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Assessment of the main food objects of the bird populations arriving in azerbaijan for reproduction in kyzylaghaj bay and adjacent to it terrestrial areas

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Abstract
The assessment of the main food objects of the bird flying to Azerbaijan for reproduction in Kyzylaghaj bay and adjacent terrestrial areas over 2005-2017 was performed on 100 score system. Birds arriving for reproduction falling under 12 groups, 29 families, 60 classes, and 90 species were recorded in the reproduction period. 23 bird species having plants as food object were assessed as 40 – 60 (satisfatory) score, 5 species 60-80 (good). 13 bird species having vertebrates as their food objects were assessed as 0-20 (very poor), 18 species 20-40 (poor), 29 species 40-60 (satisfactory), and 10 species 60-80 (good). 12 bird species having invertebrates as their food objects were assessed as 40-60 (satisfactory), 70 species 60-80 (good), and 5 species 80-100 (very good).

Keywords: Reproduction, terrestrial areas, sedentary birds, Gyzylaghaj bay

Introduction
Wetlands were always under the focus of recearches from biocenological and economical point of view because of rich diversity of different organisms there. Ramsar Convention is dedicated to studying and preservation of wetlands [1, 2]. There is just a few number of complex studies dedicated to bird fauna of wetland ecosystems despite of availability of numerous other works dedicated to this area [3]. Study of qualitative and quantiative indicates of bird fauna is very important for assessing wetlands [4]. Plasticity of the main food object serves as grounds to determine the scope of man-induced influences in bird life. Transition from one food object to another in birds' feeding habits depends on its volumes, accessibility etc., and plays a vital role in preserving rare bird populations [5, 6].
Diversity and density of species gradually increases towards ecosystem boundaries (boundary effect) [4]. Location of habitats at the intersection of acuatic and land areas helps different ecological groups to habituate in neighbourhoods jointly [7, 8]. Habitat condition is one of the main factors for living organisms and determines their numbers, distribution, living patterns, behaviors, their interaction with other organisms and etc., affecting their whole activity [9, 10]. It is possible to predefine distribution of any species by the nature of its food objects, their qualitative and quantiative indicators. Plans may be developed to preserve and regulate number of birds by studying their food objects, benefits and harms, importance for agriculture, forestry, animal – husbandry and healthcare [5].
National Strategy and Action Plan on Preservation and Sustainable Use of Biodiversity in Azerbaijan was signed in 2000 and "Gabala declaration" on Preservation of Bidiversity was signed in 2010 respectively. President of the Republic of Azerbaijan signed a decree "On Conservation of Biodiversity and its Genetic Fund" on December 21, 2012 [11, 12].
Gyzylaghaj bay has had the status of strictly protected reserve (IUCN category 1) since 1926 and ornithological reserve status since 1929. Kyzylaghaj bay has retained only 1/5th of its area in 20th of the past century [13]. Total area of Greater Gyzylaghaj bay in 1931 was 850 km^2 water volume 3,5 km^3, mean depth 4,1 m, and maximum depth 4,5 m. Most of the area dried up due to water reliction in 1946 and bay area shrank down to 712 km^2, with water volume 1,5 km^2, mean depth 2,1 m, maximum depth 2,8 km^2, lengh of the coastline 116 km, width 24 km, and length 29 km. Length of the coastline in 1965 was 92 km, width 24 km, and length 27 km. Total area of Greater Gyzylaghaj bay was 40,5 thousand ha, covering ~46% of its total area

and depth reaching 1,5-2,5 m. Maximum lengh of the Lesser Gyzylaghaj bay 16,7 km, width 6,5 km, lenght of the coastline 38,9 km, water volume 0,15 km,^{3} and depth 0,5-2,5 m [13]. The above figures change depending on water reliction, annual precipitation amounts, and volume of water flowing into the bay through rivers and channels and etc. Lesser Gyzylaghaj Bay joins the Greater Gyzylaghaj bay through three channels. Gyzylaghaj bay has had the International status as one of the 12 Ramsar site since 1975 [14].

