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Research article/Araştırma makalesi

The ornithofauna of Eskişehir/Türkiye

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Abstract

In the study conducted between December 2008 and April 2011 in Eskişehir, which is located in Northeast of Anatolia, 254 species, belonging to 58 families (18 ordos - class) which live in forest, wetland, mountain and stepe ecosystems, were recorded. Species' status' are as follows: 135 residents (R), 73 summer visitors (M) and 32 winter visitors (W), 4 vagrants (V) and 10 Transit migrants (T). When species' danger status in Red Data Book of Turkiye was checked, it was determined that 231 species were under threat and their IUCN status was found to be: (Endangered=1, Critically=none, Vulnerable=4, Least Concern =241, NT=8).

Key words: Ornithofauna, Birds, Turkey, Eskişehir

1. Introduction

In our country, compared to developed west countries, ornitofaunistic studies are quite new, Besides several exceptions (Kiziroğlu, 1980, 1982, 2004; Sıkı, 1988; Aslan and Erdoğan, 2001; Aslan and Kiziroğlu, 2003; Erdoğan, 1998; Erdoğan, 1996; Erdoğdu, 2001; Kaya et al.., 1999; Kiziroğlu et al. ., 1993; Sert and Erdoğan, 2004; Sıkı et al., 1998; Turan and Erdoğan, 1998), ornithofanunistic studies are devoted to exhibit local ornitofauna. Introducing a complete ornitofanuna is yet possible by handling these kind of local studies all together (Kiziroğlu, 2009). Our study contributes to the studies done to list (catalogue) the bird species which are Turkiye's biological diversity and thereby its biological richness.

Since Türkiye is a passage (transition) location between Europe and Asia, and it functions as a gate that opens to Africa, it undertakes an important ecosystem function for birds (Barış, 2000; Erdem, 1995; Ertan ve ark., 1989; Yarar ve Magnin, 1997). Our country's ecosystem has many wetland areas, forests, forages and moors (Dicksen,1987; Kosswig, 1950; Lensink, 1987). Moreover, we own many bird species' passing (transition) route, since we are on migration routes. Eskişehir province composes a habitat that has the ecosystem properties we have mentioned too. Our province has active biological potantials for birds, like all geographic regions of Anatolia.

The purpose of this study was to determine the bird species in Eskişehir Province and sourroundings. In our study, by determining the bird species and the geographical areas they live, it was focused on issues like exhibiting their local status for Eskişehir province, precautions that must be taken for the species' future, forming public consciousness about bird richness (abundance) and thereby biodiversity in our province and country (Kiziroğlu, 1996, 2008). For this purpose, informatory studies about preserving habitats of immigrant and overwintering birds, have also been performed via interviews with local people in every station visited. With especially inhabitants of villages in Sivrihisar Balıkdamı region. Because, although it was announced to be natural reservation area, region's condition alerts, because of discharging pond's water by inhabitants for watering purposes, pollution caused by fisherman, and hunters' timeless and cruel hunting custom. Despite all these negations, in the field work performed for determining our city's ornitofauna, there are some species which cannot be watched, although we are sure about their presence.

Eskişehir is located on the banks of the Porsuk River, 792 m above sea level, where it overlooks the fertile Phrygian Valley. In the nearby hills one can find hot springs. The city is 233 km to the west of Ankara, 330 km to the southeast of Istanbul and 78 km to the northeast of Kütahya. The district covers an area of 2,678 $km^{2.}$ The provincial capital is Eskişehir. Most of the province is laid down in Central Anatolia Region. Northern parts of Mihalıççık district and ones of Mihalgazi and Sarıcakaya of her remained in Black Sea Region and Han one of her remained in Aegean

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Region. (Figure 1). Eskişehir has a typical Central Anatolia steppe climate: dry and hot summers, and cold winters. It has a wide steppe area in the middle part in which usually steppes and from place to place ruined scrublands and oaks exist, except forested lands close to North and South borders. Within these steppe areas, cultivated areas share an impotant percentage. The lowest altitude (elevation) is Sarıcakaya county (210 mt.). The highest altitude is Turkmenbaba Mountain, which is 1226 mt. High. City center's altitude is 792 mt.

There are four Important Bird Areas in Eskişehir: Türkmenbaba Mountain (Seyitgazi), Aliken (Çifteler-Sivrihisar), Balıkdamı (Sivrihisar), Hamamdağı (Mihalıççık) (Yarar and Magnin 1997).

