

THE PROTECTION STATUS OF BIRDS FROM THE CARAULA AREA (DOLJ COUNTY, ROMANIA)

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Abstract

In the Caraula area (Dolj county, Romania) were identified 70 bird species. Those species are analysed from the point of view of three european protection laws of fauna. 10 from them belongs to Annex I of the Birds Directive (1979) and shall be the subject of special conservation measures, concerning their habitat in order to ensure their survival and reproduction in their area of distribution. 40 species are included in the Annex II from the Bern Convention-1979 (strictly protected species) and 20 species in the Annex II from the Bonn Convention (1979), being migratory and having an unfavorable status of protection and needs international agreements for their protection.

Key words: Caraula area (Oltenia, Romania), protection status of birds, Romania.

INTRODUCTION

The studied area is situated in the western part of Dolj county, part of the Oltenia province, localized in the south-western part of Romania. This area belongs to Oltenia plain, part of Romanian Plain, having plane lands in alternation with hill surfaces.

The medium altitude is 100 m, the climate is continental-temperate. The drainage is represented by Baboia rivulet, affluent of Deznăuți river and Caraula Lake. Caraula Lake is an anthropic lake, having 28 hectares and declared protected area. (Badea et al., 1974).

The vegetation is represented by isolated individuals of *Robinia pseudoacacia*, *Gleditsia triacanthos*, *Populus alba*, *Salix purpurea*, *Salix alba*, *Ulmus minor*, *Ulmus procera*, shrubs of *Crataegus monogyna*, *Rosa canina*, *Prunus spinosa*, *Ligustrum vulgare*, *Rubus caesius*, *Fragaria viridis*, *Solanum dulcamara*, *Achillea* sp., *Plantago* sp., *Poa* sp., *Urtica* sp., *Trifolium* sp., *Vicia* sp., *Agropyron* sp., *Carex* sp., *Stellaria* sp., *Taraxacum officinale*, etc.

The vegetation from the wet lands is represented by *Phragmites australis*, *Typha angustifolia*, *Scirpus* sp., *Ranunculus* sp., *Lemna* sp., *Spyrogira elongata*, *Potamogeton natans*, *Trapa natans*, *Polygonum*

amphibium, etc. Notes about the ornithofauna of Caraula area were published by other author (Ilie,2006,2007).

MATERIAL AND METHOD

This work offers new data about the ornithofaunistical structure from area, contributing at the increase of ensemble of the knowned data at national level.I mention that data about the ornithofauna and the protection status of birds from Caraula area were never published at international level.

The ornithological researches were performed during 2010-2013, in all the seasons,inside the ground ecosystems and at the edge of Caraula Lake.

The length of time of one researche day changes depending from season or meteorological conditions, heaving 2-6 hours| day.

I use the routes and the fixed points methods,the distance between two fixed points was 20 meters. The determination of the species was realized using different guides (Mullarney et al.,2000; SOR,1999).

The observation of species was realized using binoculars with specifications: 8x25 and 20x50, being completed with the direct observation. .

RESULTS AND DISSCUSIONS

In the studied area were identified 70 species belonging to 12 orders, 51 genera and 31 families.(Fig 1).

The order Anseriformes, Gruiformes, Cuculiformes and Columbiformes, presented by a family with one genus, the order Ciconiformes had two families and 4 genera, the order Falconiformes had two families and 3 genera, the order Galliformes had one family and 3 genera, the order Charadriiformes had two families and 2 genera, the order Strigiformes had one family and 3 genera, the order Coraciiformes had three families with 3 genera, the order Piciformes had one family with 2 genera and the order Passeriformes had 15 families with 27 genera.

