

THE ORNITHOFAUNA FROM TINCA AREA (BIHOR COUNTY, ROMANIA) DURING THE PREVERNAL SEASON

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ABSTRACT: The study presents the results of the researches undertaken by the authors about the ornithofauna from Tinca area during the prevernal season, in the period 2008-2014. Were recorded 109 bird species, belonging to 15 orders and 40 families.

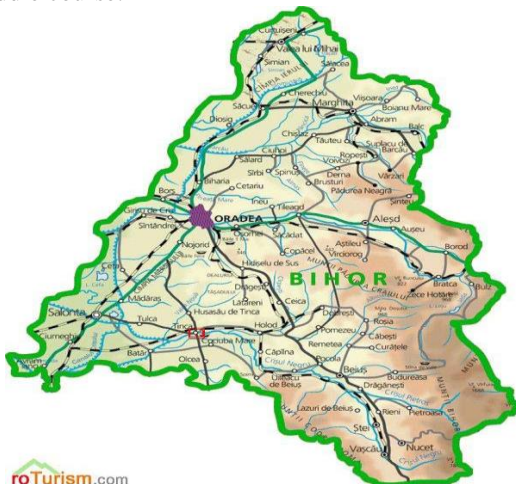
Keywords: Tinca area, ornithofauna, prevernal season.

INTRODUCTION:

Situated in the southwestern part of Bihor county, belonging to the historical province Crișana, Tinca area (Fig. 1), have a surface of 454 km², at the confluence of Miersigului Plain and Holodului Depression.

The average altitude is 100-150 m, the climate is temperate-continental, having one particular climatic nuance, the pannonic.

From the hydrographical point of view, this area belongs to the inferior limit of the Crișu Negru river, middle course.



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Fig. 1 Location of Tinca area in Bihor county, Romania (Source: own compilation by Google Earth software)

Tinca area belongs to the oak stage, the vegetation of the area having a predominant central-european origin.

The forests are formed from the species belonging to the *Quercus* genus Linnaeus 1763 (*Quercus cerris* Linnaeus 1724, *Quercus robur* Linnaeus 1763, *Quercus rubra* Linnaeus 1758, *Quercus frainetto* Tens 1823, *Quercus petraea* Liebling 1824) at which we add isolated copies or troops of *Fagus sylvatica* Linnaeus 1758, *Robinia pseudoaccacia* Linnaeus 1763, *Carpinus betulus* Linnaeus 1763, *Acer platanoides* Linnaeus 1763, *Ulmus foliacea* Hayek 1724, *Fraxinus excelsior* Linnaeus 1763, etc.

On the banks of Crișu Negru river we could meet *Alnus glutinosa* Linnaeus 1758, *Salix* sp. Linnaeus 1796, *Populus alba* Linnaeus 1758, etc.

In the lawns of Tinca area are meted different leguminous, graminaceae like *Festuca pseudovina*

Hackel 1876, *Poa pratensis* Linnaeus 1758, *Agropyron* sp. Gaertner 1835, some compositae, etc.

The present article offers informations looking the presence of birds species during the prevernal season (1st March – 1st May) in Tinca area, in the period 2008-2014.

MATERIAL AND METHOD:

The methods used are: the method of routes and the method of fixed points.

The optic equipment: the binoculars size 8x25, 20x 50.

For the determination of species were used different guides (Bruun B. *et al.*, 1999; Gooders J., Lesaffre G., 1988). Notes about the birds of Tinca area were published in some papers and books (Ilie, 2008; Ilie, 2012; Ilie, 2013).

RESULTS AND DISCUSSIONS:

During the prevernal season, in Tinca area were identified 109 species belonging to 15 orders and 40 families (Table 1, Fig.2, Fig.3).



Fig.2 *Sturnus vulgaris* (original)

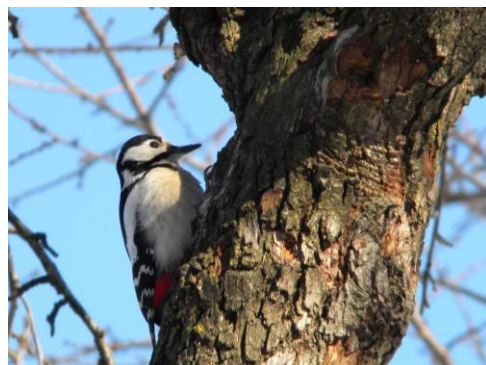


Fig.3 *Dendrocopos major* (original)