Figure 1. Administrative map of Eskişehir and major study area spots

2. Materials and methods

2.1. Characterics of study areas in Eskişehir and field works

The study have been performed between the dates of December 2008-June 2010, in a total of 50 field works, with 23.080 km travels. 68 field spots (B, Y, G, S, P, C, T that showed and explained as abrevations on Table 1) were visited in Alpu, Beylikova, Çifteler, Günyüzü, Han, İnönü, Mahmudiye, Mihalgazi, Mihalıççık, Porsuk Dam Lake, Sarıcakaya, Sarıyar Dam Lake, Seyitgazi and Sivrihisar Balıkdamı regions were visited on. Identification of species and status of species in Eskişehir were done according to Red Data Book and The Pocket Guide Birds of Türkiye (Kiziroğlu, 2008 and 2009).

Birds' seasonal migration, feeding, breeding were noted by watching via two Soligor 7x50 binoculars in camouflage tents. Field works were performed in form of photographing and filming. Besides this, we performed studies to raise awareness of the people around habitats, about issues of protecting biological ecosystems and preserving nature and natural resources.

2.2. Photographing and video shooting

During the project, all of the bird species that were watched using a 7x50 Soligor binocular, and were photographed by Canon DSLR camera. Especially, to overcome the difficulties while photographing redaceous birds on the fly, Canon EF 100-400 mm f/4.5-5.6 L IS USM lense were used. For the rest of the shootings 50-500mm F4.5-6.3 APO DG OS HSM lense was used. Yet, for exposures from remote distances, using this lense was ideal for close up shooting. Again, for shooting without disturbing the birds, close up shooting was practised via camouflage techniques in the area. The other hand, we filmed the birds in their habitats by JVC HD Pro cameras using 300 mm Tamron lense. We generally preferred to use tripod in order to avoid camera shake.

3. Results

As a result of a total of 50 field works on 68 field spots accomplished between August 2008 – June 2010, the list of bird species determined, and the regions they were watched is as follows.

Abbrevations (Table 1) that were mentioned as watching area in the list above, and their equivalents are as follows:

B: Sivrihisar and Balıkdamı Region (15 field spot)
Y: Sarıcakaya Region (10 field spot)
G: Gökçekaya Dam and Çatacık Region (6 field spot)
D: Mihallıççık and Around Sarıyar Dam Pond (11 field spot)
P: Porsuk Dam Pond and Its Round (15 field spot)
C: Çifteler Region and Eminekin Reeds (6 field spot)
T: Türkmenbaba Mountain and surroundings (5 field spot)

