Analele Ştiinţifice ale Universităţii „Al.I.Cuza” Iaşi, s. Biologie animală, Tom L, 2004

PRELIMINARY DATA REGARDING BIRD FAUNA OF THE CRAIOVIȚA LAKE – MUNICIPALITY OF CRAIOVA

BY

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Key words: Bird fauna, phenology, monitoring, nesting species, vulnerable

Between 2000-2003, in the area of Craiovița Lake and Park, there were monitored 90 species belonging to 11 orders and 32 families. Most of the species - 49 belong to Passeriformes Order. The 31 aquatic species are included in 6 orders and 11 families. The total number of nesting species is of 32, but they were signalled in different years; only 14 species nested in all the 4 analysed years. From a phenological point of view, the migratory birds predominate as compared to the sedentary ones. Within the analysed area, 17 species have an unfavourable conservation status in Europe, as they are vulnerable and declining.

Introduction

The Craiovița Lake is a basin built along the bed of the Cornițoiu stream between 1966 and 1967. It is located in the north-western part of the municipality of Craiova, on the left side of the European road E 64, Craiova – Drobeta-Turnu Severin, between the residential district of Craiovița Nouă (to north) and the one of Brestei (to south). It is separated by an isthmus over which there was built a pedestrian bridge and, thus it was divided into two unequal lakes: a main large lake and a smaller one. In the middle of these lakes, there can be noticed small islands covered by reed thicket. Both basins are surrounded by reed, bulrush, willows, and, thus, in time, the area acquired the peculiarities of a river meadow. Near the lake, there has been fitted out the park with the same name, with alleys and a large variety of trees (for example, the genera: Populus, Juglans, Quercus, Acer, Fraxinus, Salix, etc.) and bushes (Solanum, Rosa, Crataegus, etc.) that draw many species of birds. Within the park, there is also a swimming-pool with a low functionality. In 1985, the whole arrangement covered a surface of about 85 ha, while the lake occupied 32 ha. At present, it covers a surface of 54 ha and the lake only about 4 ha.

Purpose of the investigation

The present paper ranges among a larger project referring to the birds within the area of Craiova as, when I began the research, I did not find any reference with regard to this aspect in the specialised literature.

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The purpose of the study was: - the monitoring of the bird fauna within the area of Craiovița Lake and Park; - data regarding the phenology of the species; - data about the nesting species; - knowing the vulnerable and declining in number species that are present on S.P.E.C. lists of the European conventions regarding the protection of the birds and their habitats.

Material and methods

The bird fauna noticed between January 2000 and December 2003 is based on direct observations (from stationary points). There were made trips once or twice a month, in the morning or in the afternoon. The birds were identified both visually and by means of a binocular of Norconia type (10x50), using, at the same time, Bruun & alt. catalogue guide for determining species (1999). The data regarding the number of the species, as well as the ones linked to their ecology, biology, and ethology were registered on work files. In order to render the most important aspects concerning the life of the birds, I also took some photos.

Results and discussions

Between January 2000 and December 2003, the bird fauna of the analysed area counted about 90 species that belong to 11 orders and 32 families (Table 1.).

The most numerous species belong to the order Passeriformes: 49 species (number that represents 54.47 per cent of the total number of noticed species) and 16 families (51.6 per cent). Among the 13 species, sylviidae family is well represented in the area, followed by Turdidae - 8 species, Corvidae, and Fringillidae with 5 species each.

I emphasised 31 species of aquatic birds (without including the reed thicket species – warbler that from a systematic point of view belong to Passeriformes Order) are distributed in 6 orders and 10 families: Charadriiformes Order with 9 species (29 per cent); Anseriformes and Ciconiiformes Orders with 8 species each (25.8 per cent); Gruiformes Order with 3 species (9.67 per cent); Podicipediformes Order with 2 species (6.45 per cent); Pelecaniformes Order with one species (3.22 per cent).

Among the aquatic species (Bălescu, 2002), we mention as a new appearance: *Egretta alba*, which, from December 2002 to February 2003, periodically came for feeding not only in the area of the Craiovița Lake, but also in the area of Romanescu Park (it is sure that they wintered in the area of the pools located within the county of Dolj, near Craiova); *Podiceps cristatus* – a pair noticed on the small basin on the 17th of April and the 23rd of May; *Ardeola ralloides* – 5 specimens noticed by the edge of the reed thicket on the 10th of May; *Vanellus vanellus* – up to 12 specimens.

