

The List of Birds on Lake Dengizkul

Species		Rate of abundance	Nature of stay
<i>Podiceps nigricollis</i>	Black-necked Grebe	m	l
<i>Podiceps ruficollis</i> Pall.	Little Grebe	n	c
<i>Podiceps cristatus</i> L.	Great Crested Grebe	n,w	l
<i>Pelecanus onocrotalus</i> L.	White Pelican	m	r
<i>Pelecanus crispus</i> Bruch. *	Dalmatian Pelican	m,w	r
<i>Phalacrocorax carbo</i> L.	Cormorant	n,w	c
<i>Phalacrocorax pygmaeus</i> Pall. *	Pygmy Cormorant	n,w	r
<i>Botaurus stellaris</i> L.	Bittern	m,w	l
<i>Ixobrychus minutus</i> L.	Little Bittern	n	l
<i>Nycticorax nycticorax</i> L.	Night Heron	m	l
<i>Egretta alba</i> L.	Great Egret	n,w	l

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<i>Podiceps nigricollis</i>	Black-necked Grebe	m	l
<i>Podiceps ruficollis</i> Pall.	Little Grebe	n	c
<i>Egretta garzetta</i> L.	Little Egret	n	l
<i>Ardea cinerea</i> L.	Grey Heron	n,w	c
<i>Ardea purpurea</i> L.	Purple Heron	n	l
<i>Platalea leucorodia</i> L.	Spoonbill	n	r
<i>Cygnus olor</i> Gm.	Mute Swan	v,w	r
<i>Anser anser</i> L.	Greylag Goose	n,w	l
<i>Tadorna tadorna</i> L.	Shelduck	n,w	l
<i>Tadorna ferruginea</i>	Ruddy Shelduck	m,w	l
<i>Anas platyrhynchos</i> L.	Mallard	n,w	c
<i>Anas crecca</i> L.	Teal	m,w	c
<i>Anas querquedula</i>	Garganey	m	c
<i>Anas strepera</i> L.	Gadwall	n,w	l
<i>Anas clypeata</i>	Shoveler	m	c
<i>Anas penelope</i> L.	Wigeon	w	l
<i>Marmaronetta angustirostris</i> Menetr. *	Marbled Teal	n	r
<i>Netta rufina</i> Pall.	Red-crested Pochard	n,w	d
<i>Aythya ferina</i> L.	Pochard	m,w	d
<i>Aythya nyroca</i> Guild. *	Ferruginous Duck	n,w	l
<i>Aythya fuligula</i> L.	Tufted Duck	w	l
<i>Bucephala clangula</i> L.	Goldeneye	w	l
<i>Oxyura leucocephala</i> Scop. *	White-headed Duck	w	l
<i>Mergus albellus</i> L.	Smew	w	l
<i>Pandion haliaetus</i> L.	Osprey	m	l
<i>Haliaeetus albicilla</i> L. *	White-tailed Eagle	w	r
<i>Circus aeruginosus</i> L.	Marsh Harrier	n	c
<i>Buteo rufinus</i>	Long-legged Buzzard	v	l
<i>Falco tinnunculus</i> L.	Kestrel	n	l
<i>Coturnix coturnix</i> L.	Quail	m	l
<i>Grus grus</i> L.	Crane	m	c
<i>Anthropoides virgo</i> L.	Demoiselle Crane	m	c
<i>Rallus aquaticus</i> L.	Water rail	n	l
<i>Gallinula chloropus</i> L.	Moorchen	n	c
<i>Fulica atra</i> L.	Coot	n,w	d
<i>Chlamidotis undulata</i> Jacq. *	Houbara Bustard	m	l
<i>Pluvialis squatarola</i> L.	Grey Plover	m	c
<i>Pluvialis apricaria</i> L.	Golden Plover	m	l
<i>Arenaria interpres</i> L.	Turnstone	m	c
<i>Burhinus oedicnemus</i> L.	Stone Curlew	n	l
<i>Charadrius dubius</i> Scop.	Little Ringed Plover	n	l
<i>Charadrius alexandrinus</i> L.	Kentish Plover	n	l
<i>Vanelloshottusia leucura</i> Linch.	White-tailed Plover	n	l
<i>Himantopus himantopus</i> L.	Black-winged Stilt	n	l
<i>Tringa totanus</i> L.	Redshank	?	r
<i>Actitis hypoleucos</i> L.	Common Sandpiper	m	l
<i>Philomachus pugnax</i> L.	Ruff	m	l
<i>Phalaropus lobatus</i>	Red-necked Phalarope	m	l
<i>Calidris alpina</i> L.	Danlin	m	c
<i>Limicola falcinellus</i> Pont.	Broad-billed sandpiper	m	r
<i>Larus cachinnans</i>	Yellow-legged Gull	n,w	l
<i>Larus ichthyaetus</i> Pall.	Great Black-headed Gull	w	r
<i>Larus genei</i> L.	Slender-billed Gull	n	l
<i>Larus ridibundus</i> L.	Black-headed Gull	n,w	c
<i>Chlidonias hybrida</i> Pall.	Whiskered Tern	n	l