Table 1.
The list of birds species from Tinca area in the prevernal season (original)

Order	Family	Species	Habitat type	Phenological category	Trophic Spectrum		
Pelecaniformes	Pelecanidae	<i>Pelecanus onocrotalus</i>	Aq	SV	C(Ich)		
	Phalacrocoracidae	<i>Phalacrocorax carbo</i>	Aq	SV, RW	Pol		
Ciconiiformes	Ardeidae	<i>Ardea cinerea</i>	Am	SV, RW	Pol		
		<i>Egretta alba</i>	Am	SV, RW	Pol		
	Ciconiidae	<i>Ciconia ciconia</i>	Am	SV	Pol		
		<i>Ciconia nigra</i>	Am	SV	Pol		
Anseriformes	Anatidae	<i>Anser anser</i>	Am	PM	Omn		
		<i>Anser fabalis</i>	Am	P	Omn		
		<i>Anas platyrhynchos</i>	Am	S	Omn		
Falconiformes	Accipitridae	<i>Aquila pomarina</i>	T	SV	C		
		<i>Milvus milvus</i>	T	P	C		
		<i>Buteo buteo</i>	T	PM	C		
		<i>Circus cyaneus</i>	T	WV	C		
		<i>Circus pygargus</i>	T	SV	C		
		<i>Circaetus gallicus</i>	T	SV	C		
		<i>Accipiter gentilis</i>	T	S	C		
		<i>Accipiter nisus</i>	T	S	C		
		Falconidae	<i>Falco vespertinus</i>	T	SV	C	
		<i>Falco peregrinus</i>	T	S, WV	C		
		<i>Falco tinnunculus</i>	T	PM	C		
Galliformes	Phasianidae	<i>Phasianus colchicus</i>	T	S	Omn		
		<i>Coturnix coturnix</i>	T	SV	Omn		
		<i>Perdix perdix</i>	T	S	Omn		
Gruiformes	Gruidae	<i>Grus grus</i>	Am	P	Omn		
	Rallidae	<i>Fulica atra</i>	Am	PM	Omn		
		<i>Gallinula chloropus</i>	Am	SV	Omn		
Charadriiformes	Haemantopodidae	<i>Vanellus vanellus</i>	T	SV	Omn		
		<i>Charadrius dubius</i>	T	SV	In		
Columbiformes	Columbidae	<i>Columba livia domestica</i>	T	S	Omn		
		<i>Columba oenas</i>	T	S	Omn		
		<i>Columba palumbus</i>	T	S	Omn		
		<i>Streptopelia decaocto</i>	T	S	Omn		
Cuculiformes	Cuculidae	<i>Cuculus canorus</i>	T	SV	In		
Strigiformes	Tytonidae	<i>Tyto alba</i>	T	S	C		
	Strigidae	<i>Strix aluco</i>	T	S	C		
		<i>Athene noctua</i>	T	S	C		
		<i>Asio otus</i>	T	S	C		
		<i>Bubo bubo</i>	T	Ac	C		
Caprimulgiformes	Caprimulgidae	<i>Caprimulgus europaeus</i>	T	SV	In		
Apodiformes	Apodidae	<i>Apus apus</i>	T	P	In		
Coraciiformes	Alcedinidae	<i>Alcedo atthis</i>	T	PM	C(Ich)		
	Meropidae	<i>Merops apiaster</i>	T	SV	In		
	Upupidae	<i>Upupa epops</i>	T	SV	In		
Piciformes	Picidae	<i>Picus viridis</i>	T	S	In		
		<i>Picus canus</i>	T	S	In		
		<i>Jynx torquilla</i>	T	SV	In		
		<i>Dendrocopos major</i>	T	S	In		
		<i>Dendrocopos syriacus</i>	T	S	In		
		<i>Dendrocopos medius</i>	T	S	In		
		<i>Dendrocopos minor</i>	T	S	In		
		<i>Dryocopus martius</i>	T	S	In		
		Passeriformes	Alaudidae	<i>Galerida cristata</i>	T	S	Omn
				<i>Alauda arvensis</i>	T	PM	Omn
<i>Lullula arborea</i>	T			SV	Omn		
Hirundinidae	<i>Riparia riparia</i>		T	SV	In		
	<i>Hirundo rustica</i>		T	SV	In		
	<i>Delichon urbica</i>		T	SV	In		
Motacillidae	<i>Motacilla alba</i>		T	SV	In		
Laniidae	<i>Lanius collurio</i>		T	SV	Pol		
	<i>Lanius minor</i>		T	SV	Pol		
Oriolidae	<i>Oriolus oriolus</i>		T	SV	Omn		
Sturnidae	<i>Sturnus vulgaris</i>		T	PM	Omn		
Corvidae	<i>Garrulus glandarius</i>		T	S	Omn		
	<i>Pica pica</i>		T	S	Omn		
	<i>Corvus monedula</i>	T	S	Omn			
	<i>Corvus frugilegus</i>	T	S	Omn			
	<i>Corvus corone cornix</i>	T	S	Omn			
	<i>Corvus corax</i>	T	S	Omn			
	Troglodytidae	<i>Troglodytes troglodytes</i>	T	SV, RW	Omn		