Table 1. The list of ornithofauna in Eskişehir/Türkiye

	Ordo	Family	Scientific name	RDB	IUCN	S	WA
1	PODICIPEDIFORMES	Podicipedidae	*Tachybaptus ruficollis*	A.3.1	LC	R	B, G, D, P, C
2			*Podiceps cristatus*	A.5	LC	R	B, G, D, P, C
3			*Podiceps nigricollis*	A.4	LC	R	B, G, D, P, C
4	PELECANIFORMES	Phalacrocoracidae	*Phalacrocorax carbo*	A.3	LC	W	P, G, D
5			*Phalacrocorax pygmeus*	A.3.1	LC	W	P, G, D
6		Pelecanidae	*Pelecanus onocrotalus*	A.3	LC	R	B, G, D, P, C
7	CICCONIIFORMES	Ardeidae	*Botarus stellaris*	A.2.	LC	R	B, G, D, P, C
8			*Ixobrychus minutus*	A.2	LC	R	B
9			*Nycticorax nycticorax*	A.3.1	LC	R	B
10			*Ardeola ralloides*	A.3	LC	R	B, G, D, P, C
11			*Bubulcus ibis*	A.2	LC	R	B, G, D, C
12			*Egretta garzetta*	A.3.1	LC	R	B, Y, G, D, P, G, C
13			*Ardea alba*	A.3.1	LC	R	B, Y, G, D, P, G, C
14			*Ardea cinerea*	A.3.1	LC	R	B, Y, G, D, P, G, C
15			*Ardea purpurea*	A.2.	LC	R	B, Y, G, D, P, G, C
16		Ciconiidae	*Ciconia nigra*	A.3	LC	M	B, Y, G, D, P, G, C, T
17			*Ciconia ciconia*	A.3.1	LC	M	B, Y, G, D, P, G, C, T
18		Thereskionithidae	*Plegadis falcinellus*	A.3.1	LC	R	B, C
19			*Platalea leucorodia*	A.3	LC	M	B
20	PHONICOPTERIFORMES	Phonicopteridae	*Phoenicopterus ruber*	A.3.1	LC	R	B
21	ANSERIFORMES	Anatidae	*Tadorna ferruginea*	A.4	LC	R	B, Y, G, D, P, G, C
22			*Anas penelope*	A.5	LC	W	B, Y, G, D, P, G, C
23			*Anas strepera*	A.4	LC	R	B, Y, G, D, P, G, C
24			*Anas crecca*	A.5	LC	R	B, Y, G, D, P, G, C
25			*Anas platyrhynchos*	A.5	LC	R	B, Y, G, D, P, G, C
26			*Anas querquedula*	A.4	LC	R	B, Y, G, D, P, G, C
27			*Anas clypeata*	A.4	LC	W	P
28			*Netta rufina*	A.5	LC	R	B, P
29			*Aythya ferina*	A.5	LC	R	B, P
30			*Aythya nyroca*	A.3	NT	R	D
31			*Aythya fuligula*	A.5	LC	R	B
32	FALCONIFORMES	Accipitridae	*Pernis apivorus*	A.3	LC	R	B, Y, D, P, G, C
33			*Milvus migrans*	A.3	LC	M	B, Y, D, P, G, C
34			*Milvus milvus*	A.1.2	NT	R	B, Y, D, P, G, C
35			*Haliaeetus albicilla*	A.1.2	LC	R	T
36			*Gypaetus barbatus*	A.1.2	LC	R	B, G, D, P, C, T
37			*Neophron percnopterus*	A.3	EN	M	B, Y, D, P, G, C
38			*Gyps fulvus*	A.2	LC	R	B, Y, D, P, G, C
39			*Aegypius monachus*	A.2	NT	R	B, Y, D, P, G, C, T
40			*Circaetus gallicus*	A.4	LC	M	B, Y, D, P, G, C
41			*Circus aeruginosus*	A.3	LC	R	B, Y, D, C
42			*Circus cyaneus*	A.1.2	LC	R	B, P
43			*Circus macrourus*	A.1.2	NT	R	B, P
44			*Circus pygarcus*	A.1.2	LC	R	B, Y, D, P, C
45			*Accipiter gentiles*	A.1.2	LC	R	B, Y, D, P, C, T

46			*Accipiter nisus*	A.3	LC	R	B, Y, D, P, C, T
47			*Accipiter brevipes*	A.2	LC	R	D
48			*Buteo buteo*	A.3	LC	R	B, Y, D, P, G, C, T
49			*Buteo rufinus*	A.3	LC	R	B, Y, D, P, G, C, T
50			*Buteo lagopus*	A.1.2	LC	W	D
51			*Aquila pomarina*	A.3	LC	T	G, T
52			*Aquila rapax*	A.1.2	LC	R	G, T
53			*Aquila heliaca*	A.1.2	VU	R	G, S, C
54			*Aquila chrysaetos*	A.1.2	LC	R	G, T
55			*Hieraaetus pennatus*	A.3	LC	M	B, Y, D, P, G, C
56			*Pandion haliaetus*	A.1.2	LC	R	B, P
57			*Falco naumanni*	A.2	VU	M	B, Y, D, P, G, C, T
58			*Falco tinnunculus*	A.2	LC	R	B, Y, D, P, G, C, T
59			*Falco vespertinus*	B.3	NT	T	B
60			*Falco columbarius*	B.1.2	LC	W	B
61			*Falco subbuteo*	A.3.1.	LC	M	B, Y, P, C
62			*Falco biarmicus*	A.2	LC	R	B
63			*Falco cherrug*	A.1.2	VU	R	B
64			*Falco peregrinus*	A.1.2	LC	R	B
65	GALLIFORMES	Phasianidae	*Alectoris chukar*	A.2	LC	R	B, Y, D, P, G, C, T
66			*Coturnix coturnix*	A.3	LC	M	B, Y, D, P, G, C, T
67	GRUIFORMES	Rallidae	*Rallus aquaticus*	A.3	LC	R	B, C
68			*Porzana porzana*	A.2	LC	R	B
69			*Porzana parva*	A.1.2	LC	R	B
70			*Crex crex*	A.1.2	NT	R	B
71			*Gallinula chloropus*	A.3.1	LC	R	B, C
72			*Fulica atra*	A.5	LC	R	B, Y, D, P, G, C
73		Otididae	*Otis tarda*	A.2	VU	R	C
74	CHARADİİFORMES	Recurvirostridae	*Himantopus himantopus*	A.3	LC	M	B
75			*Recurvirostra avosetta*	A.4	LC	M	B
76		Burhinidae	*Burhinus oedicnemus*	A.2	LC	M	B
77		Charadriidae	*Charadrius dubius*	A.3	LC	M	B, Y, D, P, G, C
78			*Charadrius alexandrinus*	A.4	LC	R	B
79			*Vanellus vanellus*	A.5	LC	M	B, Y, D, P, G, C
80		Scolopacidae	*Calidris alba*	B.3	LC	W	B
81			*Calidris minuta*	B.5	LC	W	B
82			*Calidris temminckii*	B.3	LC	W	B
83			*Calidris ferruginea*	B.4	LC	W	B
84			*Calidris alpina*	B.5	LC	W	B
85			*Limicola falcinellus*	B.3	LC	W	B
86			*Philomachus pugnax*	B.4	LC	W	B
87			*Lymnocryptes minimus*	B.1.2	LC	W	B
88			*Gallinago gallinago*	B.3.1	LC	W	B
89			*Scolopax rusticola*	B.3	LC	W	B
90			*Limosa limosa*	B.4	NT	W	B