many water birds, and it is itself a wintering site for over 27 bird species. Coot *Fulica atra* and Red-crested Pochard *Netta rufina* . dominate in winter. Mallard *Anas platyrhynchos* and Teal *Anas crecca* are common. Of rare birds, Mute Swan *Cygnus olor*, White-headed Duck *Oxyura leucocephala*, Pygmy Cormorant *Phalacrocorax pygmaeus*, and White-tailed Eagle *Haliaeetus albicilla* winter there. The latter 3 species was included with the IUCN Red List.

The total number of migrating game waterfowl, as estimated by aerial inventory, ranged from 114.6 thousand to 499.4 thousand; 54.5-92.9% are Coots and about 6.5-42.6% are bay ducks. Among many migrating bird species staying on Dengizkul, the most important are White Pelican *Pelecanus onocrotalus*, Crane *Grus grus* and Demoiselle Crane *Anthropoides virgo*, Dalmatin Pelican *Pelecanus crispus* is rare.

Data on numbers of waterfowl of Dengizkul Lake during the autumn migration (aerial count, departmental materials of Gosbiocontrol)

Birds species	1986 year	1987 year	1988 year
Greylag Goose	220	5	
Bean Goose	6		
Mallard	2.808	1.177	2.901
Teal	23	288	
Gadwall	8	1.182	479
Red-crested Pochard	17.809	86	1.268
Pochard	25.687	32.247	11.105
Ferruginous Duck	5.323	164	976
Tufted Duck	50		
Goldeneye			
Smew	184		
Goosander			
Coot	62.486	464.210	122.558
Total:	114.604	499.359	139.287

Data presented in the above table witness that the numbers of migrating game birds recorded were constantly high on Lake Dengizkul. Coot was dominant (62.500-464.200 birds). Co-dominants were Pochard (11.100 to 32.200 birds) and Mallard (1.200 to 2.900 birds); in separate years up to 17.800 Pochards were recorded.

During the counts game waterfowl, 13 species were recorded. Ferruginous Duck, which was among them, is included with IUCN Red List as an endangered species. This species is constantly encountered on Lake Dengizkul during the autumn migration. There were more hydrophilous birds on Dengizkul Lake during autumn migration really. At the table 2 there are data only for game waterfowl and no data about other hydrophilous birds like grebes, cormorants, herons, waders, gulls and terns, which usually present at the lake.

In September 1999 we observed southern and northern parts of lakes bank. There were about 350 feeding waders on the southern shallow bank. Among them were Grey Plover (*Pluvialis squatarola*), Golden Plover (*Pluvialis apricaria*), Turnstone (*Arenaria interpres*), Dunlin (*Calidris alpina*), Broad-billed sandpiper (*Limicola falcinellus*), Common Sandpiper (*Actitis hypoleucos*). At some northern bays of lake with reed-bed we found lot of surface-feeding ducks and bay ducks concentrated for feeding and rest. Common number was about 25 thousand. There were Red-crested Pochard, Ferruginous Duck, Tufted Duck, Mallard, Gadwall, Shoveler, Teal, Red-crested Pochard, Gadwal and Shoveler were dominate. Also some Black-necked Grebes, Great Crested Grebes, Gray Herons, Greets Egrets, and Dalmatian pelicans had feeding near by those birds.

Winter aerial counts of the game waterfowl were made in 1987, 1988, 1990 and all hydrophilous birds and waterfowl in 2000. The results of these counts are presented in Table.