	Sylviidae	<i>Acrocephalus schoenobaenus</i>	T	SV	In
		<i>Acrocephalus scirpaceus</i>	T	SV	In
		<i>Acrocephalus arundinaceus</i>	T	SV	In
		<i>Hippolais icterina</i>	T	SV	Omn
		<i>Sylvia nisoria</i>	T	SV	Omn
		<i>Sylvia communis</i>	T	SV	Omn
		<i>Sylvia borin</i>	T	SV	Omn
		<i>Sylvia curruca</i>	T	SV	Omn
		<i>Sylvia atricapilla</i>	T	SV	Omn
		<i>Phylloscopus collybita</i>	T	SV	In
	Muscicapidae	<i>Muscicapa striata</i>	T	SV	Omn
		<i>Ficedula hypoleuca</i>	T	P, SV	In
	Turdidae	<i>Oenanthe oenanthe</i>	T	SV	In
		<i>Phoenicurus ochruros</i>	T	SV, RW	In
		<i>Saxicola rubetra</i>	T	SV	Omn
		<i>Saxicola torquata</i>	T	SV	In
		<i>Erithacus rubecula</i>	T	SV, RW	Omn
		<i>Turdus merula</i>	T	PM	Omn
		<i>Turdus philomelos</i>	T	SV	Omn
		<i>Turdus pilaris</i>	T	WV	Omn
		<i>Turdus viscivorus</i>	T	PM	Omn
	Paridae	<i>Parus palustris</i>	T	S	Omn
		<i>Parus caeruleus</i>	T	S	Omn
		<i>Parus ater</i>	T	S	Omn
		<i>Parus major</i>	T	S	In
	Aegithalidae	<i>Aegithalos caudatus</i>	T	S	In
	Remizidae	<i>Remiz pendulinus</i>	T	PM	Omn
	Sittidae	<i>Sitta europaea</i>	T	S	Omn
	Certhiidae	<i>Certhia familiaris</i>	T	S	In
	Passeridae	<i>Passer domesticus</i>	T	S	Omn
		<i>Passer montanus</i>	T	S	Omn
	Fringillidae	<i>Fringilla coelebs</i>	T	PM	Omn
		<i>Pyrrhula pyrrhula</i>	T	S	Omn
		<i>Coccothraustes coccothraustes</i>	T	S	Veg
		<i>Serinus serinus</i>	T	SV	Veg
		<i>Carduelis chloris</i>	T	S	Omn
		<i>Carduelis carduelis</i>	T	S	Omn
		<i>Carduelis cannabina</i>	T	PM	Omn
	Emberizidae	<i>Miliaria calandra</i>	T	PM	Omn
		<i>Emberiza citrinella</i>	T	S	Omn

NOTES:

T = Terrestrial
 Am = Amphibian
 Aq = Aquatic
 S = Sedentary
 SV = Summer visitor
 PM = Partial migratory
 WV = Winter visitor

P = Passage species
 In = Insectivorous species
 Omn = Omnivorous species
 Veg = Vegetarian
 RW = Rarely winter
 Ac = Accidental species
 Ich = Ichthyophagous
 Pol = Polyphagous

The observed species belongs to 15 order: Pelecaniformes (2 species, 1,83%), Ciconiiformes (4 species, 3,66%), Anseriformes (3 species, 2,75%), Falconiformes (11 species, 10,09%), Galliformes (3 species, 2,75 %), Gruiformes (3 species, 2,75 %), Charadriiformes (2 species, 1,83%), Columbiformes (4 species, 3,66%), Cuculiformes (1 species, 0,91%), Strigiformes (5 species, 4,58%), Caprimulgiformes (1 species, 0,91%), Apodiformes (1 species, 0,91%), Coraciiformes (3 species, 2,75%), Piciformes (8 species, 7,33%), Passeriformes (58 species, 53,21%).