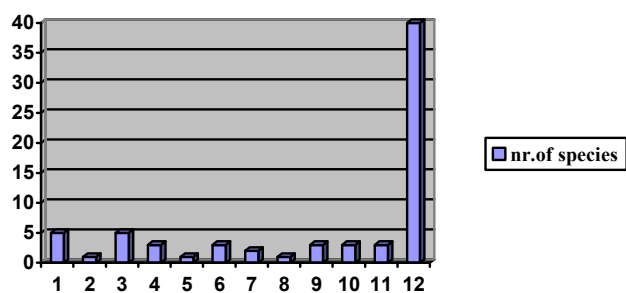


Fig. 1. Taxonomic structure of the bird fauna from Craula area (original)
 Legend: 1 = Ciconiiformes 7 – Columbiformes
 2 – Anseriformes 8 – Cuculiformes
 3 – Falconiformes 9 - Strigiformes
 4 – Galliformes 10 - Coraciiformes
 5 – Gruiformes 11- Piciformes
 6 – Charadiiformes 12 – Passeriformes

Table 1.
 Bird species identified in the Craula area and their conservation status (original)

Bird species	Bern Convention	Bonn Convention	Bird Directive 79/409 EEC
Ardea cinerea	A III		
Ixobrychus minutus	A II	A II	A I
Egretta alba	A II	A II	A I
Egretta garzetta	A II		A I
Ciconia ciconia	A II	A II	A I
Anas platyrhynchos	A III	A II	AII/1, AIII/1
Buteo buteo	A II	A II	
Accipiter gentilis	A II	A II	
Accipiter nisus	A II	A II	
Falco peregrinus	A II	A II	A I
Falco tinnunculus	A II	A II	
Phasianus colchicus	A III		A II/1, AIII/1
Perdix perdix	A III		A II/1, AIII/1
Coturnix coturnix	A III	A II	A II/2
Gallinula chloropus	A III		A II/2
Larus ridibundus	A III		A II/2
Larus argentatus	A III		A II/2
Sterna hirundo	A II	A II	A I
Streptopelia decaocto	A III		A II/2
Streptopelia turtur	A III	A II	A II/2
Asio otus	A II		
Athene noctua	A II		
Strix aluco	A II		
Cuculus canorus	A III		
Merops apiaster	A II	A II	
Coracias garrulus	A II	A II	A I

Upupa epops	A II		
Picus viridis	A II		
Dendrocopos major	A II		
Dendrocopos syriacus	A II		A I
Alauda arvensis	A III		A II/2
Galerida cristata	A III		
Troglodytes troglodytes	A II		
Hirundo rustica	A II		
Delichon urbica	A II		
Motacilla alba	A II		
Lanius collurio	A II		A I
Lanius minor	A II		A I
Oriolus oriolus	A II		
Sturnus vulgaris			A II/2
Garrulus glandarius			A II/2
Pica pica			A II/2
Corvus monedula			A II/2
Corvus frugilegus			A II/2
Corvus corone cornix			A II/2
Sylvia borin	A II	A II	
Sylvia communis	A II	A II	
Sylvia curruca	A II	A II	
Sylvia hortensis	A II	A II	
Acrocephalus schoenobaenus	A III	A II	
Hippolais icterina	A III	A II	
Erithacus rubecula	A II		
Luscinia megarhynchos	A II		
Phoenicurus ochruros	A II		
Turdus merula	A III		A II/2
Turdus viscivorus	A III		A II/2
Turdus philomelos	A III		A II/2
Parus major	A II		
Parus coeruleus	A II		
Sitta europaea	A II		
Passer domesticus			
Passer montanus	A III		
Pyrrhula pyrrhula	A III		
Fringilla montifringilla	A III		
Fringilla coelebs	A III		
Carduelis carduelis	A II		
Carduelis chloris	A II		
Carduelis cannabina	A II		
Emberiza citrinella	A II		
Miliaria calandra	A III		

Notes: A I = annex I, A II= annex II, A III= annex III, A II/1= annex II, part 1, A II/2 = annex II, part 2, A III/1 = annex III, part

After the 79/409/ECC directive(1979) looking the protection of the wild birds (Birds Directive), 10 species (14,28%) belongs to annex I, 3 species (4,28%) belongs to annex II/1, 16 species (22,85%) belongs to

annex II/2, 3 species (4,28%) belongs to annex III/1, totalizing 29 species (41,42%)-table 1.