Gyzylaghaj bay and its adjacent dry areas situated in south-west of the Caspian Sea are ornithological area having special importance in terms of studying intraspecies and interspecies relations and, directly or indirectly, the food object. While the area has always been subject to natural (water ebbing and edding and etc) anthropic and anthropogenic factors, the food objects for bird populations in the reproduction period in this area has almost not studied. Food chain is a key factor in bird distribution and migration [15, 16]. Species composition, their settlement levels and food chains largely depend on qualitative and quantitative indicators of food resources, as long as they sharply vary depending on year, season, day, biotope and etc., factors. Therefore, several years have been spent on studying and assessing food objects in forming species compositions, settlement levels, and food chains of birds in the reproduction period. Food objects of the same species population in different biotopes has been considered. Significance of Kyzylaghaj bay for waterfowl birds has increased as a result of fully drying up and elimination of many small lakes once existing at Kyzylaghaj bay and its adjacent areas caused by farming activities of people.

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Materials and Methods

The isvestigations have been carried out in 2005-2017 on transects by using also horses, vehicles, motorized and ordinary boats. Here the main objective was to assess the birds' main food objects based on 100 score system in the reproduction period. Researches were conducted every year in April, May, June, July primarily at 9^{00} – 19^{00} am. Binoculars and Carl Zeiss telescope were used for this purpose. The birds' food objects were assessed at their feeding; nesting, resting, overnight staying and etc., sites. Their vulnerability to man-induced factors were taken into account. To do this, we referred to results of analysis of food remnants and excrements, bird vomits, direct visual observations, literary data and etc. Diversity of food objects was considered when establishing its significance for various bird populations.

Study of bird vomits was successful in terms of studying food chains of owl, seagulls and etc. Relatively accurate data was obtained on food chain after studying nests of several birds, baby birds nest feeding patterns, nests surrounding and etc. Even greater attachment of birds to a specific site in the reproduction period and intensive feeding of baby birds (food delivery) helps to relatively accurately establish their food ratio. The same individual birds in several populations may pick up food from different locations, which may be seen as an adaptation of recurrent nature directed towards enhancing their life effects [17, 18]

The researches on main food objects of birds in Azerbaijan contain data on food ratio of various species and those data were primarily gathered until 50 to 90s of the past century. Food objects assessment data are presented in the scientific works of G.T. Mustafayev, N.A. Sadıgova, and N.A. Sadıgova [19, 9]. A.Baldi [7], S.N. Gashev [20], N.A.Sazanova [20], A.G.Selyukov [20],, O.A.Khritanko [20], S.I. Shapalov [20], E.Y. Ekimova [21], A.Y. Guseva [22], E.A. Morochkina [23],Y. V. Gorodilova [24], B.Y. Kassal [25], V.I.Chuchukalo [26], M.L. Kupershtein [27], T.S. Pikhtova [28], V.M. Brovdin [29] and etc. authors have carried out scientific research works to assess food chains on a global scale. Researchers have used general assessment (low, poor, high and etc.) and score assessment criteria regarding food chains, food base, food objects, and etc.

Results and Discussions

Food objects are not conditioned by only species diversity, but also with abundance of food (amount of food per area unit), its stability, yearly, daily and biotopicaly differences, availability etc. Despite the occasional richness of food object, several negative factors cause alteration of food objects. Richness of food objects also influences food nature by influencing density of the bird population [30, 31].

The main feedstuff of plant feeder acuatic birds in Kyzylaghaj bay is small see grass (*Zosfera minor*). See grass is distinct for high nutrient value: composition 17,1% protein, 14,9% albumen, 2,6% oil, and 17,2% starch [32]. Sea grass faces extinction as a result of fishing by fingernet trawl and intensive desalination of the sea water. It is locally spread in few spoes in the bay. Lesser Gyzylaghaj bay has become a fresh water basin due to the water brought via Gumbashy and Vilash rivers from Talysh Mountains. Waters flow into Greater Gyzylaghaj bay via three channels (the water flowing into Greater Gyzylaghaj bay in the former Soviet Union was regulated by gateways) as a result of increased fresh water amounts in Lesser Gyzylaghaj bay. Consequently, water salinity in Greater Gyzylaghaj bay drops from 10-12 to 2-7% in February through April, which gradually increases in June through August and salinity increases again in fall [32]. Frequent change in the salinity of water regime in Greater Gyzylaghaj bay has brought to reduction in the small sea grass (*Zosfera minor)*. Seasonal biomass alteration of the small sea grass may also take place depending on the water salinity regime, plant feeder birds feeding on them in winter and fish in summer [32]. This biomass falls ~ 5-10 times due to flowing of fresh water into Greater Gyzylaghaj bay. The bay was one of the main habitats of birds flying to Azerbaijan for wintering in 1950s. 80% of the birds flying to Gyzylaghaj bay for wintering has settled down here and this was largely due to fairly good food resources and preservation condition. A.G. Gasimov and Z.M. Abbasov have indicated availability of 56 depth organisms here (chironomidae larvae 44,6% or 24 species and cholygitedes 21,4% or 12 species). Nerens and cardium increased after salinity dropped [14]. 396 coypus (*Myocastor coypus*) were introduced into Lesser Gyzylaghaj bay on March 14, 1959 and coypu farm was established in 1962 there. Each year 6-8 thousand nutria skins were sold. Nutria destroys different plants 1370 kg in a year [32] and serves as a true meliorator. It shreds into pieces roots of reed and other water plants 4-5 times more than just feeding on them and such pieces may be used by birds as *Fulica atra*, *Porphyrio porphyrio*, *Gallinula chloropus* and other birds for building a nest [32].

