, to determine their importance in nature and in the economy.

#### MATERIALS AND METHODS

The survey carried out in the region qisminigil grounded, stony desert, saline marshes and its

parts. Desert's plants Tamarix, Haloxylon persicum, Haloxylon belangeriana, Descurainia sophia, Artemisia diffuse, Alhagi pseudalhagi, Ammodendron conollyioccurva. Desert pastures are mostly used for livestock, especially sheep and goats. In recent years, the construction and transportation in these areas, as well as the construction of railways, gas pipelines have had an impact on the biodiversity of the region. Basically, March, April and May were taken and research work was carried out. The study area has surveyed a total of 24 times on land using the stationary, route, and 5-minute counting methods [2; 3; 4; 5; 6]. The results of the animal count were extrapolated to a 10-hectare area and the density of the animal community was as follows. determined by the formula:

$$D = \frac{n}{2 \cdot L \cdot W} ;$$

where D is the density; n is the number of reptiles encountered; L is the route length; W is the width of the route or the distance from the route axis to the boundary of the calculated corridor. Multiplication 2 was used in the formula to account for reptiles to the left and right of the route axis.

Results and discussion In the spring of 2019, the fauna of waterfowl around Dengizkul, Zamonbobo and Kara-Kir lakes were studied, and based on the analysis of the data obtained, 32 species of waterfowl belonging to 2 groups were identified. Territorial, hilly and remnant mountains, as well as the number and quantity of species recorded in the settlement, their peculiarities are described.

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 declining species has been granted, 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 resources, industry, agriculture, tourism and labour potential of each region to accelerate socio-economic development." Based on these tasks, scientific research aimed at studying and justifying the reptile fauna, bioecological features, their sustainable use in the Bukhara region, identifying and assessing the impact of anthropogenic factors on reptile objects and their habitats is of great importance. Decree of the President of the Republic of Uzbekistan dated February 7, 2017, No PF-4947 "On the Strategy for further development of the Republic of Uzbekistan", Cabinet of Ministers of the Republic of Uzbekistan dated July 19, 2017 No 530 "On measures to further improve the forestry management system" and Resolution No. 914 of November 7, 2018 "On the state accounting of objects of flora and fauna, accounting of volumes of their use and the state cadastre" and the implementation of the tasks set out in other regulations related to this activity. 7 species of reptile fauna found in the region during the spring season of reptiles around Dengizkul, Zamonbobo and Kara-Kir lakes are included in the Red Book of the Republic of Uzbekistan, 3 species in the IUCN Red List, 5 species in CITES Appendices I and II [1]. However, the species composition, number, biotopic distribution, reproduction, seasonality and duration of waterfowl around Dengizkul, Zamonbobo and Kara-Kir lakes have not been studied. (Table 1).

**TABLE 1 SPECIES COMPOSITION AND NUMBER OF REPTILES AROUND DENGIZKUL, ZAMONBOBO AND KARA-KIR LAKES**

№	Group and species names	Reserve name	March	April	May	Total	%
<b>Lacertilia Gekkonidae</b>							
1	<i>Crossobamon everesmanni</i>		5	12	14	31	4,1
2	<i>Teratoscincus Scincus</i>	UzRDB	2	1	3	6	0,8
3	<i>Gymnodactylus russowi</i>		8	9	11	28	3,7
4	<i>Gymnodactylus caspius</i>		6	11	9	26	3,4
5	<i>Gymnodactylus fedtschenkoi</i>		4	6	15	25	3,3
<b>Agamidae</b>							
6	<i>Agama Lehmanni</i>		6	9	17	32	4,2
7	<i>Agama caucasica</i>		-	5	7	12	1,6
8	<i>Agama sanguinolenta</i>			3	3	6	0,8
9	<i>Phrynocephalus mustaceus</i>		2	8	10	20	2,6
10	<i>Phrynocephalus interscapularis</i>		17	34	56	107	14,3
11	<i>Phrynocephalus helioscopus</i>		10	4	13	27	3,6
12	<i>Phrynocephalus raddei</i>		5	6	8	19	2,5
<b>Varanidae</b>							
13	<i>Varanus griseus</i>	UzRDB CITES I	1	4	5	10	1,3
<b>Anguidae</b>							
14	<i>Ophisaurus apodus</i>		1	2	3	6	0,8
<b>Lacertidae</b>							
15	<i>Lacerta agilis</i>		12	14	22	48	6,4
16	<i>Eremias grammica</i>		11	13	23	47	6,2
17	<i>Eremias scripta</i>		9	11	13	33	4,4
18	<i>Eremias lineolata</i>		8	10	17	35	4,6
19	<i>Eremias velox</i>		14	16	26	56	7,4
20	<i>Eremias arguta</i>		5	4	9	18	2,4
<b>Serpentes Typhlopidae</b>							
21	<i>Typhlops vermicularis</i>		-	1	1	2	0,26
<b>Boidae</b>							
22	<i>Eryx miliaris</i>	UzRDB, CITES II	4	5	6	15	2
<b>Colubridae</b>							
23	<i>Natrix tessellata</i>		11	15	31	57	7,6
24	<i>Psammophis line olatum</i>		2	4	6	12	1,6

