

# Information on Private Hunting Farms Located on The Low Plains of The Desert Zone of Uzbekistan

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**Abstract:** The article analyzes data on private hunting grounds located in the lowland areas of Uzbekistan (Bukhara, Navoi, Khorezm regions and the Republic of Karakalpakstan). Of the 7 private hunting grounds in Uzbekistan, 2 are located in the lowland areas of the region, and detailed information about them is provided. The hunting grounds of Bukhoroneftkurilishmontazh Balykchilik Klaster LLC and Damir Sultan Fayz LLC, located in the Bukhara region, have a total area of 49,000 hectares.

**Keywords:** Kashkadarya, Bukhara, Navoi, Khorezm, Republic of Karakalpakstan, Wild, Male, Female, Economic, Biodiversity, Protection, Private hunting grounds, LLC, Khadicha, Zikri, Devkhona, Karakir, Karavulbozar, Peshku.

**Introduction:** In our republic, special attention is paid to improving the regulatory framework and implementing program measures aimed at preserving biodiversity, protecting wildlife and its rational use. In particular, as a result of the work carried out, species whose numbers are declining have been given the status of protected; the area of specially protected natural territories is being expanded; conditions are being created for broad public control over the protection of the animal world; and hunting tourism is beginning to be introduced into practice.

The “Strategy of Actions for the Further Development of the Republic of Uzbekistan” sets the task of “ensuring the comprehensive and effective use of the natural, mineral, industrial, agricultural, tourist and labor potential of each region for accelerated socio-economic development.”

Based on the objectives set, scientific research aimed at studying the placement of private hunting grounds is of great importance. located in the lowland regions of our republic (Bukhara, Navoi, Khorezm regions and the Republic of Karakalpakstan), the fauna of game

animals, their bioecological characteristics, sustainable use, as well as the identification and assessment of the impact of anthropogenic factors on hunting objects and their habitat [3].

## DATA ANALYSIS AND METHODOLOGY

**Level of study of the topic.** Studies of the species composition of game animals, hunting volumes, hunting industry and its management, as well as sustainable use of game species, conducted by foreign scientists, based on the zoogeographic features of each region, were carried out C.D. Fitzgibbon (1995), A. Gammell (1999), L.Munro (1999) G. Griffin (2000), F. Barends (2002), Ph. Chardonnet (2002) and others.[3; 3-10 p]

Extensive research conducted by the Institute is devoted to the history of the development of hunting and hunting management in the CIS countries, the specifics of amateur and commercial hunting, problems of hunting management, anthropogenic transformation of hunting management, and issues of hunting tourism V.F. Gavrin (1972), N.N. Grakova (1973), S.A. Larin (1974), V.V. Melnikov (1992), V.A.

Chashukhin (2006), V.N. Bolshakov (2012) [1; 52 p].

Research on the biology, ecology and protection of some species of animals allowed for hunting in Uzbekistan was carried out by N.A. Zarudny (1915), G.I. Ishunin, Kh.S. Salikhbaev (1963, 1984), D.Yu. Kashkarov (1965), T.Z. Zakhidov (1971), M.G. Mitropolsky, O.V. Mitropolsky and V.O. Sudarev (2011, 2014), G.F. Goncharov (2015), A.A. Atakhodzhaev, V.O. Sudarev (2017), Ya.I. Ametov (2018), R.R. Rakhmonov (2020) and others. However, these studies cannot provide detailed information on the introduction of modern and advanced methods of hunting management and hunting management, as well as on the solution and justification of existing problems in the field of hunting and sustainable use of game species. In this regard, the study of the species composition, ecology and sustainable use of game animals in the steppe zone of Uzbekistan, regulation of hunting farms, development of hunting tourism, and development of recommendations for increasing the economic efficiency of hunting farms are of current scientific and practical importance. [2; 27-34 p.]

The aim of the study is to determine the faunistic composition, significance, abundance and ecological characteristics of animal species that are objects of hunting in private hunting grounds located in the desert zone of Uzbekistan, and to develop recommendations for their sustainable use.

The object of the study was three species of animals hunted in private hunting grounds in the steppe zone of Uzbekistan (Bukhara, Navoi, Khorezm and Karakalpakstan), as well as private cattle farms as their habitat.