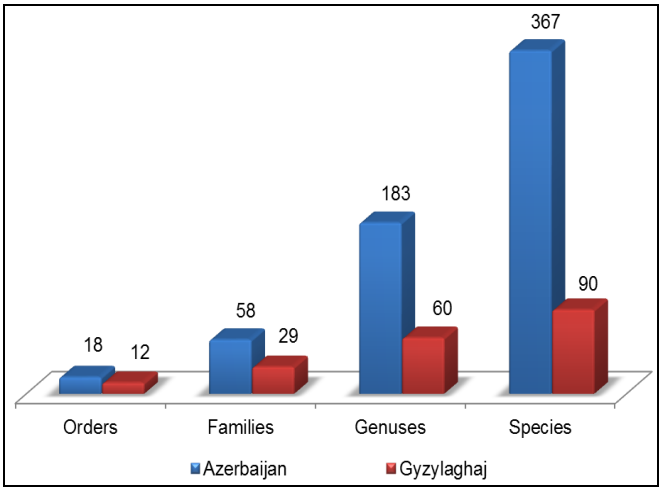

Chart 1: Taxonomic comparison between bird fauna of Azerbaijan and bird populations being in reproduction at Kyzylaghaj bay and adjacent to it terrestrial areas

There is a gradual drop from group (~ 66.6%) to species level(~24.5%) in the taxonomic spectrum of 367 bird species recorded in Azerbaijan out of 90 bird species arrive for reproduction at Kyzylaghaj bay and its adjacent dry areas (chart 1) [33, 34].

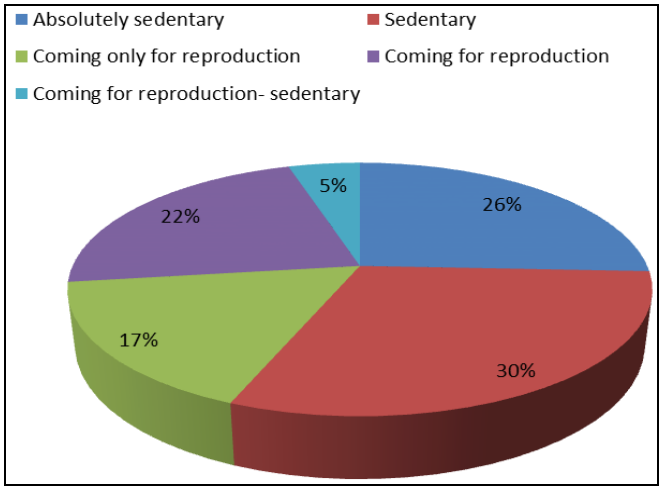

Chart 2: The character of birds settlement on population level at the reproduction period

Among 140 bird species recorded in Gyzylaghaj bay and adjacent terrestrial areas 64 species are sedentary birds, 90 species are birds coming for reproduction. 50 species belong to absolutely sedentary birds, 76 species belong to birds coming just for reproduction, and 14 birds belong both to sedentary and coming for reproduction in Gyzylaghaj bay (Chart 2).