It is difficult to establish the phenology of the species only for the area of the Craiovița Lake. It is usually realised for large surfaces. In spite of all these, I want to specify:

- 11 species were constantly noticed during all my trips in the four years of the study, in larger or smaller numbers, no matter the weather; due to this fact, I considered

them to be sedentary: *Anas platyrhynchos, Columba livia domestica* (close to the houses located in the neighbourhood of the basin, where they also nest), *Streptopelia decaocto, Corvus frugilegus, C. corone cornix, C. monedula, Pica pica, Parus major, Passer domesticus, P. montanus, Carduelis carduelis* .

- certain sedentary and nesting species for other areas of Craiova and its periphery has irregular appearances within the studied habitat; they were not constantly observed during all the trips I made; some of them occasionally passed through the habitat for feeding and resting during different periods of the year (*Garrulus glandarius, Picus viridis etc*); certain species stayed in this habitat all the time in this habitat for nesting: for example *Turdus merula* (2000, 2001), *Dendrocopos major* (2000, 2001), *D. syriacus* (2001-2003), *Galerida cristata* (2002), *Carduelis chloris* (2001,2003), *Parus caeruleus* (2002,2003).

- most of the species are summer guests; some of the species stay here as they nest (16 species); others came for feeding and resting (for example *Egretta garzetta, Ardea cinerea, Aythia nyroca, Chlidonias hibrydus* etc.). From this category, some specimens of *Gallinula chloropus* and *Fulica atra* also stayed here over the winter.

- some species with a status of summer guests in Romania, cross the area in question either in spring (prevernal aspect) – *Cuculus canorus, Saxicola torquata, Phoenicurus ochruros* etc, or in both seasons, spring and autumn (serotinal and autumnal aspect) – *Sylvia communis, Phylloscopus trochilus, P. collybita*, etc. In 2003, *Sylvia borin* stayed also during summer, as it is possible to be a nesting species.

- among the species that are winter guests, *Troglodytes troglodytes, Erithacus rubecula* and *Emberiza schoeniclus* never left the territory. Most of the species did not spend the entire period here, even if some of them were noticed during almost all the months of the hiemal season (*Coccothraustes coccothraustes, Fringilla coelebs* etc). Other species only crossed the area searching for food: *Certhia familiaris, Regulus regulus* and *R. ignicapillus, Pyrrhula pyrrhula* etc.

- as accidental appearances, I considered the species that occasionally came within the habitat, at irregular time periods. Some species just flew over the area accidentally (*Buteo buteo, Falco tinnunculus*), while other species stayed for a longer or shorter period (*Emberiza citrinella, Turdus viscivorus*, etc).

Beginning with June 2001, there have been annually made de-colmatations of the main lake, burning of some areas covered by reed, because the mayoralty intends to build a pleasure beach and an aquatic sports grounds. Due to these works, the habitat changed influencing the present bird fauna, especially the aquatic species. After the first reclamation, there was observed the reduction of the number of certain aquatic specimens, as well as the appearance of other species of birds, such as the limicolous ones. Among these, I found the presence of *Himantopus himantopus* species quite special, as this species is protected in Romania. In 2003, it manifested a nesting behaviour and it is possible to be a nesting species. At the same time, in 2003 the number of *Nycticorax nycticorax* specimens increased (18 specimens in July); they came for feeding and resting (the species was observed even if during the afternoon). Within

the place previously covered by the de-colmatated basin, besides the areas covered by bulrush, reed, willows, there developed a grassy vegetation rich in sedge, dwarf elder, wild orache, great mallow, hemp, thistle, horse thistle, bur etc. From place to place, there appear puddles, rich in duckweed and land elevations that made up access roads on the sides of which there grow numerous ruderal plants. The new aspect of the field represents an ideal place for the nesting of the warblers, shrikes, wagtails etc. With reference to the yellow wagtail, I want to specify that: - *Motacilla flava feldegg* was constantly seen in 2002 and 2003, when it also nested; - *M. f. thunbergi* was seen by the end of March and the beginning of May 2003; - at the same time, I have also noticed 2 specimens the appearance of which did not allow me to include them in one of the known sub-species and, thus, I did not write them down in the table. I shall precisely identify them in the next years.