The habitat of the bird species of the annex I must be the subject of special conservation to secure the survival and the reproduction of them inside their surface of distribution. The species of the annex II/1 could be hunted on the terrestrial and wetlands where the Birds Directive we applied.

The species of the annex II/2 could be hunted only in the states members of the European Union for who they are mentioned.

For the species of the annex III/1, the activities of transport for sale, the sale of the dead or alive birds or some parts and obtained produce from bird, easy to identify, are permitted only with special licence.

From the point of view of Bern Convention (1979), 40 species (57,14%) are included in the annex II, being strictly protected species and the species of the annex III, (23:32,85%) are protected species-table 1.

The species (20:28,57%) included in the annex II of Bonn Convention-1979 (the convention looking the migratory wild animals) have a unfavourable statute of protection and need international agreements for their protection.

The bird fauna from Caraula area was analyzed from the point of view of breeding (table 2).

Fifty – two species (74,28 % from the total of the observed species) are certainly nesting in the area being proved by some characteristics (the discovery of the next with eggs or chicks, the presence of the adults with food in their bills, the presence of some unflying or barely flying juveniles in a characteristic biotop), 11 species (15,71% from the total) are probably breeding (songs of the male in characteristic biotop, nuptial and territorial behaviour of the pair or the presence of the pairs in characteristic habitat during the breeding season) and 7 species (10% from the total) are non-breeding birds-figure 2.

Table 2

Bird species identified in the Caraula area from point of view of breeding
(original)

Bird species	Certain breeding	Probable breeding	Non-breeding
Ardea cinera			X
Ixobrychus minutus		X	
Egretta alba			X
Egretta garzetta			X
Ciconia ciconia	X		
Anas platyrhynchos	X		
Buteo buteo		X	
Accipiter gentilis	X		
Accipiter nisus	X		
Falco peregrinus		X	
Falco tinnunculus		X	
Phasianus colchicus	X		

Perdix perdix	X		
Coturnix coturnix	X		
Gallinula chloropus		X	
Larus ridibundus			X
Larus argentatus			X
Sterna hirundo		X	
Streptopelia decaocto	X		
Streptopelia turtur			X
Asio otus	X		
Athene noctua	X		
Strix aluco	X		
Cuculus canorus		X	
Merops apiaster	X		
Coracias garrulus	X		
Upupa epops	X		
Picus viridis	X		
Dendrocopos major	X		
Dendrocopos syriacus	X		
Alauda arvensis	X		
Galerida cristata	X		
Troglodytes troglodytes	X		
Hirundo rustica	X		
Delichon urbica	X		
Motacilla alba	X		
Lanius collurio	X		
Lanius minor	X		
Oriolus oriolus	X		
Sturnus vulgaris	X		
Garrulus glandarius	X		
Pica pica	X		
Corvus monedula	X		
Corvus frugilegus	X		
Corvus corone cornix	X		
Sylvia borin	X		
Sylvia communis	X		
Sylvia curruca	X		
Sylvia hortensis	X		
Acrocephalus schoenobaenus	X		
Hippolais icterina		X	
Erithacus rubecula	X		
Luscinia megarhynchos	X		
Phoenicurus ochruros	X		
Turdus merula	X		
Turdus viscivorus	X		
Turdus philomelos		X	
Parus major	X		
Parus coeruleus	X		
Sitta europaea		X	
Passer domesticus	X		
Passer montanus	X		
Pyrrhula pyrrhula		X	
Fringilla montifringilla			X
Fringilla coelebs	X		
Carduelis carduelis	X		
Carduelis chloris	X		
Carduelis cannabina	X		
Emberiza citrinella	X		
Miliaria calandra	X		