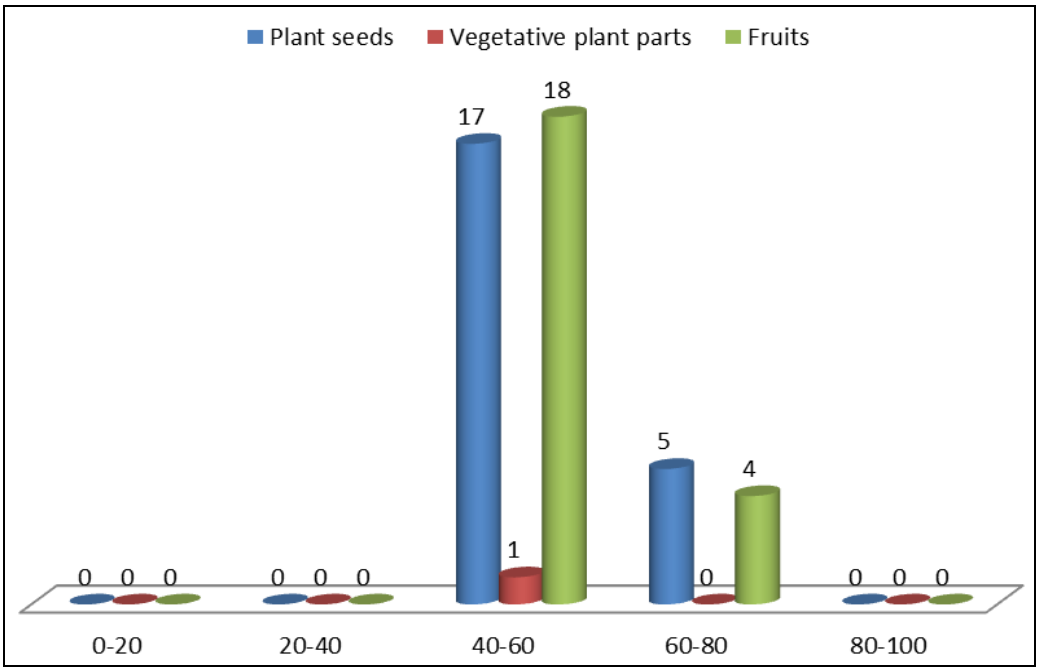

Chart 3: Assessment of bird's plant origin food objects in the reproduction period

No assessments 0-20 (very poor), 20-40 (poor) and 80-100 (very good) were recorded for the birds coming for reproduction having plant origin food objects at Gyzylaghaj bay and its adjacent areas. 17 bird species feeding on plant seeds and 18 species feeding on fruits, and 1 species feeding on vegetative parts received 40-60 (satisfactory) score. 5 bird species having plant seeds as food objects and 4 species having fruits as food objects were assessed as 60-80 (good) (chart 3).