Phenologically, most of the species represent summer visitors (48, 44,03%), followed by sedentaries (42, 38,53%), partial migratories (12, 11%), passage species (4, 3,66%), winter visitors (2, 1,83%) and accidental species (1, 0,91%).

The trophic analysis proved the existence of 52 omnivorous (47,70%), 30 insectivorous (27,52%), 16 carnivorous (14,67%), 7 polyphagous (6,42%), 2

vegetarian (1,83%) and 2 carnivorous ichthyophagous species (1,83%).

Also, two species (1,83%) are aquatic, ten species (9,17%) are amphibian and the most species (97-88,99%) are terrestrial.

From the total of the observed species, 96 (88,07%) are certainly breeding (species nesting was proved by the discovery of the nest with eggs, by the presence of the adults with food in their bills and in movement towards the supposed place of the nest, the presence of some unflying or barely flying juveniles in a characteristic biotope and 13 (11,92%) are non-breeding birds.

We find generally a whole concordance between the presence of the species in area and his phenology indicated in the speciality literature.

However, we can made some considerations:

- *Ficedula hypoleuca* Pall. – one individual, 29th April 2012, Tinca forest. This species is very rarely at national level, summer visitor or passage species.
- *Anser fabalis* Lath. – one rush with seven individuals, 7th April 2013, Tinca. This species is a passage bird at national level (first mention in area).
- *Apus apus* L. – one individual, 8th April 2013, Tinca. This species is not characteristic in area and her observation represents, after me, the more early mention at national level. Sporadic presence in area.
- *Milvus milvus* L. – one individual, 9th April 2013, Tinca. This species was breeding in area in the past, but because the excesiv anthropic pressure the number of individuals is very reduced.
- *Circaetus gallicus* Gmel. – one individual, 11th April 2013, Tinca (pale, whitish form). I mention that this chromatic variety of the plumage is more rare meted at national level.
- *Bubo bubo* L. – one individual, 20th February 2014, Tinca forest. This species is accidental in area, being characteristic to the forests at more high altitudes.
- *Pelecanus onocrotalus* L. – three individuals, 5th March 2014, Tinca (Crișul Negru river). Her presence in area, in the last two years, in winter or in spring is due to the raised temperatures enregistred in this period.
- The protection statute of the identified birds species emphasizes the existence of the following categories (table 2).

Table 2.

The protection statute of the identified birds species from Tinca area during the prevernal (original)

Nr.crt.	Species	Birds Directive	Convention of Bonn	Convention of Berna
1	<i>Pelecanus onocrotalus</i>	AI	AII	AIII
2	<i>Phalacrocorax carbo</i>	AI		AIII
3	<i>Ardea cinerea</i>			AIII
4	<i>Egretta alba</i>	AI	AII	AII
5	<i>Ciconia ciconia</i>	AI	AII	AII
6	<i>Ciconia nigra</i>	AI	AII	AII
7	<i>Anser anser</i>	AIII/2	AII	AIII
8	<i>Anser fabalis</i>	AIII/2	AII	AIII
9	<i>Anas platyrhynchos</i>	AII/1, AIII/1	AII	AIII
10	<i>Aquila pomarina</i>	AI	AII	AII
11	<i>Milvus milvus</i>	AI	AII	AII
12	<i>Buteo buteo</i>		AII	AII
13	<i>Circus cyaneus</i>	AI	AII	AII
14	<i>Circus pygargus</i>	AI	AII	AII
15	<i>Circaetus gallicus</i>	AI	AII	AII
16	<i>Accipiter gentilis</i>		AII	AII
17	<i>Accipiter nisus</i>		AII	AII
18	<i>Falco vespertinus</i>		AII	AII
19	<i>Falco peregrinus</i>	AI	AII	AII
20	<i>Falco tinnunculus</i>		AII	AII
21	<i>Phasianus colchicus</i>	AIII/1, AIII/1		AIII
22	<i>Coturnix coturnix</i>	AII/2	AII	AIII
23	<i>Perdix perdix</i>	AII/1, AIII/1		AIII
24	<i>Grus grus</i>	AI	AII	AII
25	<i>Fulica atra</i>	AII/1, AIII/2		AIII
26	<i>Gallinula chloropus</i>	AII/2		AIII
27	<i>Vanellus vanellus</i>	AII/2		AIII
28	<i>Charadrius dubius</i>		AII	AII
29	<i>Columba livia domestica</i>			
30	<i>Columba oenas</i>	AII/2		AIII
31	<i>Columba palumbus</i>	AII/1		
32	<i>Streptopelia decaocto</i>	AII/2		AIII
33	<i>Cuculus canorus</i>			AIII
34	<i>Tyto alba</i>			
35	<i>Strix aluco</i>			AII
36	<i>Athene noctua</i>			AII
37	<i>Asio otus</i>			AII
38	<i>Bubo bubo</i>			AII
39	<i>Caprimulgus europaeus</i>	AI		AII
40	<i>Apus apus</i>			AIII
41	<i>Alcedo atthis</i>	AI		AII
42	<i>Merops apiaster</i>			AII
43	<i>Upupa epops</i>			AII
44	<i>Picus viridis</i>			AII
45	<i>Picus canus</i>	AI		AII
46	<i>Jynx torquilla</i>			AII
47	<i>Dendrocopos major</i>			AII
48	<i>Dendrocopos syriacus</i>	AI		AII
49	<i>Dendrocopos medius</i>	AI		AII
50	<i>Dendrocopos minor</i>			AII
51	<i>Dryocopus martius</i>	AI		AII