The subject of the study is the fauna of animal species hunted in private hunting grounds located in the desert zone of Uzbekistan, their distribution, numbers, bioecological features, the impact of anthropogenic factors on the fauna, as well as the improvement of measures for the protection and sustainable use of species.

Expected scientific novelty: Analysis of the quantitative composition of the fauna of animals hunted in private hunting grounds located in the desert zone of Uzbekistan;

To identify the distribution and dynamics of the number of animal species that are objects of hunting in private hunting farms located in the desert zone of Uzbekistan;

To determine the bioecological characteristics, protection and use of animal species obtained in private hunting grounds located in the desert zone of Uzbekistan;

To identify the role of water bodies as habitats for animal species that are objects of hunting in private hunting grounds in the desert zone of Uzbekistan, and their importance in preserving the biodiversity of desert ecosystems;

To identify anthropogenic factors influencing the species of animals that are objects of hunting in private hunting grounds in the desert zone of Uzbekistan, and their habitats, as well as the degree of their impact;

In 2020, Uzbekistan adopted the Law "On Hunting and Hunting Organizations", according to which hunting farms will be privatized by individual enterprises and hunting associations. The law provides for measures aimed at:

- scientific planning
- conservation and sustainable use of wildlife
- protection and reproduction of wildlife.

However, the full implementation of the law is complicated by the lack of a mechanism. Currently, in Uzbekistan, 4.77 million hectares of hunting grounds (10.6% of the country's territory) are occupied by hunting farms.

1. Sports Association of Hunters and Fishermen of Uzbekistan
2. State Forestry and Hunting Farm
3. LLC or private hunting farms

To sum up the above, today there are more than 50 hunting farms in Uzbekistan. More than 38,000 hunters are registered in our republic, and the annual production rates of licensed species range from 10% to 25%. To obtain a license, hunters must be members of a hunting association and have hunting experience. About 2,000 new permits are issued to hunters each year.

The Sports Union of Hunters and Fishermen of Uzbekistan charges hunters an initial and annual fee (\$24.50), with the state owning 20% of the hunting activity. Information on trends and quotas for game species is limited. However, populations of some mammals, such as wild boar (*Sus scrofa* (Linnaeus, 1758)) and sand hare (*Lepus tolai* (Pallas, 1778)), are growing while maintaining stable hunting quotas. In contrast, some bird species, such as the Asiatic partridge (*Alectoris chikar*, J.E. Gray, 1830), are declining in numbers. Poaching for consumption or illegal trade is a serious problem, affecting 69% of all hunted mammal species and 56% of all threatened mammal species. Issues such as poaching and species decline require attention and recently passed laws must be fully implemented.

The Bukhara region is located in the southwest of

Uzbekistan, and its main source of water supply is the Amu-Bukhara Canal. Collector waters of the Bukhara region are formed as a result of irrigation and washing of lands from salts and are collected in large lakes such as Dengizkul, Kara-Kir, Tuzkon, Ogitma, Kumsultan, Khadicha, Zikri, Devkhona. The total volume of water in the region is concentrated in 8 lakes. The total area of the lakes is 35,000 hectares, and these areas vary depending on the season.

In the Karaulbazar district of the Bukhara region, there is a private hunting farm, Bukhoroneftkurilishmontazh Balykchilik Klasteri LLC. The total area of the farm, including water and steppe zones, is 40,000 hectares. The private hunting farm includes a system of 3 lakes: Khadicha, Zikri and Devkhona.

Lake Khadicha is one of the lakes of the Bukhara region, located in the southeast of the region. This lake is the largest in the Karavulbazar oasis. Lake Khadicha is located on the right bank of the Amu-Bukhara Machine-Building Canal (ABMC), not far from the Gavan Bridge (Gavan Bridge). Lake Khadicha was formed on the site of ancient riverbeds (deep swamps) of the Kashkadarya basin. Lake Khadicha is separated from the ABMK by a dam 50-100 m wide. However, water from the ABMK does not flow into Lake Khadicha.

The morphometric data of the lake are as follows:

- Lake length – 18–20 km;

- Maximum width – 8–10 km;
- Water volume – 150 million/m<sup>3</sup>;
- Maximum depth – 10.8 meters (122.5 million/m<sup>3</sup>);
- Average depth – 4.6 meters (57.5 million/m<sup>3</sup>);
- Lake circumference – 18.3 km.