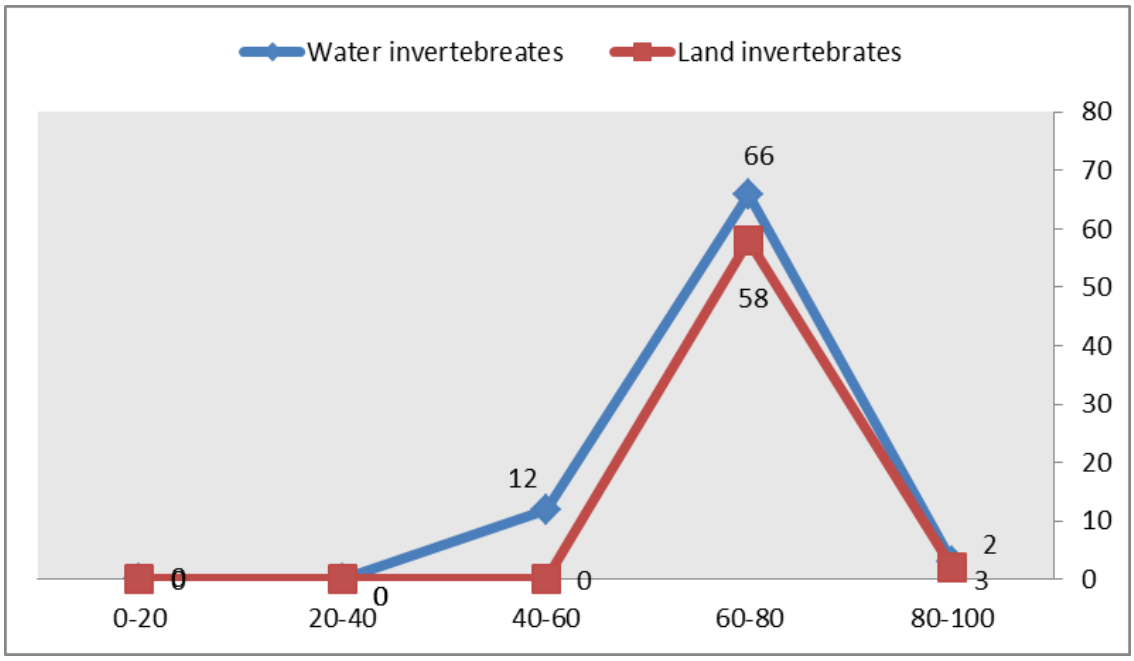

Chart 4: Reproduction period for assessment of sedentary bird populations' food objects (invertebrates)

Invertebrate biomass in these areas located at intersection of two ecosystems (acuatic and terrestrial) is multiple times greater than other food objects. No bird populations having aquatic and land invertebrates as their food objects and assessed as 0-20 (very poor), 20-40 (poor) were recorded. No bird populations having acuatic invertebrates as their food objects and assessed as 40-60 (satisfactory) were recorded. 12 bird species feeding on land invertebrates were assessed as 40-60 (satisfactory). 58 bird species having invertebrates as their food objects received 60-80 (good), 2 species 80-100(very good), 66 species having land invertebrates as their food objects 60-80 (good), and 3 species 80-100 (very good) (chart 4).

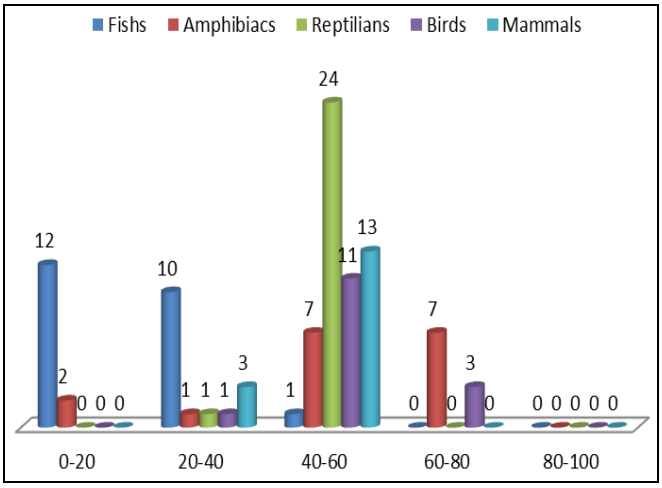

Chart 5: Assessment of sedendary bird populations' food objects (vertebrates) at reproduction period

12 birds species having fish as their food objects were assessed as 0-20 (very poor), 10 species 20-40(poor), and 1 species 40-60 (satisfactory). 2 bird species having amphibiacs as their food objects were assessed as 0-20 (very poor), 6 species 20-40 (poor), 7 species 40-60 (satisfacotyr), and 7 species 60-80 (good). 1 bird species having reptilians as their food objects were assessed as 20-40 (poor) and 24 species 40-60 (satisfactory). 1 bird species having birds as their food objects were assessed as 20-40 (poor), 11 species 40-60 (satisfactory), and 3 species 60-80 (good). 3 bird species having mammals as their food objects were assessed as 20-40 (poor) and 13 species 40-60(satisfactory) (chart 5).

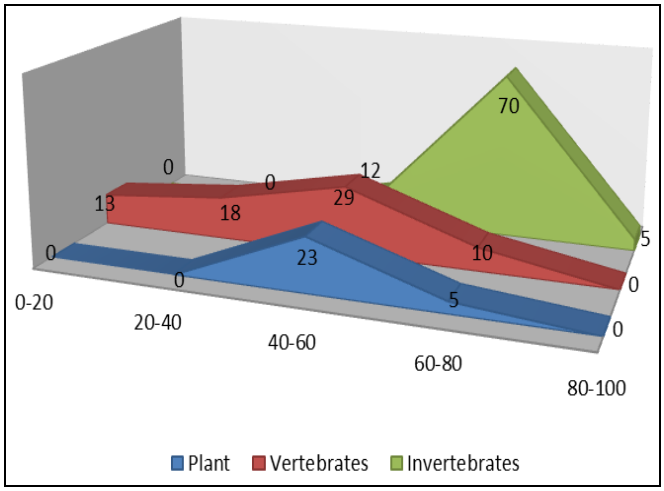

Chart 6: Reproduction period for assessment of sedendary birds' key food objects (plants, invertebrates and vertebrates)