52	<i>Galerida cristata</i>			AIII
53	<i>Alauda arvensis</i>	AII/2		AIII
54	<i>Lullula arborea</i>	AI		AIII
55	<i>Riparia riparia</i>			AII
56	<i>Hirundo rustica</i>			AII
57	<i>Delichon urbica</i>			AII
58	<i>Motacilla alba</i>			AII
59	<i>Lanius collurio</i>	AI		AII
60	<i>Lanius minor</i>	AI		AII
61	<i>Oriolus oriolus</i>			AII
62	<i>Sturnus vulgaris</i>	AII/2		
63	<i>Garrulus glandarius</i>	AII/2		
64	<i>Pica pica</i>	AII/2		
65	<i>Corvus monedula</i>	AII/2		
66	<i>Corvus frugilegus</i>	AII/2		
67	<i>Corvus corone cornix</i>	AII/2		
68	<i>Corvus corax</i>			AIII
69	<i>Troglodytes troglodytes</i>			AII
70	<i>Acrocephalus schoenobaenus</i>		AII	AIII
71	<i>Acrocephalus scirpaceus</i>		AII	AIII
72	<i>Acrocephalus arundinaceus</i>		AII	AIII
73	<i>Hippolais icterina</i>		AII	AIII
74	<i>Sylvia nisoria</i>	AI	AII	AII
75	<i>Sylvia comunnis</i>		AII	AII
76	<i>Sylvia borin</i>		AII	AII
77	<i>Sylvia curruca</i>		AII	AII
78	<i>Sylvia atricapilla</i>		AII	AII
79	<i>Phylloscopus collybita</i>		AII	AIII
80	<i>Muscicapa striata</i>		AII	AII
81	<i>Ficedula hypoleuca</i>		AII	AII
82	<i>Oenanthe oenanthe</i>			AII
83	<i>Saxicola rubetra</i>			AII
84	<i>Saxicola torquata</i>			AII
85	<i>Phoenicurus ochruros</i>			AII
86	<i>Erithacus rubecula</i>			AII
87	<i>Turdus merula</i>	AII/2		AIII
88	<i>Turdus philomelos</i>	AII/2		AIII
89	<i>Turdus pilaris</i>	AII/2		AIII
90	<i>Turdus viscivorus</i>	AII/2		AIII
91	<i>Parus palustris</i>			AII
92	<i>Parus caeruleus</i>			AII
93	<i>Parus ater</i>			AII
94	<i>Parus major</i>			AII
95	<i>Aegithalos caudatus</i>			AII
96	<i>Remiz pendulinus</i>			AIII
97	<i>Sitta europaea</i>			AII
98	<i>Certhia familiaris</i>			AII
99	<i>Passer domesticus</i>			
100	<i>Passer montanus</i>			AIII
101	<i>Fringilla coelebs</i>			AIII
102	<i>Pyrrhula pyrrhula</i>			AIII
103	<i>Coccothraustes coccothraustes</i>			AII
104	<i>Serinus serinus</i>			AII
105	<i>Carduelis carduelis</i>			AII
106	<i>Carduelis cannabina</i>			AII
107	<i>Miliaria calandra</i>			AIII
108	<i>Emberiza citrinella</i>			AII

After Birds Directive, 22 species belongs to annex 1, requiring special protection of habitats for secure the survival and the breed of those.