91			*Numenius arquata*	B.3	LC	W	B
92			*Tringa erythropus*	B.4	LC	W	B, Y, D, P, G, C
93			*Tringa totanus*	A.4	LC	R	B, Y, D, P, G, C
94			*Tringa nebularia*	B.3.1	LC	W	B, Y, D, P, G, C
95			*Tringa ochropus*	B.2	LC	W	B, Y, D P, G, C
96			*Tringa glareola*	B.3	LC	T	B, Y, D, P, G, C
97			*Actitis hypoleucos*	A.3	LC	M	B
98			*Arenaria interpres*	B.3	LC	T	B
99		Phalaropidae	*Phalaropus lobatus*	B.3.1	LC	T	B
100		Laridae	*Larus melanocephalus*	A.3.1	LC	R	B, P, D
101			*Larus ridibundus*	A.5	LC	R	B, Y, D, P, G, C
102			*Larus canus*	B.2	LC	W	B, P, D
103			*Larus michahellis*	A.4	LC	R	B, Y, D, P, G, C
104			*Larus cachinnans*	A.5	LC	R	B, P, D
105		Sternidae	*Sterna nilotica*	A.4	LC	R	B, Y, D G, C
106			*Sterna hirundo*	A.3	LC	R	B, Y, D P, G, C
107			*Sterna albifrons*	A.3.1	LC	M	B, P
108			*Chlidonias niger*	A.3	LC	R	B, Y, D, P, G, C
109			*Chlidonias leucopterus*	A.4	LC	R	B, Y, D, P, G, C
110	PTEROCLIFORMES	Pteroclididae	*Pterocles orientalis*	A.3	LC	R	B, Y, D, C
111	COLUMBIFORMES	Columbidae	*Columba livia*	A.5	LC	R	B, Y, D, P, G, C
112			*Columba oenas*	A.3.1	LC	R	
113			*Columba palumbus*	A.4	LC	R	B, Y, D, P, G, C
114			*Streptopelia decaocta*	A.5	LC	R	B, Y, D, P, G, C
115			*Streptopelia turtur*	A.3.1	LC	M	B, Y, D, P, G, C
116	CUCULİFORMES	Cuculidae	*Clamator glandarius*	A.1.2	LC	M	B, Y, D, P, G, C
117			*Cuculus canorus*	A.2	LC	M	B, Y, D, P, G, C
118	STRIGIFORMES	Tytonidae	*Tyto alba*	A.1.2	LC	R	D, G, T
119		Strigidae	*Otus scops*	A.2	LC	R	B, Y, D, P, G, C, T
120			*Bubo bubo*	A.1.2	LC	R	G, T
121			*Athene noctua*	A.2	LC	R	B, Y, D, P, G, C, T
122			*Strix aluco*	A.2	LC	R	G, C, T
123			*Asio otus*	A.2	LC	R	B, Y, D, P, G, C, T
124			*Asio flammeus*	A.1.2	LC	W	B, C, T
125	CAPRIMULGIFORMES	Caprimulgidae	*Caprimulgus europaeus*	A.1.2	LC	M	B, Y, D, P, G, C, T
126	APODIFORMES	Apodidae	*Apus apus*	A.3.1	LC	M	B, Y, D, P, G, C, T
127			*Apus pallidus*	A.2	LC	M	B, Y, D, P, G, C, T
128			*Apus melba*	A.3.1.	LC	M	B, Y, D, P, G, C, T
129			*Apus affinis*	A.3	LC	M	B, Y, D, P, G, C, T
130	CORACIIFORMES	Alcedinidae	*Alcedo atthis*	A.2	LC	R	B, Y, D, P, G, C, T
131		Meropidae	*Merops apiaster*	A.3.1	LC	M	B, Y, D, P, G, C, T
132		Coraciidae	*Coracias garrulus*	A.2	NT	M	B, Y, D, P, G, C, T
133		Upupidae	*Upupa epops*	A.2	LC	M	B, Y, D, P, G, C, T
134	PICIFORMES	Jyngidae	*Jynx torquilla*	A.1.2	LC	M	T
135		Picidae	*Picus viridis*	A.2	LC	R	T