23 bird species arriving for reproduction having plants as their food objects were assessed as 40-60 (satisfactory) and 5 species 60-80 (good). 13 bird species having vertebrates as their food objects were assessed as 0-20 (very poor), 18 species 20-40 (poor), 29 species 40-60 (satisfactory), and 10 species 60-80 (good). 12 bird species having invertebrates as their food objects were assessed as 40-60 (satisfactory), 70 species 60-80 (good), and 5 species 80-100 (very good) (chart 6).

Table 1: Assessment of the main food objects of sedentary bird populations at Kyzylaghaj bay and adjacent terrestrial areas for reproduction based on 100 score system

№	Species	R	M	Assesement of food objects by 100 score system									
				S	**Fr**	**V**	**M.inv**	**T.inv**	**F**	**A**	**R**	**B**	**M**
1	*Podiceps ruficollis*	+		60-80			80-100		40-60				
2	*Podiceps nigricollis*	+		60-80			80-100		40-60				
3	*Podiceps cristatus*	+	+	60-80	40-60		80-100		40-60				
4	*Phalacrocorax carbo*	+	+				60-80		20-40				
5	*Phalacrocorax pygmaeus*	+	+				60-80		20-40				
6	*Botarus stellaris*	+	+				60-80	60-80	0-20	60-80	40-60		40-60
7	*Ixobrychus minutus*		+				60-80	60-80	0-20	60-80		20-40	
8	*Nycticorax nycticorax*	+					60-80	60-80	0-20	60-80			
9	*Ardeola rallocdes*		+				60-80	60-80	0-20	60-80	40-60		
10	*Bubulcus ibis*		+				60-80	60-80	0-20				
11	*Egretta alba*	+	+				60-80	60-80	0-20	40-60	40-60		20-40
12	*Egretta garzetta*	+	+				60-80	60-80	0-20	40-60	40-60		20-40
13	*Ardea cinerea*	+	+				60-80	60-80	0-20	60-80	40-60		20-40
14	*Ardea purpurea*		+				60-80	60-80	0-20	60-80	40-60		20-40
15	*Platalea leucorodia*		+	40-60	40-60		60-80		0-20	0-20			
16	*Plegadis falcinellus*		+				60-80	60-80	0-20	40-60			
17	*Ciconia ciconia*	+	+				60-80	60-80	0-20	40-60	40-60	40-60	40-60
18	*Phoenicopterus roseus*	+					40-60						
19	*Tadorna ferrugenea*	+		40-60	20-40	40-60	60-80						
20	*Tadorna tadorna*	+		40-60	20-40	40-60	60-80						
21	*Anas plathyrhynchos*	+		40-60	40-60	60-80	60-80						
22	*Anas strepera*	+		40-60	40-60	60-80	60-80						
23	*Netta rufina*	+		40-60	40-60	60-80	60-80						
24	*Pandion haliaetus*		+					40-60	0-20		40-60		40-60
25	*Pernis apivorus*		+					40-60		0-20	40-60		
26	*Milvus miqrans*		+					40-60			40-60	40-60	40-60
27	*Circus macrourus*		+					40-60			40-60	40-60	40-60
28	*Circus pygargus*		+					40-60			40-60	40-60	40-60
29	*Circus aeruginosous*	+						40-60		40-60	20-40	80-100	40-60
30	*Accipiter nisus*	+	+					40-60			40-60	40-60	40-60
31	*Accipiter brevipes*		+					40-60		20-40	40-60	40-60	40-60
32	*Accipiter badius*		+								40-60		
33	*Buteo buteo*	+						40-60			40-60	40-60	40-60
34	*Circaetus gallicus*		+					40-60		40-60	40-60	40-60	
35	*Hieraatus pennatus*		+					40-60			40-60	40-60	40-60
36	*Aquila pomaria*		+					40-60			40-60	40-60	40-60
37	*Haliatus albicilla*	+							0-20			40-60	40-60
38	*Falco subbuteo*		+					40-60				40-60	40-60
39	*Falco naumanni*		+					40-60			40-60		
40	*Falco tinnunculus*	+						40-60			40-60	40-60	40-60
41	*Francolinus francolinus*	+		60-80	0-20			60-80					
42	*Rallus aquatus*	+						60-80	20-40				
43	*Coturnix coturnix*		+	60-80	60-80								
44	*Gallinula chloropus*	+		60-80	40-60		60-80	60-80					
45	*Porphyrio porphyrio*	+		60-80	0-20		60-80						
46	*Filica atra*	+		60-80	60-80	60-80	60-80						
47	*Burchinus oedicnemus*		+				60-80	60-80		60-80	40-60		20-40
48	*Charadrius dubius*		+				60-80	60-80					
49	*Charadrius leshenaultii*		+				60-80	60-80					
50	*Charadrius alexandrinus*		+				60-80	60-80					
51	*Vanellus vanellus*	+					60-80	60-80					
52	*Vanellochettusia lecura*		+				60-80	60-80					
53	*Himantopus himantopus*		+				60-80	60-80					
54	*Recurvirostra avosetta*	+	+				60-80						
55	*Tringa ochropus*	+	+				60-80	60-80					
56	*Tringa glareola*		+				60-80	60-80					
57	*Tringa totanus*	+	+			40-60	60-80	60-80					
58	*Actius hypoleucos*		+				60-80	60-80					
59	*Glareola pratincola*		+				60-80	60-80					
60	*Glareola nordmanni*		+				60-80	60-80	20-40				
61	*Larus ichtyaetus*	+					60-80	60-80	20-40		40-60	60-80	
62	*Larus ridibundus*	+					60-80	60-80	20-40				
63	*Larus genei*	+					60-80	60-80	20-40				
64	*Larus argentatus*	+					60-80	60-80	20-40		40-60	60-80	