Professors and teachers of the Department of Biology of the Bukhara State Pedagogical Institute, on the basis of a business agreement, conduct joint research work with employees of the private hunting farm LLC "Fishing Cluster "Bukhoroneftstroimontazh". In particular, from April 5 to 7, 2025, an event was held to census the species composition of spring wild birds and animals on the Khadicha, Zikri and Devkhona lakes, which belong to the private hunting farm LLC Fishing Cluster Bukhoroneftstroimontazh, and their adjacent territories. To study the species composition of wild birds and animals permitted for amateur hunting on the lakes of Khadicha, Zikri, Devkhona and adjacent desert areas, a LADA NIVA car with state registration number 80/078 SVA, owned by Bukhoroneftkurilishmontazh, was used. 907 km were covered and the following results were obtained.

Information on the spring census of 2025 of wild birds and animals on the lakes of Khadicha, Zikri and Devkhona in the Bukhara region and their environs, with a total area of 40 thousand hectares (04/08/2025)

**1 table**

№	Species of wild animals and birds	Name of hunting grounds and number of wild birds and animals (heads)			
		Hunting farm			Total number (heads)
		Khadicha	Zikri	Devkhona	
1	<i>Anas strepera</i>	300	50	152	502
2	<i>Anser anser</i>	500	53	200	753
3	<i>Anas crecca</i>	301	41	61	403
4	<i>Netta rufina</i>	400	59	146	605
5	<i>Aythya ferina</i>	320	80	110	510
6	<i>Anas strepera</i>	201	20	30	251
7	<i>Anas clypeata</i>	200	20	40	260
8	<i>Fulica atra</i>	601	403	252	1256
9	<i>Lepus tolai</i> (Pallas, 1778)	614	400	554	1568

The Law of the Republic of Uzbekistan "On Hunting and Hunting Management", adopted by the Legislative Chamber on May 19, 2020 and approved by the Senate on June 19, 2020, Chapter 4, Article 20, No. O'RQ-627 dated July 8, 2020, provides for hunting.

Types of hunting include:

sport and amateur hunting;

industrial hunting;

hunting for the purpose of obtaining game;

hunting for the purpose of keeping and breeding wild animals in semi-free conditions or in artificially created habitats;

Hunting for scientific, medical and control purposes;

Hunting for the purpose of regulating the number of wild animals.

Sport and amateur hunting is carried out by individuals for personal consumption of hunting products.

Commercial hunting is carried out for the commercial sale of hunting products.

Predatory hunting is carried out with the purpose of obtaining game (fur, horns, feathers, skins, skulls, tusks, other vital organs), which is assessed according to certain characteristics.

The extraction of wild animals for the purpose of keeping and breeding them in semi-free conditions or in artificially created habitats is permitted provided that conditions are created for the habitation of wild animals in a confined space.

Hunting for scientific, medical and control purposes is carried out for the purpose of studying and preserving wild animals, as well as for organizing assistance to wild

animals in the event of their illness, death, the risk of plague and for other reasons.

Hunting for the purpose of regulating the number of wild animals is carried out to maintain the number and structure of the population of wild animals at an acceptable level, as well as to combat animals that carry particularly dangerous infections.

Winter-spring and autumn-winter census of game animals and birds is carried out, the results of which are sent to the Ministry of Ecology, Environmental Protection and Climate Change of the Republic of Uzbekistan. Experts analyze and agree on recommended hunting volumes based on the conclusions of scientists from the Institute of Zoology of the Academy of Sciences of the Republic of Uzbekistan. In this case, shooting of 5-10% of the specified number of animals and 15-20% of birds is allowed. In some cases, shooting of certain species may be prohibited for a certain period.

List of wild birds and animals that will be hunted on the Khadicha, Zikri and Devkhona lakes and their surroundings in the Bukhara region in the 2025-2026 hunting season.