25	<i>Coluber ravergieri</i>		1	2	2	5	0,66
26	<i>Colubter karelini</i>		1	3	4	8	1,06
27	<i>Elaphe diol</i>		2	6	8	16	2,1
Viperidae							
28	<i>Vipera ursini</i>	UzRDB, RL, CITES I	-	1	2	3	0,40
29	<i>Echis carinatus</i>		3	4	5	12	1,6
30	<i>Lythorinchus ridgewayi</i>	UzRDB,	1	2	4	7	0,9
31	Central Asian	UzRDB, RL, CITES II	-	1	1	2	0,26
Chelonia							
32	<i>Agrionemys horsfieldi</i>	UzRDB, RL, CITES II	5	7	5	17	2,2
	TOTAL		156	233	359	748	100

Note: UzRDB - Species included in the Red Book of the Republic of Uzbekistan (minor species) (2019)

RL - Red Listed Species of the International Union for Conservation of Nature and Natural Resources (IUCN) (2004)

CITES I, CITES II - Species (subspecies) included in the annexes to the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

A total of 7 species of protected reptiles were found during the study in the area, of which 7 species are listed in the Red Data Book of the Republic of Uzbekistan, 3 species are on the IUCN Red List, 5 species are CITES I; Inclusion in CITES II was determined by studies (Table 1). In March, the number of reptile species increased until May (32 species), including 203. *Phrynocephalus interscapularis*, *Natrix tessellata*, *Eremias velox*, *Lacerta agilissoni* were observed. The increase in the composition of these species is directly related to the development of nutrient reserves. The misconception among the population about the healing properties of the meat and bones of the grey goat is leading to unplanned and disorderly hunting by the locals. The Central Asian desert tortoise and its eggs have now declined sharply as a result of being trampled underfoot by livestock and killed by herding dogs. barrier factors. *Varanus griseus*, listed in the Red Data Book of the Republic of Uzbekistan, was killed in a head-on collision with a car on the way to Dengizkul, Zamonbobo and Kara-Kyr lakes. In late May, *Agrionemys horsfieldi* was captured and held captive by shepherds.

In recent years, the growing demand for food prepared by the population as "medicinal" and hunted animals (*Varanus griseus*, *Eryx miliaris*) is also leading to their illegal hunting. In some districts, food outlets selling these types of food have been set up, and it has even been noted that some species are kept in cages in front of these outlets (in the Labi-Hovuz teahouse in the village of Sofidehqon, Vobkent district).

Every year in June and July, it is almost a tradition for locals to offer food prepared from *Eryx*

miliaris to people who come for treatment in the sand and salt of the Alat district on the border with Turkmenistan. Until this "traditional" season, many sand-snakes are hunted. The study also shows that the sale of species and their carcasses (meat, fat, skin) in markets and public catering establishments, as well as the hunting of protected species, indicate that there are still many unresolved issues in the field.

## CONCLUSION

The State Cadastre of Wildlife Objects consists of a systematic report of qualitative and quantitative information on the diversity, classification, number dynamics, level of study and other information necessary for the organization of measures for the protection and sustainable use of wildlife. . Today, the data of the state cadastre of objects of fauna do not allow to obtain accurate information on the total number of animal species found in Uzbekistan, including Bukhara region. Therefore, it is advisable to carry out practical work in this area.

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