136			*Dendrocopus major*	A.3	LC	R	C, T
137			*Dendrocopus syriacus*	A.2	LC	R	G, P
138	PASSERİFORMES	Alaudidae	*Melanocorypha calandra*	A.5	LC	R	B, C
139			*Melanocorypha bimaculata*	A.3	LC	M	B, Y, D, P, G, C, T
140			*Calandrella brachydactyla*	A.3	LC	M	B, Y, D, P, G, C, T
141			*Calandrella rufescens*	A.3	LC	R	B, Y, D, P, G, C, T
142			*Galerida cristata*	A.3	LC	R	B, Y, D, P, G, C, T
143			*Lullula arborea*	A.3	LC	R	B, Y, D, P, G, C, T
144			*Eremophila alpestris*	A.3.1	LC	R	B, P, T
145			*Alauda arvensis*	A.4	LC	R	B, Y, D, P, G, C
146		Hirundinidae	*Riparia riparia*	A.5	LC	M	B, Y, D, P, G, C
147			*Hirundo rupestris*	A.5	LC	M	B, Y, D, P, G, C
148			*Hirundo rustica*	A.5	LC	M	B, Y, D, P, G, C, T
149			*Hirundo daurica*	A.3	LC	M	B, Y, D, P, G, C
150			*Delichon urbicum*	A.3	LC	M	B, Y, D, P, G, C, T
151		Motacillidae	*Anthus richardi*	A.2	LC	V	B, Y, D, P, G, C
152			*Anthus campestris*	A.2	LC	M	B, Y, D, P, G, C
153			*Anthus trivialis*	A.3	LC	M	B, Y, D, P, G, C
154			*Anthus pratensis*	A.3	LC	W	B, Y, D, P, G, C
155			*Anthus cervinus*	A.2	LC	M	B
156			*Anthus spinoletta*	A.3	LC	R	B, Y, D, P, G, C
157			*Motacilla flava*	A.3.1	LC	M	B, Y, D, P, G, C
158			*Motacilla flava feldegg*	A.3	LC	M	B, Y, D, P, G, C
159			*Motacilla citreola*	A.2	LC	V	B, Y, D, P, G, C
160			*Motacilla cinerea*	A.2	LC	R	B, Y, D, P, G, C
161			*Motacilla alba*	A.3.1.	LC	R	B, Y, D, P, G, C
162		Cinclidae	*Cinclus cinclus*	A.1.2	LC	R	T
163		Troglodytidae	*Troglodytes troglodytes*	A.1.2	LC	R	G, T
164		Turdinae	*Cercotichas galactotes*	A.3	LC	V	G, T
165			*Erithacus rubecula*	A.3	LC	R	B, Y, D, P, G, C, T
166			*Luscinia luscinia*	A.2	LC	T	B, Y, D, P, G, C, T
167			*Luscinia megarhynchos*	A.2	LC	M	B, Y, D, P, G, C, T
168			*Luscinia svecica*	A.2	LC	M	B, C
169			*Irania gutturalis*	A.1.2	LC	M	B, Y, D, P, G, C, T
170			*Phoenicurus ochruros*	A.2	LC	R	B, Y, D, P, G, C, T
171			*Phoenicurus phoenicurus*	A.3	LC	R	B, Y, D, P, G, C, T
172			*Saxicola rubetra*	A.3	LC	R	B, Y, D, P, G, C
173			*Saxicola torquatus*	A.3	LC	M	B, Y, D, P, G, C
174			*Oenanthe isabellina*	A.3	LC	M	B, Y, D, P, G, C, T
175			*Oenanthe oenanthe*	A.3	LC	M	B, Y, D, P, G, C, T
176			*Oenanthe pleschanka*	A.1.2	LC	T	B, Y, D, P, G, C, T
177			*Oenanthe hispanica*	A.2	LC	M	B, Y, D, P, G, C, T
178			*Oenanthe finschii*	A.1.2	LC	M	B, Y, D, P, G, C, T
179			*Monticola saxatilis*	A.1.2	LC	M	B, Y, D, P, G, C, T
180			*Monticola solitarius*	A.1.2	LC	R	B, Y, D, P, G, C, T