The total number of nesting species is 32. I considered as nesting species those species at which I noticed: - adults with building material in their beaks; - flying direction of the adult with food in their beak in a certain place many times; - observation of certain nests (they are very well blacked out, hard to observe in order to ensure the protection of the eggs and the nestlings); - the presence of the nestlings and the young or only of the young. The number of the species that nested oscillated during the 4 years of the study. Most of the species, namely 27, nested in 2001. Of the number of nesting species, 14 nested in all the analysed years: *Ixobrychus minutus, Anas platyrhynchos, Gallinula chloropus, Fulica atra, Columba livia domestica, Streptopelia decaocto, Hirundo rustica, Sturnus vulgaris, Corvus frugilegus, C. monedula, Acrocephalus scirpaceus, Parus major, Passer domesticus, Passer montanus.* Till now, the data referring to nesting/ non-nesting species indicate that the non-nesting ones predominate in the area. The findings regarding this aspect are relative. Many of the nesting species are linked to the private gardens located around the lake. It is possible that the number of the nesting birds to decrease (due to the modification of the habitat), to maintain or to increase (due to adaptation to the new changes of the habitat) for the next years.

According to the European status regarding the conservation of species and habitats, there have been established 5 categories of S.P.E.C (Species of European Conservation Status), after Tucker and Heath (1994). Of the total number of the species noticed within the area of Craiovița Lake and Park, 17 are considered to have an unfavourable status of conservation for Europe, as they are vulnerable and declining in number; they belong to 3 categories of S.P.E.C.:

- the 1st category of S.P.E.C. – globally threaten species. There can be mentioned only *Aythya nyroca*.

- the 2nd category of S.P.E.C. – species with unfavourable conservation status concentrated in Europe. There can be mentioned only 3 species: *Phalacrocorax pygmaeus* that comes in the area for resting and feeding, *Picus viridis* in search of food; *Ciconia ciconia* that stayed for about one hour before a new flight.

- the 3rd category of S.P.E.C. – species with unfavourable conservation status that are not concentrated in Europe. This category includes 13 species: 4 of them are

vulnerable: *Botaurus stellaris*, *Ixobrichus minutus*, *Ardeola ralloides*, *Anas querquedula*, and 9 declining in number species: *Falco tinnunculus*, *Nycticorax nycticorax*, *Chlidonias niger*, *Chlidonias hybridus*, *Hirundo rustica*, *Lanius collurio*, *Saxicola torquata*,, *Muscicapa striata*, *Galerida cristata*. Except for *Galerida cristata* species that is sedentary within the area of Craiova, all the other species are summer guests and in passing species.

Of the vulnerable and declining in number species, 4 found excellent conditions for nesting: *Ixobrichus minutus*, *Lanius collurio*, *Galerida cristata*, *Hirundo rustica*.

During the field researches, it was noticed a permanent oscillation of the number of birds, both annually and according to the season due to the climatic and feeding conditions. Most of the species were observed during the prevernal aspect, when, besides the existing species (sedentary, partially migratory, some species that stayed from winter), there appeared the species in passing (cuckoos, warblers, spotted-flycatchers), as well as summer guests (grebes, herons, swallows, wagtails, red-backed shrikes, etc). The maximum number of birds was registered in 2002, when I monitored 56 species between March and April.

The diversity of species noticed in the area of the Craiovița Lake and Park proves the fact that the birds have adapted to the urbanisation conditions in the area as this habitat is also a resting point for many birds in the migration process. We assist to a various climate which in our area in the last years, was manifested through hot and dry summers, short autumns and springs, mild winters that directly or indirectly influenced the dynamics of the birds. At the same time, the change of the biotope due to the human intervention led to the modification of the bird fauna within the studied area. That is why it is necessary to continue the seasonal and annual monitoring of the birds.