**Table 2**

<i>No</i>	<i>Scientific name of the species</i>	<i>Species name in Russian</i>	<i>Species name in Uzbek</i>	<i>Counted</i>	<i>Recommended catch volume</i>
1	<i>Anas platyrhynchos</i>	Кряква	<i>Kryakva</i>	502	100
2	<i>Anser anser L</i>	Серый гусь	<i>Kulrangg'oz</i>	753	150
3	<i>Anas crecca</i>	Чирок свистунок	<i>Churrak</i>	403	80
4	<i>Netta rufina</i>	Красноносый нырок	<i>Kiziltumshuq</i>	605	120
5	<i>Aythya fenina L</i>	Красногловый нырок	<i>Kizilbosh</i>	510	100
6	<i>Anas strepera</i>	Серая утка	<i>Qo'ng'ir o'rdak</i>	251	50
7	<i>Anas clypeta</i>	Широконоска	<i>Suqsun</i>	260	50
8	<i>Fulika atra</i>	Лысуха	<i>Qashqaldoq</i>	1256	250
9	<i>Lepus capensis</i>	Заяц	<i>Quyov</i>	1568	150

Lake Devkhona is located in the Karaulbazar district of the Bukhara region, its area is 1700 hectares. The water reserve according to the project is 203.5 million m<sup>3</sup>. The average depth is 13-14 m, the maximum is 34 m. The sources of water intake were considered to be the Karshi Central and Karaulbazar collectors [3; 3-10 p].

The main factors that bring animals and birds together are water, food and a safe habitat. In Lake Devkhona,

45 species of higher aquatic plants belonging to 21 families have been identified. At the southwestern shore of the lake, in shallow water, 1–4 m deep, in a strip up to 5–8 m wide (3–4 km long), communities of higher aquatic plants grow: reeds, bulrushes, sedges, and water onions. Lake plants were studied in three ecological groups: those growing in wet areas along the coast (hygrophytes), those partially submerged in water (hydrophytes), and those completely or partially



submerged in water (hydatophytes). Of the 45 plant species identified in the lake area, 15 species (33.33%) are hygrophytes, 18 species (40.0%) are hydrophytes, and 12 species (26.66%) are hydatophytes. Aquatic plants were mentioned because they are the main food for waterfowl. Aquatic plants have a number of beneficial properties. In particular, they serve as a substrate for laying eggs by phytophilic fish of the lake, raw material for building nests by birds, a shelter, a place of refuge from enemies for non-predatory animals, food, and determine the climate of the lake. The research showed that during the growing season, the higher aquatic plants of Lake Devkhona do not

produce much biomass, unlike other lakes in the region. We found that Lake Devkhona has lower bird biodiversity than other lakes because it has very few alpine algae and is a deep lake.

The hydrobiology of the natural reservoirs of Karakyr, located in the Peshkun district of the Bukhara region, can be considered in the works of M.A. Abdullaev (2003) and D.S. Niyozov (2017). Lake Karakir is located in the northwest of the Bukhara region. In the summer months, as a result of evaporation and a decrease in the water level, the lake dries up by 40-45%, and many macrophytes die.



**1 photo Lake Karakir, located in the Peshkun district of the Bukhara region.**

In the 50-60s of the last century, as a result of the discharge of water from the northern collector into the desert zone in the northwest of the Bukhara region, Lake Kara-Kyr was formed. Its total area currently amounts to 26 thousand hectares. Four fishing farms belonging to the Peshkunsky district have been established on Lake Kara-Kyr. The area occupied by the fishing farms is 22.5 thousand hectares. Peshkubalyk LLC - 9,000 hectares, Nastarin Service Bukhara LLC - 12,000 hectares, Neftgazmontazh LLC - 1,350 hectares, Karakul Balyk Agrosanoat LLC - 175 hectares. These farms are engaged in fishing. This part of the lake is constantly covered with water.

In addition, a large area of Kara-kir and its surroundings are declared the Kara-kir State Nature Reserve. This reserve protects and reproduces various species of birds, rodents and mammals that need protection in the groves around the lake. The lake's water area is

divided into three contours (large, small and aquarium). The northern collector served as the main source of formation of all hydrobionts living in the lake. The surroundings of the reservoir are covered with tall aquatic plants, reeds and bulrushes, forming extensive reed thickets. In these tugai serve as a habitat and breeding ground for many animals.

The natural water resources of Lake Kara-kir are represented by shallow water bodies. The source of water is the Northern collector - the flow rate is 30-40 m<sup>3</sup>/sec, the water reserve is 1088 billion/m<sup>3</sup>. The area of the lake is expanding, especially in early spring. The number of ponds increases. From July to August, the ponds dry up. During the natural spawning period, the small fish that have reproduced en masse die. This serves as a rich source of food for the wildlife and fish-eating birds that live around the lake.

