

## A Study on the Ornithofauna of Doğancı Pond in Alpu-Eskişehir\*

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**Abstract:** This study was carried to determine the ornithofauna of Doğancı Pond and vicinity, which is located in the Alpu District of Eskişehir province. The study area, which is situated on one of the migration routes for birds, has a natural pond and wetlands occurring around the pond during spring and fall.

In the study period from August 1996 to August 1997, 86 species and 1 subspecies belonging to 36 families from 13 orders were identified in the area.

**Key Words:** Ornithofauna, Eskişehir-Alpu, Doğancı Pond, Systematic

### Eskişehir-Alpu Doğancı Göleti Ornitofaunası Üzerine Çalışmalar

**Özet:** Bu çalışmada Eskişehir'in Alpu ilçesi sınırları içinde bulunan Doğancı Göleti ve çevresindeki kuş faunası araştırılmıştır. Kuş göç yollarından birisi üzerinde bulunan çalışma alanı, doğal bir göletle bunun çevresinde bahar aylarında ortaya çıkan geçici sulakalanlardan oluşmaktadır.

Ağustos 1996 ile Ağustos 1997 arasında gerçekleştirilen arazi çalışmaları sonucunda bölgede 13 takıma ait 36 familyadan 86 tür ve 1 alttür tespit edilmiştir.

**Anahtar Sözcükler:** Ornitofauna, Eskişehir-Alpu, Doğancı Göleti, Sistemantik

### Introduction

The number of bird species is 500 throughout the European continent, whereas it is approximately 453 in Turkey (1). For this reason Turkey has a fairly important position in terms of bird species' diversity. The first comprehensive publication concerning the birds of Turkey was published by Ergene (2). In the following years, various studies were carried out by both Turkish and foreign researchers (3-23).

Turkey is known to have a lot of wetlands for birds (24). Furthermore, there are many temporary wetlands especially formed in the spring which serve as a food and shelter center for many birds. Doğancı Pond is such a place, situated within the borders of Eskişehir province, near the town of Alpu. Doğancı Pond is situated on the migration route of the birds and can be defined as a small

bird area. This study was carried out to contribute to the determination of the bird fauna of Turkey, and to lay the groundwork for later research, as well as to indicate the importance of temporary wetlands, formed during the migration season, for food and the shelter of birds.

### Materials and Methods

8-20 x 50 macro Soligor binoculars were used for observation. The characterization of the determined birds was carried out with an EOS 1000 camera and a 100-300 mm Soligor macro lens. Also, the specification of different types of bird nests were studied from a boat at different periods of time. Previous studies were used for identification of bird species (25-28). Species list, scientific names and status were from Kirwan et al. (1) and red data book were from Kiziroğlu (13).

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The Transect method was used (29). The first observations were made within a 3 km zone between Alpu and Doğançı Pond. Further studies were done at Doğançı Pond, of 4000 m<sup>2</sup>, as the center of the temporary wetlands formed in the vicinity of Doğançı Pond with a total area of about 20000 m<sup>2</sup>.

### Characteristics of the Study Area

Doğançı Pond, situated at latitude 39°48'30" N and longitude 30°58'45" E, is on the Alpu Plateau between Alpu and Çukurhisar village, 45 km from Eskişehir (Figure). The elevation of the area is 760 m. The pond is fed from channels. In the middle of the pond is a mound, named after the pond. It takes up an area of 4000 m<sup>2</sup>, including the mound. In spring, when the channels are open, the water depth is about 2 m, whereas it decreases to 1 m in the summer months. About 2-6 meters of the section from the shore of the pond is covered with reedbeds. The water area known as the Alpu Plateau, which includes Doğançı Pond, is connected to the Porsuk Stream, an arm of the Sakarya River. The area, used as pastures, between the south of the pond and Alpu, with an area of 15000 m<sup>2</sup> is fully covered by water in spring and autumn.

In the temporary wetlands of the area, Özkütük (30), in his studies on invertebrates, specified 11 species belonging to the Crustaceae, Chelicerata and Insecta

classes. In the present study, *Gobius* sp., *Alburnus* sp., *Cobitis* sp. and *Aphanius chantrei* were encountered in the pond.

### Results and Discussion

In this study on the birds in Eskişehir-Alpu Doğançı Pond, 86 species and 1 subspecies from 36 families belonging to 13 orders were established. The periods of observation for the species were recorded within a period of one year (Table).