Table 1. The phenological situation of the species of birds within the area of Craiovița Lake and Park – the Municipality of Craiova between 2000-2003 at which there are added some observations regarding the birds of this habitat

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
1.	Ord. Podiciformes Fam. Podicipedidae *Tachybaptus ruficollis*		III-XI	III-X	IV-XI	OV.C. Frequent
2.	*Podiceps cristatus*				IV,V	P. One pair
3.	Ord. Pelecaniformes Fam. Phalacrocoracidae *Phalacrocorax pygmaeus*		VIII, IX, XI	II,VII		OV. Feeding-resting
4	Ord. Ciconiiformes Fam. Ardeidae *Ardea cinerea*	II-XI	II, IV, V, VII, VIII, X, XI	V, VI, VIII, IX, X	VIII, IX, X	OV. Feeding-resting
5.	*Botaurus stellaris*	IV, VII, VIII				OV. Rare
6.	*Ixobrychus minutus*	IV-IX	III-IX	IV-X	IV-IX	OV.C. Frequent
7.	*Ardeola ralloides*				V	P
8.	*Nycticorax nycticorax*		VII	VI, IX	V, VI, VII, IX	OV. Feeding-resting

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
9.	*Egretta garzetta*	IV-IX	IV, VI, VII, VIII	VI, VII, IX	VI, VII,VIII, IX	OV. Feeding-resting
10	*Egretta alba*			XII	I, II	OI. One-two specimens
11.	Fam. Ciconiidae *Ciconia ciconia*				VIII	A. Acc. 8 specimens.
12.	Ord. Anseriformes Fam. Anatidae *Cygnus cygnus*	I, II				OI. 4 specimens
13.	*Cygnus olor*			II, III, IV	III, IV	P
14.	*Anas platyrhynchos*	I-XII	I-XII	I-XII	II-XII	S.C. Common
15.	*Anas crecca*	I, II		I, II	II, XII	OI.
16.	*Anas queryuedula*			III, IV	III	P
17	*Anas clypeata*			IV		P
18	*Aythia ferina*		VII, VIII, IX	IV, VII, X	III, IV, V, VII, VIII	OV. Cp. Feeding-resting

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
19.	*Aythia nyroca*		VIII	IV	III, V, VI, VII	OV. Feeding-resting
20.	Ord. Falconiformes Fam. Accipitridae *Buteo buteo*	VIII	II, XI	III, IX	IV, VI, VIII	A. Acc
21.	Fam. Falconidae *Falco subbuteo*	V, VII, VIII	VII, VIII			OV.
22.	*Falco tinnunculus*			IV, VIII		A.Acc. One pair
23.	Ord. Gruiformes Fam Rallidae *Rallus aquaticus*	XII	I-II			OI. Rare
24.	*Gallinula chloropus*	II-XII	I-XII	I-XII	I-XI	OV. OI. C. Common
25.	*Fulica atra*	II-XII	I-XII	II-XII	II-XII	OV. OI. C. Common

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
26.	Ord. Charadriiformes Fam Recurvirostridae *Himantopus himantopus*		VI, VII,VIII	IV, VIII	IV-VII, VIII	OV.Cp
27.	Fam Charadriidae *Charadrius dubius*		VIII, IX			P
28.	*Vanellus vanellus*				V, VI, VII	OV
29.	Fam Scolopacidae *Calidris minuta*		VIII, IX			P
30.	*Tringa sp.*		VIII, IX		V	P
31.	Fam. Laridae *Larus ridibundus*	I-XII	I-III, VI, VII, VIII, X	III, V, IX, XI	II, V, VII, IX, X XI, XII	It appears periodical
32.	*Larus argentatus cachinnans*	I-III,V,VI-X, XII	I, II, IV, V	I, X	III, V, VI, VIII, XI	It appears periodical
33.	Fam. Sternidae *Chlidonias niger*	IV,VI,VII,IX		VI	III, V	OV. For feeding