Materials on numbers of waterfowl of Dengizkul Lake during wintering 1987, 1988, 1990 and 2000 years (aerial count, departmental materials of Gosbiocontrol)

Bird species	Years				
	1987	1988	1990	10.01.2000	3.02.2000
Great Crested Grebe					1
Grebe sp.					8
Pelican sp.				19	
Cormorant				40	40
Pygmy Cormorant				10	
Grey Heron				1	
Mute Swan				17	
Swan sp.				418	96
Greyling Goose	123	10	151		35
Shelduck	253	22	168		5
Mallard	1.230	2.928	555	9.176	4.281
Teal	1.503		1.577	288	56
Gadwall			186		267
Pintail					180
Wigeon		5			
Red-crested Pochard	432	174	270	4.550	3.329
Pochard	14.193	27.929	13.214	29.100	6.909
Ferruginous Duck	35	7.087		245	83
Pochard sp.				28	424
Tufted Duck		770	74		256
Goldeneye	3			1	2
White-headed Duck				1.107	185
Snew	12		70	350	18
Goosander			2		69
Ducks sp.				33.181	4.594
Coot	29.945	95.543	35.477	201.036	91.060
Aggregations (Coots or Pochards)				7.000	31.300
Steppe Eagle				2	
White-tailed Eagle				19	18
Marsh Harrier					1
Harrier sp.					1
Yellow-legged Gull				15	32
Black-headed Gull				31	106
Gulls sp.					75

Bird species	Years				
	1987	1988	1990	10.01.2000	3.02.2000
Total:	47.729	134.468	51.744	286.634	143.431

The total number of wintering game waterfowl, as estimated by aerial inventory, ranged from 47.7 thousand to 134.5 thousand in 1987, 1988 and 1989. In 2000 there were 286.6 thousand at the beginning of winter and 143,400 when it becomes colder and lake partly was frozen. (Please, look at the above table. Winter climatic conditions in Uzbekistan are not stable. So, in the beginning of January in 2000 the weather became very cold. Temperature in Buchara region near Lake Dengizkul was minus twelve degree and Lake Dengizkul partly was frozen, and other shallow little lakes in this region was frozen too. So, waterfowl were concentrated on the Dengizkul. But two weeks later the weather become warmer and lake was not frozen. In this time some waterfowl redistributed to the other nearest lakes.)

On Lake Dengizkul, of 14 species game birds counted in winter 1987, 1988 and 1990 most numerous were Pochards, the numbers of which reached 29,7%; 20,8%; 25,5%, and Coots (62,7%; 71%; 68,6%). Among rare species Ferruginous Duck does not wintering on Lake Dengizkul on a regular basis. In separate years its numbers can be significant. So, 7,087 ducks were recorded in 1988, only 35 in 1987, and none of them in 1990.

In 2000 26 species of hydrophilous birds were recorded there. The total numbers of birds reached 286,600 and 143,300 birds in January and February, respectively. In these months, the same species prevailed. The dominant was Coot, which constituted 70,1% in January and 63,5% in February.

On Lake Dengizkul, the highest numbers were also recorded for Pochard, Mallard, Red-crested Pochard and White-headed Duck. We, for the first time for Uzbekistan, recorded the wintering of White-headed Duck. At the beginning of wintering period we recorded 1107 White-headed Ducks, and 185 birds in February. The numbers of this bird may had decrease due to the cold spell and their movement to the other water bodies. Similar changes in numbers were recorded for Ferruginous Duck. In January and February, we recorded 245 and 83 Ferruginous Ducks, respectively. Of threatened birds included in the IUCN Red List we recorded Dalmatian Pelican, Pygmy Cormorant, Ferruginous Duck, White-headed Duck and White-tailed Eagle; of those having national importance we recorded Mute Swan and Steppe Eagle.

The availability of sufficient fish stock enables fish-eating birds to inhabit in the lake area. Cormorant *Phalacrocorax carbo* is dominates in this group, and can be observed over all seasons of the year.

Literary data (Shermazatov, Nazarov, 1991) witness wintering of such birds as grebes, pelicans, herons and swans, but without indicating specific species. Using simple mathematical calculation, we can state that during the autumn migration pelicans, cormorants, herons, swans and gulls constituted 1,26% of the total number of the birds recorded, and in winter 1987-88 — 1,45%. Really in winter 2000 number of hydrophilous birds were lower.

Of species belonging to the unique avian fauna on Lake Dengizkul, Dalmatin Pelican, White Pelican, Mute Swan, Marbled Teal, Ferruginous Duck and White-headed Duck, White-tailed Eagle, Pallas' Sea Eagle and Imperial Eagle are noted.

The results of the counts show that Lake Dengizkul as a site of concentration of migrating and wintering waterfowl and hydrophilous birds is of international importance in connection with of high number, also as site witch suppose some species of international importance and more than 1% of the world population of White-headed Duck.