*Motacilla flava feldegg* (Michahelles), which is a subspecies of *M. flava* (L.), was observed in April, May and June. In the same area, individuals which resemble another subspecies of *M. flava* (L.) (*M. flava flava*) were seen in April, June, July, August and September. But it is known that two subspecies belong to same species do not live in the same habitat. Therefore, we think that the latter birds may be hybrids.

When the Table is examined, the area is seen to have an extremely rich bird fauna especially between the periods when the temporary wetlands are formed. Because the wetlands remain for a month in the autumn and three months in spring, both the number of species and population density are clearly seen to increase. It has also been established that the cause of the decrease in the bird population density is not related with the drying up

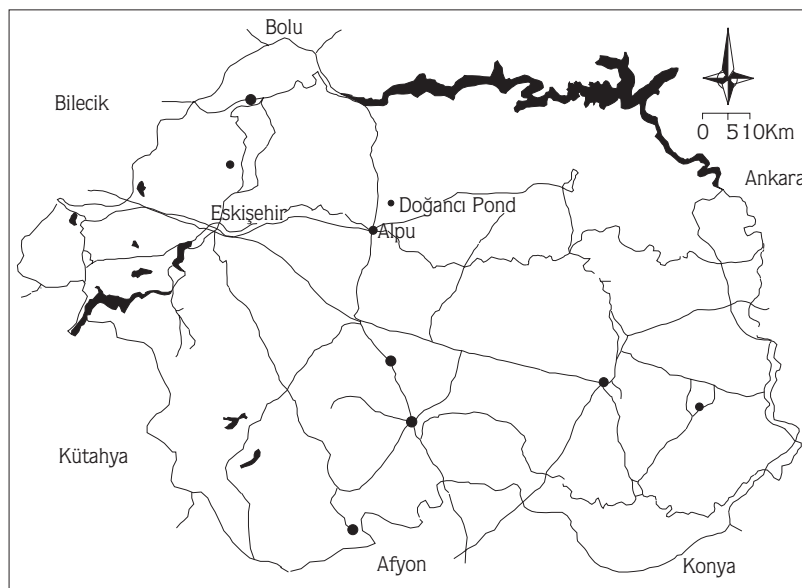


Figure. Position of Doğançı Pond in Eskişehir.



Table. Continued.

OBSERVATION YEAR	1996												1997												Nest	Status*	RDB**
OBSERVATION MONTH	8	9	10	11	12	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8						
A COUNT OF MONTHLY OBSERVATIONS	1	2	1	2	1	2	1	1	1	1	2	3	1	2	3	4	1	2	3	4	1	2	3	4	1	2	1
SPECIES																											
<i>Motacilla flava feldegg</i>																											
<i>Motacilla alba</i>																											
<i>Saxicola rubetra</i>																											
<i>S. torquata</i>																											
<i>Oenanthe isabellina</i>																											
<i>O. oenanthe</i>																											
<i>Cettia cetti</i>																											
Unidentified <i>Acrocephalus</i>																											
<i>Acrocephalus melanopogon</i>																											
<i>A. schoenobaenus</i>																											
<i>A. arundinaceus</i>																											
<i>Phylloscopus trochilus</i>																											
<i>Regulus ignicapillus</i>																											
<i>Muscicapa striata</i>																											
<i>Panurus biarmicus</i>																											
<i>Remiz pendulinus</i>																											
<i>Lanius collurio</i>																											
<i>Lanius minor</i>																											
<i>Pica pica</i>																											
<i>Corvus monedula</i>																											
<i>C. frugilegus</i>																											
<i>C. corone pallascens</i>																											
<i>Sturnus vulgaris</i>																											
<i>Passer domesticus</i>																											
<i>P. hispaniolensis</i>																											
<i>Carduelis carduelis</i>																											
<i>C. cannabina</i>																											
<i>Emberiza schoeniclus</i>																											
<i>E. melanocephala</i>																											
<i>Miliaria calandra</i>																											

of the land. It has been seen that much of the bird population leaves the area before the wetlands dry up. Thus, it can be understood from this that the birds make use of the area for resting and nourishment and not for laying eggs. But the land loses its suitability for other species when the waters dry up.

The study area is surrounded by planted areas and steppes. Therefore the number of people are seen to

increase in the area especially during periods of planting. This has negative effects on the birds in terms of their coming to the area. Also the pond is used for watering plants; water is transferred to the fields by pumps, which decreases the water level of the pond. Furthermore, hunters come from neighboring areas and endanger the natural life even during periods when hunting is forbidden.

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