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
34.	*Chlidonias hybridus*		VIII		V, VI, VIII	OV. Ad., young
35.	Ord. Columbiformes Fam. Columbidae *Columba livia domestica*	I-XII	I-XII	I-XII	I-XII	S.C. Common
36.	*Streptopelia decaocto*	I-XII	I-XII	I-XII	I-XII	S.C. Common
37.	Ord. Cuculiformes Fam Cuculidae *Cuculus canorus*	IV,V	IV, V	IV-V	V, VI	P. It appears regularly
38.	Ord. Piciformes Fam. Picidae *Picus viridis*	IV, VII, IX, XI	II, V, IX, XI	II, III, VIII, IX, XII	III, VII, XI	S. Solitary. Rare
39.	*Dendrocopos major*	II,IV,V,VII, VIII X-XII	I, II, III,VI,VIII, X, XI, XII	I, III, VII, X, XII	III, VI, VIII, XI	S.C. In a small number. One pair
40.	*Dendrocopos syriacus*	I, III, IV,VI,VIII, IX, XI	II-V,VII-XII	I, III, V-VIII, XI, XII	I-III, V-VII, IX, X, XII	S.C. In a small nr; one-two pair

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
41.	*Dendrocopos medius*		V,VI,VIII	IV, XI	II	A. Acc. One specimens
42.	Ord. Passeriformes Fam. Alaudidae *Galerida cristata*		X, XI, XII	I-IV, VI-XII	I-III, VII, X, XII	S. C.
43.	Fam. Hirundinidae *Hirundo rustica*	III-IX	III-IX	III-VIII	IV-IX	OV.C. Common
44.	*Delichon urbica*	IV-IX	III-IX	IV, V, VIII	IV, VI	OV.C. Decreasing
45.	Fam. Motacillidae *Motacilla flava*		VIII	IV-IX	IV-IX	OV,C
46.	*Motacilla alba*		IV-IX	IV-IX	IV	OV, P.C
47.	Fam. Laniidae *Lanius collurio*		V, VII-IX	V-X	V-X	OV.C. Frequent
48.	Fam. Sturnidae *Sturnus vulgaris*	III-XI	III-X	IV-XI	IV-X	OV.C. Common
49.	Fam. Corvidae *Corvus frugilegus*	I-XII	I-XII	I-XII	I-XII	S.C. Common

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
50.	*Corvus corone cornix*	I-V, VIII-XII	I-XII	I-XII	I-XII	S.C. Common
51	*Corvus monedula*	I-XII	I-XII	I-XII	I-XII	S.C. Common
52	*Pica pica*	I, IV,VI,IX,X, XI	I-XII	I-XII	I-XII	S.C. Common
53	*Garrulus glandarius*	X, XII	II, VII, IX	III, VI, XI, XII	II,VI, X	S. Solitary. Rare
54	Fam. Troglodytidae *Troglodytes troglodytes*	I-II, XI-XII	I-II, XI-XII	I-III, X-XII	I-III; X-XII	OI. Constant
55	Fam. Sylviidae *Locustella luscinoides*	IV, V, VIII	IV-V,VII-IX	IV,V, VII, VIII, IX	V,VII,VIII	OV.C
56	Acrocephalus schoenobaenus	IV-IX	IV-X			OV.C
57	*Acrocephalus scirpaceus*	IV-IX	IV-X	IV-X	V-VII, IX	OV.C
58	*Acrocephalus palustris*			IV, V, VII, VIII	V-VIII	OV.C
59.	*Acrocephalus arundinaceus*		VI,IX	IV-X	V-IX	OV.C.

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
60	*Sylvia borin*	III, IV, VIII, IX	III, IV, VIII, IX	III, IV, IX	III-IX	P,OV. Cp
61.	*Sylvia atricapilla*			III, IV	IV	P
62.	*Sylvia communis*	IV, VIII, IX	IV, VIII, IX		IV	P
63.	*Sylvia curruca*			III, IV	IV	P
64.	*Phylloscopus trochilus*	III, IV, XI, X	II, IV, IX, X	III, IV, X	IV, VIII, IX, X	P. Frequent
65.	*Phylloscopus collybita*	III, IV, VIII-X	III,IV,VIII,IX, X	III, IV, IX, X	IV, IX,	P. Frequent
66.	*Phylloscopus sibilatrix*			IV, VIII	VIII	P
67	*Hypolais icterina*		VIII, IX			P. Rare
68.	Fam. Regulidae *Regulus ignicapillus*		XII	I, III, XI	I	OI. For feeding
69.	*Regulus regulus*			XII	I, III	OI. For feeding
70.	Fam Muscicapidae *Muscicapa striata*		IV, VIII, IX, X	VIII, IX	IX	P