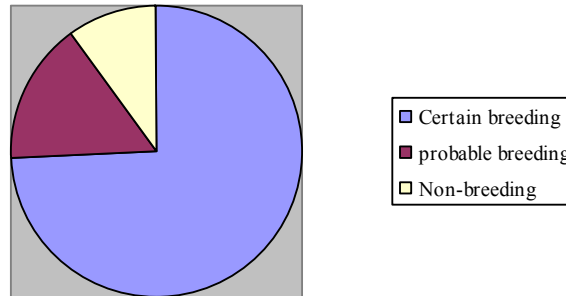


Fig. 2. The distribution of the bird species from Caraula area referred to breeding (original)

From the presentation of the data to be observed that a great part from those species presents an unfavourable protection status at european level..

The absence of the trees with hollow has determined strange behaviors tied to nesting.

Thus, in the colonies of nests from the clayey shores, near *Merops apiaster* and *Coracias garrulus* nested too other species like *Passer montanus*, *Upupa epops* (one nest identified) and *Sturnus vulgaris* (two nests observed).

The same behaviour of nesting owed often to the absence of the hollow trees was observed at the species *Strix aluco*.

The holes were hollowed out often in the clayey shores but not inside the colonies of the before mentioned species but separated from those.

The height compared to the ground was varied: from one meter (one nests observed) till four – five meters (two nests identified).

I mention that in the foreign and romanian literature I don't identified data about the big number of the breeding species (5) identified in one single colony. Also, data looking the nesting of the species *Strix aluco* in the clayey shores, sometimes at reduced height compared to the ground were not known till today.

We observed interesting details about the plumage colouring at the species *Strix aluco*.

Generally, the colouring is grey, but existing too individuals with rusty colouring.

The second clutch, observed at 20 th July 2013, presented five chicks recent flyings, only one presented the grey colour and four presented the rusty colour.

CONCLUSIONS

The presence of a relatively big number of species proves a big ornithofaunistical variety in Caraula area.

The presence of some strictly protected species at European level in relatively big populations and the peculiarities presented, about the nesting of some species, unmentioned till in present in the scientific literature represents sound arguments for the proposal of Caraula area protected area.

In the Caraula area, during 2010 – 2013, were recorded 70 bird species, out of whom numerous are endangered at European or regional level, them making the object of some international laws of protection adopted.

REFERENCES

1. Badea, L., Chenovici, A., (1974): Județul Dolj. Editura Academiei R.S.R., București, pp.23-65.
2. Ilie Lorena Cosma, 2006 – Considerații asupra ornitofaunei din zona Caraula (Județul Dolj). Muzeul Olteniei Craiova. Oltenia. Studii și comunicări. Științele Naturii ,22: .284-285.
3. Ilie, L.C., (2006): Considerații asupra avifaunei din zona Caraula (jud. Dolj). Oltenia. Studii și comunicări. Științele naturii. Craiova, vol.22, pp. 284-285.
4. Ilie, L. C., (2007): Influența mediului asupra ornitofaunei din zona Caraula (jud. Dolj). Editura Sitech, Craiova 50 p.
5. Mullarney, K., Svensson, L., Zetterstrom, D., Grant, P., (2000): Le guide ornitho. Delachaux et Niestle. Paris, pp.12-377.
6. S.O.R., (1999): Hamlyn Guide. Păsările din România și Europa. Determinator ilustrat. Octopus Publishing Group Ltd., London.
7. Xxx Directiva Consiliului Europei (79/409 EEC) privind conservarea pasarilor salbatice ,adoptata la 2 aprilie 1979.
8. Xxx Legea nr 13 din 11 martie 1993, pentru aderarea Romaniei la Conventia privind conservarea vietii salbatice si a habitatelor naturale din Europa , adoptata la Berna la 19 septembrie 1979.
9. Xxx Legea nr 13 din 8 ianuarie 1998, pentru aderarea Romaniei la Conventia privind conservarea speciilor migratoare de animale salbatice, adoptata la Bonn , la 23 iunie 1979.