181			*Turdus torquatus*	A.1.2	LC	R	B, Y, D, P, G, C, T
182			*Turdus merula*	A.3	LC	R	B, Y, D, P, G, C, T
183			*Turdus pilaris*	B.2	LC	W	B, Y, D, P, G, C, T
184			*Turdus philomelos*	A.2	LC	W	B, Y, D, P, G, C, T
185			*Turdus iliacus*	B.2	LC	W	B, Y, D, P, G, C, T
186			*Turdus viscivorus*	A.2	LC	R	B, Y, D, P, G, C, T
187		Sylviidae	*Cettia cetti*	A.2	LC	R	B, Y, D, P, G, C
188			*Cisticola juncidis*	A.2	LC	R	B, Y, D, P, G, C
189			*Locustella naevia*	A.1.2	LC	M	B, Y, D, P, G, C
190			*Locustella fluviatilis*	A.1.2	LC	M	B, Y, D, P, G, C
191			*Locustella lusciniodies*	A.2	LC	M	B, Y, D, P, G, C
192			*Acrocephalus melanopogon*	A.2	LC	M	B, Y, D, P, G, C
193			*Acrocephalus schoenobaenus*	A.2	LC	M	B, Y, D, P, G, C
194			*Acrocephalus palustris*	A.3	LC	M	B, Y, D, P, G, C
195			*Acrocephalus scirpaceus*	A.2	LC	M	B, Y, D, P, G, C
196			*Acrocephalus arundinaceus*	A.3	LC	M	B, Y, D, P, G, C
197			*Hippolais pallida*	A.3	LC	M	B, Y, D, P, G, C
198			*Sylvia melanocephala*	A.3	LC	R	B, Y, D, P, G, C, T
199			*Sylvia curruca*	A.2	LC	M	B, Y, D, P, G, C, T
200			*Sylvia communis*	A.3	LC	M	B, Y, D, P, G, C, T
201			*Sylvia atricapilla*	A.2	LC	W	B, Y, D, P, G, C, T
202			*Phylloscopus bonelli*	A.2	LC	R	B, Y, D, P, G, C
203			*Phylloscopus sibilatrix*	A.2	LC	M	B, Y, D, P, G, C
204			*Phylloscopus collybita*	A.3.1	LC	R	B, Y, D, P, G, C
205			*Phylloscopus trochilus*	A.3.1	LC	T	B, Y, D, P, G, C
206			*Regulus regulus*	A.1.2	LC	R	B, Y, D, P, G, C, T
207		Muscicapidae	*Muscicapa striata*	A.3	LC	M	B, Y, D, P, G, C, T
208			*Ficedula parva*	A.2	LC	T	B, Y, D, P, G, C, T
209			*Ficedula semitorquata*	A.3	LC	M	B, Y, D, P, G, C, T
210			*Ficedula albicollis*	A.2	LC	M	B, Y, D, P, G, C, T
211			*Ficedula hypoleuca*	A.1.2	LC	T	B, Y, D, P, G, C, T
212		Timaliidae	*Panurus biarmicus*	A.3	LC	R	B, Y, D, P, G, C, T
213		Aegithalidae	*Aegithalus caudatus*	A.2	LC	R	B, Y, D, P, G, C, T
214		Paridae	*Parus ater*	A.3	LC	R	B, Y, D, P, G, C, T
215			*Parus caeruleus*	A.2	LC	R	B, Y, D, P, G, C, T
216			*Parus major*	A.3.1.	LC	R	B, Y, D, P, G, C, T
217		Sittidae	*Sitta europaea*	A.3	LC	R	B, Y, D, P, G, C, T
218			*Sitta neumayer*	A.2	LC	R	B, Y, D, P, G, C, T
219		Cerhiidae	*Certhia brachydactyla*	A.1.2	LC	R	B, Y, D, P, G, C, T
220		Remizidae	*Remiz pendulinus*	A.2	LC	R	B, Y, D, P, G, C, T
221		Oriolidae	*Oriolus oriolus*	A.2	LC	M	B, Y, D, P, G, C, T
222		Laniidae	*Lanius isabellinus*	A.2	LC	V	B, Y, D, P, G, C, T
223			*Lanius collurio*	A.3	LC	M	B, Y, D, P, G, C, T
224			*Lanius minor*	A.3	LC	M	B, Y, D, P, G, C, T