65	*Chlidonias niger*		+				60-80	60-80	20-40				
66	*Chlidonias leucopterus*		+				60-80	60-80	20-40				
67	*Chlidonias hybrida*		+				60-80	60-80	20-40	40-60			
68	*Hidroprogne caspia*		+				60-80	60-80	20-40				
69	*Gelochelidon nilotica*		+				60-80	60-80			20-40	40-60	
70	*Sterna sandvicensis*		+				60-80	60-80	20-40				
71	*Sterna hirundo*		+				60-80	60-80	20-40				
72	*Sterna albifrons*		+				60-80	60-80	20-40				
73	*Pterocles orientalis*	+		60-80									
74	*Columba livia*	+		60-80									
75	*Streptopelia turtur*		+	60-80	60-80								
76	*Cuculus canorus*		+					60-80					
77	*Asio flammeus*	+											40-60
78	*Athene noctua*	+										60-80	40-60
79	*Caprimulgus eurapeus*		+					60-80					
80	*Apus apus*		+				60-80	60-80					
81	*Alcedo atthis*	+					60-80		40-60				
82	*Merops apiaster*		+					60-80					
83	*Meropa superciliosus*		+					60-80					
84	*Upupa epops*		+					60-80		40-60	40-60		
85	*Riparia riparia*		+					80-100					
86	*Hirundo rustica*		+					80-100					
87	*Delichin urbica*		+					80-100					
88	*Galerida cristata*	+		40-60			60-80	60-80					
89	*Calandrella cinerea*	+		40-60			60-80	60-80					
90	*Calandrella rufescens*		+	40-60			60-80	60-80					
91	*Melanocorypha calandra*	+		40-60			60-80	60-80					
92	*Anthus compestris*		+	40-60	40-60		60-80						
93	*Motasilla flava*	+					60-80	60-80					
94	*Motasilla alba*	+	+				60-80	60-80					
95	*Lanius collurio*		+	40-60				60-80			40-60	60-80	40-60
96	*Lanius senator*		+	40-60				60-80			40-60	60-80	40-60
97	*Lanius minor*		+	40-60				60-80					
98	*Oriolus oriolus*		+	40-60	40-60			60-80					
99	*Sturnus vulgaris*	+	+	60-80	60-80			60-80					
100	*Pastor roseus*		+	60-80	60-80			60-80					
101	*Garrulus glandarius*	+		40-60	40-60	40-60		60-80			40-60	60-80	20-40
102	*Pica pica*	+		40-60	40-60		60-80	60-80				60-80	
103	*Corvus frugilegus*	+		40-60	40-60	60-80	60-80	60-80					
104	*Corvus cornix*	+		40-60	40-60		60-80	60-80					
105	*Cettia cetti*	+		40-60				60-80	40-60				
106	*Lusciniola melanopogon*		+				60-80	60-80					
107	*Acrocephalus schoenobaenus*		+		40-60		60-80	60-80					
108	*Acrocephalus scirpaeus*		+				60-80	60-80					
109	*Acrocephalus arundinaceus*		+		40-60		60-80	60-80		60-80			
110	*Hippolais pallida*		+	40-60	40-60		60-80	60-80					
111	*Sylvia nisoria*		+	40-60	40-60		60-80	60-80					
112	*Sylvia hortensis*		+	40-60	40-60		60-80	60-80					
113	*Sylvia atricapilla*		+	40-60	40-60		60-80	60-80					
114	*Sylvia borin*		+	40-60	40-60		60-80	60-80					
115	*Sylvia communis*		+	40-60	40-60		60-80	60-80					
116	*Sylvia mystacea*		+	40-60	40-60		60-80	60-80					
117	*Phylloscopus trochilus*		+				60-80	60-80					
118	*Phylloscopus collybitus*		+				60-80	60-80					
119	*Muscicapa striata*		+				60-80	60-80					
120	*Saxicola torguata*		+					60-80					
121	*Oenanthe oenante*		+		40-60		60-80	60-80					
122	*Oenante hispanika*		+		40-60		60-80	60-80					
123	*Cercotrichas galactotes*		+				60-80	60-80					
124	*Phoenicurus phoenicurus*		+				60-80	60-80					
125	*Luscinia megarhynchos*		+	40-60	40-60		60-80	60-80					
126	*Turdus merula*	+		40-60	40-60	40-60	60-80	60-80					
127	*Panrus biarmicus*	+			40-60		60-80	60-80					
128	*Remiz pendulinus*	+					80-100	80-100					
129	*Remiz makronyx*	+					80-100	80-100					
130	*Parus major*	+		40-60	40-60	40-60		60-80					
131	*Sitta europaea*	+		40-60	40-60	40-60		60-80					
132	*Sitta neumayer*	+					60-80	60-80					