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
71.	Fam. Turdidae *Saxicola torquata*				III	P.
72.	*Phoenicurus ochruros*			III	III	P
73.	*Erithacus rubecula*	I-II, XI-XII	I-II, X-XII	I-III, X-XII	I-IV, X-XII	OI. Constant
74.	*Luscinia megarhynchos*	IV,VI,VIII	IV-VIII	IV-VIII	V-VIII	OV. Frequent. C
75.	*Turdus merula*	I-XII	I-III, VI, VIII-XII	I-III, V, IX, XI, XII	I-III, X	S.C. Decreasing
76.	*Turdus iliacus*			II, XII		OI. In flocks
77.	*Turdus pilaris*	I, II	I, II	I, II, XII	I	OI. In flocks or isolately
78.	*Turdus viscivorus*		IX	III, X	XI	A.Acc. Rare
79.	Fam Paridae *Parus major*	I-XII	I-XII	I- XII	I-V,VII-XII	S. Common. C
80.	*Parus caeruleus*	I-IV,VIII-XII	I-IV,VII-XII	I-III, V,VII-XII	I-III, V, VII, IX-XII	S.C. Numerous in autumn and winter

No.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
81.	Fam. Certhiidae *Certhia familiaris*		XII	II	I	OI. Rare One specimens
82.	Fam. Passeridae *Passer domesticus*	I-XII	I-XII	I-XII	I-XII	S.C. Common
83.	*Passer montanus*	I-XII	I-XII	I-XII	I-XII	S.C. Common
84.	Fam. Fringillidae *Fringilla coelebs*		XII	I, III,XII	II, III, X	OI
85.	*Pyrrhula pyrrhula*		X, XII	I, XI	III	OI. Rare
86.	*Coccothraustes coccothraustes*	XII	I, II, XII	I, II, XI, XII	I, II, III, XI	OI
87.	*Carduelis chloris*		IV-VI, VIII, IX, X XII	I-IV,VI-VIII, X, XI, XII	II-VII, XII, IX, X	S.C. Discrete presence
88.	*Carduelis carduelis*	II-VI,VIII-XII	I-II, IV, V, VII-XII	I-V, VII-XII	I-XI	S.C. Frequent
89.	Fam. Emberizidae *Emberiza schoeniclus*		X-XII	I-II, XI-XII	I-III, XI	OI. Frequent

Nr.	Species Family Order	Phenology				Observation for the studied area
		2000	2001	2002	2003	
90.	*Emberiza citrinella*		VIII, IX	XII	II	A. Acc. In flocks
Total	Species	47 species	69 species	75 species	76 species	

Explication of the table: S-sedentary species; OV-summer gust; OI-winter guest; P-passage species; A.Acc-accidental appearance; Ad-adults; C-nesting; Cp-possible nesting species; I-XII –the months of year:I-January;II-February; III-March; IV-April; V-May; VI-June; VII-July; VIII-August; IX-September; XI-November; XII-December

Conclusions

- Craiovița Lake and Park represent an ecological favourable environment when it comes to ensure food, shelter, nesting conditions, as well as a resting place for many species of birds during migration periods.

- There were identified about 90 species belonging to 11 orders and 32 families between 2000 and 2003.

- Of the 49 species and 16 families, Passerifomes Order is the best represented.

- I identified 31 of aquatic and semi-aquatic species that are included in the following orders: Charadriiformes (9 species), Anseriformes (8), Ciconiiformes (7), Gruiformes (3), Podicipediformes (2), Pelecaniformes (1)

- Of the 32 species of nesting birds, 14 nested in all the analysed years: *Ixobrychus minutus, Anas platyrhynchos, Gallinula chloropus, Fulica atra, Columba livia domestica, Streptopelia decaocto, Hirundo rustica, Sturnus vulgaris, Corvus frugilegus, Corvus monedula, Acrocephalus scirpaceus, Parus major, Passer domesticus, Passer montanus*.

- Of the total number of noticed species, 17 have an unfavourable status of conservation for Europe, as they are vulnerable and their number is declining. Only *Aythia nyroca* is threatened at a global level and 4 species are nesting: *Ixobrychus minutus, Lanius collurio, Galerida cristata, Hirundo rustica*.

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