225			*Lanius senator*	A.2	LC	M	B, Y, D, P, G, C, T
226			*Lanius nubicus*	A.2	LC	M	B, Y, D, P, G, C, T
227		Corvidae	*Garrulus glandarius*	A.3.1	LC	R	B, Y, D, P, G, C, T
228			*Pica pica*	A.5	LC	R	B, Y, D, P, G, C, T
229			*Corvus monedula*	A.5	LC	R	B, Y, D, P, G, C, T
230			*Corvus frugilegus*	A.5	LC	R	B, Y, D, P, G, C, T
231			*Corvus corone*	A.5	LC	R	B, Y, D, P, G, C, T
232			*Corvus cornix*	A.5	LC	R	B, Y, D, P, G, C, T
233			*Corvus corax*	A.5	LC	R	B, Y, D, P, G, C, T
234		Sturnidae	*Sturnus vulgaris*	A.5	LC	R	B, Y, D, P, G, C, T
235		Passeridae	*Passer domesticus*	A.5	LC	R	B, Y, D, P, G, C, T
236			*Passer hispaniolensis*	A.3	LC	R	B, Y, D, P, G, C, T
237			*Passer montanus*	A.3	LC	R	B, Y, D, P, G, C, T
238			*Petronia petronia*	A.3	LC	R	B, Y, D, P, G, C, T
239		Fringillidae	*Fringilla coelebs*	A.4	LC	R	B, Y, D, P, G, C, T
240			*Fringilla montifringilla*	A.3	LC	W	B, Y, D, P, G, C, T
241			*Serinus serinus*	A.3	LC	W	B, Y, D, P, G, C, T
242			*Carduelis chloris*	A.3	LC	R	B, Y, D, P, G, C, T
243			*Carduelis carduelis*	A.3.1	LC	R	B, Y, D, P, G, C, T
244			*Carduelis spinus*	A.3	LC	W	B, Y, D, P, G, C, T
245			*Carduelis cannabina*	A.3	LC	R	B, Y, D, P, G, C, T
246			*Loxia curvirostra*	A.3	LC	R	B, Y, D, P, G, C, T
247			*Coccothraustes coccothraustes*	A.3	LC	W	B, Y, D, P, G, C, T
248		Emberizidae	*Emberiza cirlus*	A.2	LC	R	B, Y, D, P, G, C, T
249			*Emberiza cia*	A.2	LC	R	B, Y, D, P, G, C, T
250			*Emberiza hortulana*	A.3	LC	M	B, Y, D, P, G, C, T
251			*Emberiza caesia*	A.2	LC	M	B, Y, D, P, G, C, T
252			*Emberiza schoeniclus*	A.3	LC	R	B
253			*Emberiza melanocephala*	A.4	LC	M	B, Y, D, P, G, C, T
254			*Miliaria calandra*	A.4	LC	R	B, Y, D, P, G, C, T

R: Resident; **M:** Migrant; **W:** Winter Visitor; **T:** Transit Migrant **V:** Vagrant (according to Kiziroğlu 2009)
IUCN Red List Categories: Critically endangered **(CR)**, Endangered **(EN)**, Vulnerable **(VU)**, Near threatened **(NT)**, Least concern **(LC)**
RDB : Red Data Book, **S:** Status of Kiziroğlu 2009, **WA:** Watching Area
B: Sivrihisar and Balıkdamı Region, **Y**: Sarıcakaya Region, **D:** Mihallıççık and Around Sarıyar Dam Pond, **P**: Porsuk Dam Pond and Its Round, **C**: Çifteler Region and Eminekin Reeds, **T**: Türkmenbaba Mountain and surroundings