Other 5 species belongs to annex II/1, being able to hunted in the areas in which is applied the directive and 16 species belongs to annex II/2, being able to hunted only in the states of European Union for witch they are mentioned.

In the annex III/1 includes species who requires special licence for sale both alive or dead birds and any part or produce obtained from bird, easy of identification.

The species of annex III/2, if captured those were legally killed or illegal obtained, states member could allows on their territory the transport for sale, the sale, the supply for sale of alive or dead birds or any part or produce obtained from bird, easy identification.

Convention of Berna includes 65 species belonging to annex II, being strictly protected and 34 species from the annex III being protected.

Convention of Bonn refers to migratory species of wild animals and includes 33 species who belongs to annex II, having need of international accords for their protection because presents unfavourable protection statute.

The quantitative data looking the population effectives emphasizes the following aspects:

Some species like *Streptopelia decaocto*, *Columba livia domestica* – turned wild specimens, *Corvus ochruros*, *Parus major*, *Passer domesticus* and *Carduelis carduelis* are common species.

Phalacrocorax carbo – 10 reports on the banks of Crișul Negru river: 97 specimens identified.

Ardea cinerea – 32 specimens identified. *Egretta alba* – 6 specimens identified on the banks of Crișul Negru river.

Ciconia ciconia - 7 nests with chicks were identified in the studied area.

Ciconia nigra – 2 nests with chicks in the area.

Anser anser – 9 reports, on the fly, 267 specimens observed.

Aquila pomarina – one nest with chicks in the area.

Buteo buteo – relatively common species, 3-4 reports by day in year of the studied period.

Circus cyaneus – 17 specimens observed.

Circus pygargus – 10 specimens observed.

Accipiter gentilis – 24 specimens identified.

Accipiter nisus – 8 specimens.

Falco vespertinus – 6 specimens observed (4 males, 2 females).

Falco peregrinus – 3 specimens observed.

Coturnix coturnix – two reports: 5 specimens observed.

Perdix perdix – 3 reports: 9 specimens identified.

Grus grus – 9 reports, on the fly: 325 specimens observed.

Fulica atra – 2 specimens with chicks observed on the banks of Crișu Negru river (Tinca spa) in every year of studied period.

Gallinula chloropus – the same situation like the preceding species.

Vanellus vanellus – 3 pairs with chicks observed in studied area.

Charadrius dubius – 15 specimens observed.

Columba oenas – 2 reports: 5 specimens identified in the Tinca forest.

Columba palumbus – 4 reports: 4 specimens in the Tinca forest.

Cuculus canorus – 57 specimens observed or heard singing.

Tyto alba – 8 specimens identified.

Strix aluco – 14 specimens observed.

Athene noctua - relatively common species, observed or heard approximately in every day of the studied area.

Asio otus – one nest with 4 chicks observed in Tinca village, in every year of the studied period.

Caprimulgus europaeus – 2 pairs observed in every year in the Tinca forest.

Alcedo atthis – 1-2 specimens by day, observed on the banks of Crișul Negru river, Tinca spa, in the period April – 1 st May.

Merops apiaster – only 3 reports: 27 specimens observed.

Upupa epops – 2 reports: 2 specimens observed in the Tinca forest.

Picus viridis – 14 specimens observed in the Tinca forest.

frugilegus, *Passer montanus* are frequent, other species like *Phasianus colchicus*, *Dendrocopos major*, *Delichon urbica*, *Sturnus vulgaris*, *Garrulus glandarius*, *Pica pica*, *Hirundo rustica*, *Phoenicurus Picus canus* – 9 specimens observed in the Tinca forest.

Jynx torquilla – 5 reports in the Tinca forest.

Dendrocopos syriacus – relatively common species, being metted in the forest and inside the Tinca village.

Dendrocopos medius – very rarely species, 2 reports in the Tinca forest.

Dendrocopos minor – 3 reports in the Tinca forest.

Dryocopos martius – 4 reports in the Tinca forest.

Galerida cristata – 6 reports: 9 specimens identified.

Alauda arvensis – 40 specimens observed.