The hunting farm Damir Sultan Faiz LLC is engaged in

private hunting on the natural reservoir Kara-kir and the adjacent desert territory with a total area of 9,000 hectares, of which 1,961 hectares are occupied by reservoirs. As a result of participation in the event "Spring census of wild animals and birds" on the basis of an agreement with the farm, together with the faculty of the Department of Biology of the Bukhara State Pedagogical Institute, The Bukhara Regional Department of Ecology, Environmental Protection and

Climate Change, as well as its employees, have achieved the following results. (Table 3)

Information on the spring census of wild birds and animals in 2025 on Lake Karakir and its environs in the Bukhara region, with a total area of 9,000 thousand hectares, of which 1,961 hectares are wetlands where hunting is permitted (as of 14.04.2025)

**Table 3)**

№	Names of wild animals and birds	Name of the hunting ground and number of wild animals and birds (heads)
		Kara-kir 9000 hectares
1	<i>Anas platyrhynchos</i>	1 200
2	<i>Anser anser L</i>	556
3	<i>Anas crecca</i>	1 199
4	<i>Netta rufina</i>	2 625
5	<i>Aythya fenina</i>	2 005
6	<i>Anas strepera</i>	1 001
7	<i>Anas clypeta</i>	1 265
8	<i>Fulika atra</i>	6001
9	<i>Pterocales arentalus</i>	550
10	<i>Lepus capensis</i>	1 503
11	<i>Sus scrofa</i>	41
12	<i>Meles sp. **</i>	30



**2 photos of Lake Karakir, located in the Peshkun district of the Bukhara region**

The number of wild birds and animals subject to hunting in the hunting season of 2025-2026, and the

recommended volume of hunting on an area of 9,000 hectares of Lake Karakir in the Bukhara region and its environs, of which 1,961 hectares are water areas

(table 4)

<i>№</i>	<i>Scientific name of the species</i>	<i>Species name in Russian</i>	<i>Species name in Uzbek</i>	<i>Counted</i>	<i>Recommended catch volume</i>
1	<i>Anas platyrhynchos</i>	Кряква	<i>Kryakva</i>	1 200	240
2	<i>Anser anser L</i>	Серый гусь	<i>Kulrang g'oz</i>	556	111
3	<i>Anas crecca</i>	Чирок свистунок	<i>Churrak</i>	1 199	239
4	<i>Netta rufina</i>	Красноносый нырок	<i>Kiziltumshuq</i>	2 625	525
5	<i>Aythya fenina</i>	Красноголовый нырок	<i>Kizilbosh</i>	2 003	400
6	<i>Anas strepera</i>	Серая утка	<i>Qo'ng'ir o'rdak</i>	1001	200
7	<i>Anas clypeata</i>	Широконоска	<i>Suqsun</i>	1 265	253
8	<i>Fulika atra</i>	Лысуха	<i>Qashqaldoq</i>	6001	1200
9	<i>Pterocales arentalus</i>	(Ч.рябок)	<i>Qorabag'ir</i>	550	110
10	<i>Lepus capensis</i>	Заяц	<i>Quyov</i>	1503	150
11	<i>Sus scrofa</i>	(кабан)	<i>To'ng'iz</i>	41	4
12	<i>Meles sp. **</i>	(барсук)	<i>Bo'rsiq</i>	30	3

## CONCLUSION

In conclusion, it can be said that in accordance with the procedure established by Appendix 2 to the Law of the Republic of Uzbekistan "On Hunting and Hunting Management" dated July 8, 2020, the current hunting season for wild animals and birds in our country ended on February 28 of this year. The legislation establishes strict liability for violation of the rules of illegal hunting and relevant legislative acts have been adopted. Nevertheless, in 2022, 1,409 cases of violation of hunting rules were identified, the amounts of fines and damage to nature were determined in accordance with the procedure established by law, and materials were sent to law enforcement agencies for taking measures to take enforcement measures. Of these, criminal cases have been initiated in 36 cases. In the future, the Asian partridge - *Alectoris chikar* (J.E. Gray, 1830), which is on the list of birds subject to hunting, should be included in the "Red Book" of the Republic of Uzbekistan, given the fact that its numbers in the wild are declining. Preservation and protection of biodiversity in nature is the sacred duty of every person.

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