The list about the seasonal status of the birds determined during our study is also as follows. Classification of the birds determined, in terms of order and family level is as follows. The positions of the bird species determined in our project in IUCN Red List (2001) is as follows;

In our study, which was achieved in Eskişehir province between December 2008 - June 2010, 254 species from 53 families of 18 orders were determined. Numerical distribution of the determined species with respect to orders has been determined as follows: 3 species from order Podicipediformes, 3 species from order Pelecaniformes, 1 species from order Phoenicopteriformes, 13 species from order Ciconiiformes, 11 species from order Anseriformes, 33 species from order Falconiformes, 2 species from order Galliformes, 7 species from order Gruiformes, 36 species from Charadriiformes, 1 species from Pterociliformes, 5 species from order Columbiformes, 2 species from order Cuculiformes, 7 species from order Strigiformes, 1 species from order Caprimulgiformes, 4 species from order Apodiformes, 4 species from order Coraciiformes, 4 species from order Piciformes and 117 species from order

Passeriformes. Of the species identifed, it was determined that, 135 of them were residents, 73 of them were summer migrants, 32 of them were winter migrant, 10 of them were transit migrant and 4 of them were vagrant.

4. Discussion

Total 254 bird species (one of them are subspecies) belong to 53 families (18 ordos) were detected in Eskişehir at the end of this study in two years. Distribution of species according to IUCN Red List Categories are like this; any species are critically endangered, 1 Endangered, 4 Vulnerable, 8 Near threatened, 241 Least concern. Observed species, grouped as following; 135 Residents, 73 Summer Migrants, 32 Winter visitors, 10 Transit migrants, 4 Vagrants.

Like any artificial formation made by human beings, Dams effect all the beings in that ecosystem negatively too, since they alter the existing ecosystem. Within Eskişehir's boundaries, the oldest dams of Turkiye, Porsuk, Sarıyar and Gökçeyaka dams exist. As a result of this study, it was found that, besides large and small wetlands, these artificial wetlands are used densely by many aquatic bird species for sheltering, nutrition and reproduction.

As a result of these observations, and evaluations, it was seen that, with 16 species, Balıkdamı region and near abroad which is located in Sivrihisar county territories, was demonstrating the uttermost species diversity. Although Balıkdamı has wildlife protection area status, DSI's activities such as drainage channels which means interference to hydrophoric meadowland, and water drawing via pumps endangers area's future. Moreover, domestic wastes of peripheral villages around Balıkdamı, and rain water from peripheral fields (farms) in which fertilizers and pesticides are used uncontrolledly, unite with wetlands directly. These are primary factors that threatens the region.

In Eskişehir province, Porsuk, Sarıyar and Gökçekaya dam lakes are the regions, in which highest number of individuals are counted. On the other hand, Sündiken and Turkmenbaba mountain sequence is an important forest ecosystem for birds, since it is an area in which many species reproduce, especially from Passeriformes ordor. Since it is determined that it shelters *Neophron percnopteurs* and *Aegypius monachus* species, which reproduces in this region, these areas' importance increases.

When our study's data was compared with local studies, previously done about bird species in Eskişehir, following results are obtained (acquired). All of the 6 species, which were informed from Eskişehir by Bezzel (1964). All of the 7 species, which were informed from Eskişehir and around by Warncke (1964) were determined in the study. Erdoğdu (2001) has informed (notified-declared) 86 species and one subspecies in the study which was conducted in Doğancı puddle, located in Eskişehir Alpu county territories. Among these species, except *Glariola pratincola* and *Larus genei,* all of the other species were recorded in our study too. Aslan and Kiziroğlu (2003) have informed 102 species in the study conducted Eminekin Puddle, located in Eskişehir Çifteler county. Among these species, except *Grus grus*, all of the species were recorded in our study. However it was our bad luck that we couldn't observe it. In this respect, we may say the same thing for the bird species that couldn't be observed too. Of course, there may be deficiencies in bird species' number that was determined during field work. It is obvious that species that were observed coincidentally, or that couldn't be observed, affects the number of species positively or negatively. This will be handled via long term observations. Still, after all, we are aware that this study has positive contribution to our country's ornitofauna.

When all of these results are evaluated as a whole, 254 species, which were determined within Eskişehir province's territories being our study area, correspond to almost half of the Türkiye's Birds List (Kiziroğlu, 2009). It was seen that, among these species some of the important ones, which are in danger of extinciton, use the area for nutrition, reproduction and resting during migration.

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