Lullula arborea – 27 specimens heard in the Tinca forest.

Riparia riparia – 57 nests identified in the banks of Crișu Negru river.

Motacilla alba – 27 specimens observed.

Lanius collurio – 35 specimens observed.

Lanius minor – only 6 reports, 12 specimens observed.

Oriolus oriolus – 20 specimens identified.

Corvus monedula – breeding species in Tinca vilage, 120 specimens observed.

Corvus corone cornix – breeding species, 2 pairs observed in Tinca spa area.

Corvus corax – breeding species, 4 pairs observed chicks in Tinca area.

Troglodytes troglodytes – 10 specimens observed

Acrocephalus schoenobaenus – 5 pairs observed inside the spinney of Crișu Negru river.

Acrocephalus scirpaceus – 4 pairs identified inside the spinney of Crișu negru river.

Hippolais icterina – 12 specimens observed.

Sylvia nisoria – 7 specimens identified.

Sylvia communis – 20 pairs with chicks identified in Tinca area.

Sylvia borin – 3 pairs identified in Tinca area.

Sylvia curruca – 4 specimens observed

Sylvia atricapilla – 8 specimens observed.

Phylloscopus collybita – 10 specimens observed.

Muscicapa striata – 26 specimens identified.

Oenanthe oenanthe – 2 pairs identified in Tinca area.

Saxicola rubetra – 6 specimens observed.

Saxicola torquata – 22 specimens identified.

Erithacus rubecula – 19 specimens observed.

Turdus merula – 23 specimens identified.

Turdus philomelos – 14 specimens identified.

Turdus pilaris – only 4 specimens observed.

Turdus viscivorus – 9 specimens observed.

Parus palustris – 149 specimens observed.

Parus caeruleus – 202 specimens observed in the Tinca forest.

Parus ater - 14 specimens observed in the Tinca forest.

Aegithalos caudatus – 67 specimens observed in the Tinca forest and 34 specimens observed on the banks of Crișu Negru river.

Remiz pendulinus – one pair observed near the spinney of Crișu Negru river.

Sitta europaea – common species only inside of the Tinca forest.

Certhia familiaris – 8 specimens observed in the Tinca forest.

Fringilla coelebs – common species inside of the Tinca forest.

Pyrrhula pyrrhula – only 7 specimens observed.

Coccothraustes coccothraustes – 11 specimens observed.

Serinus serinus – 21 specimens observed.

Carduelis chloris – only 9 specimens observed.

Carduelis cannabina – 36 specimens observed.

Miliaria calandra – only 4 specimens observed.

Emberiza citrinella – 159 specimens observed.

From the total of the identified species, a number of 12 species are included in the red list of the vertebrates from Romania, belonging to different types of protection.

In this way, 9 species (*Aquila pomarina*, *Falco vespertinus*, *Bubo bubo*, *Ciconia ciconia*, *Ciconia nigra*, *Egretta alba*, *Upupa epops*, *Grus grus*, *Streptopelia turtur*) are considered vulnerables and 3 species (*Corvus corax*, *Milvus milvus*, *Falco peregrinus*) are considered endangered.

Like measures of protection are necessary the followings :

- to stop the deforestation of forested surfaces and cutting of the trees with hollow who represents places for breeding for species like hoopoe, tomtit, owl, etc.

- to stop the poaching of some cynegetic species like pheasant, quail, partridge, wild duck, etc.

- to stop the destruction of the nests of the birds because the dishonesty, ignorance or accidentally.

- to limit the presence of the sportive fishing on the banks of Crișu Negru river, which represents a perturbator factor for the activity of the aquatic birds.

CONCLUSSIONS:

In the period 2008 – 2014, during the prevernal season, in Tinca area were recorded 109 species, in majority summer visitors and sedentaries, terrestrials and omnivorous. Were recorded one species very rare at national level.

At the same time, were recorded 12 species who are included in the red list of the vertebrates from Romania: 9 species considered vulnerables and 3 species considered endangered.

After the protection statute were identified the following categories:

- Birds Directive: 22 species belongs to annex I, 5 species belongs to annex II/1, 16 species belongs to annex II/2, 3 species belongs to annex III/1 and 3 species to annex III/2.

- Convention of Berna: 65 species belongs to annex II and 34 to annex III.

- Convention of Bonn: 33 species belongs to annex II.

From the point of view of the quantitative data looking the population effective were identified 4 frequent species and 11 common species in the studied area.

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