133	*Passer domesticus*	+		40-60	40-60			60-80					
134	*Passer hispaniolensis*	+		40-60	40-60			60-80					
135	*Passer montanus*	+		40-60	40-60			60-80					
136	*Carduelis carduelis*	+		40-60	40-60		60-80	60-80					
137	*Emberiza calandra*	+			40-60		60-80	60-80					
138	*Emberiza schoniculus*	+			40-60		60-80	60-80					
139	*Emberiza hortulana*		+	40-60	40-60		60-80	60-80					
140	*Emberiza melanocephala*		+	40-60	40-60		60-80	60-80					

Note 1: S – seed, Fr – fruit, V – vegetative part, M. $_{invert.}$ – water invertebrates, T. $_{invert.}$ – terrestrial invertebrates, F – fish, A – amphibians, R – reptilians, B – birds, M – mammals.
Note 2: 0-20 – very poor, 20-40 – poor, 40-60 – satisfactory, 60-80 – good, 80-100 – very good
Note 3: R – sedentary (resident) populations, M – populations arriving in Azerbaijan for reproduction

Conclusion

1. Resources of small sea grass (*Zosfera minor*) as a main feedstuff for water birds have substantially diminished in the reproduction period in Kyzylaghaj bay caused by changes in water salinity.
2. Sea naiad, green, diatom, blue-green alga biomass has increased and form water jungles to the end of the reproduction period.
3. Water and terrestrial invertebrates become a main food object for many bird populations since they increase both qualitatively and quantitatively.
4. Species composition of bird populations having fish as their food objects has diminished both qualitatively and quantitatively.
5. Amphibiacs have become the key food object for bird populations since they are large in quantitive and accessible along the bay coastline thanks to fresh water of rivers and channels flowing into the Lesser Kyzylaghaj bay. The qualitative and quantitative amphibiac indicators are very low along the coastline of the Greater Kyzylaghaj bay.
6. Qualitative and quantitative indicators of the reptiles and mammals serving as main food objects for birds in the terrestrial areas adjacent to Greater and Lesser Gyzylaghaj bays are fairly good.
7. Birds become main food obejcts (eggs, baby and fledgling birds in the nest, and etc.) since they largely nest in the Greater Kyzylaghaj bay.

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