

DATA ABOUT THE FAUNA OF VERTEBRATES FROM TINCA AREA (BIHOR COUNTY, ROMANIA) DURING THE HIEMAL SEASON 2017-2018

Ilie Aurelian Leonardo ^{*}, Marinescu Mariana ^{**}

^{*}“Nicolae Jiga” Theoretical High School of Tinca, aurelian_ilie@yahoo.fr
^{**}University of Oradea, Teacher Training Department, marinescum54@yahoo.com

Abstract

In this work are presented data about the fauna of vertebrates from Tinca area (Bihor county, Romania) during the hiemal season 2017 – 2018. There were identified 64 species belonging to three classes. The winter 2017 – 2018 is considered the warmest from the history of Tinca village, with diurnal temperatures between 0 – 19° C. In this way, there were identified premature activities, even copula in some species (*Streptopelia decaocto* Friv., *Passer montanus* L.) The *Monticola solitarius* L. species is mentioned for the first time in Tinca area. We noticed some phonological anomalies at seven species. *Falco rusticolus* L. is mentioned for the first time in Romanian fauna.

Key words: fauna of vertebrates, data, western part of Romania.

INTRODUCTION

Tinca area is located in the south-western part of Bihor county, in the north-western part of Romania. The climate is temperate-continental belongs to the stage (Berindei et al., 1972). Data about the fauna of vertebrates from Tinca area were published by Ilie et al. (2011, 2013, 2015, 2017); Ilie, (2012) Tinca area is formed by five villages (Tinca, Gurbediu, Belfir, Râpa, Girișu-Negru).

Because the high diurnal temperatures for this period (0-17°C) some species of vertebrates were observed during the winter (one amphibian and some bird species). This work follows the diversity of the vertebrates in the conditions of the hiemal season 2017-2018.

The researches were achieved during November 1, 2017 – March 1, 2018.

MATERIAL AND METHODS

The observations were realized with the help of binoculars with specifications 8 x 25 and 20 x 50, being completed with the direct observations. For the identification of the vertebrates were used different sources (Fuhn, 1969; Popescu et al., 2001; Svensson, 2017).

RESULTS AND DISCUSSIONS

In the analyzed period, the following species were identified:

The Amphibia class: (table 1)

- *Triturus vulgaris L.*

- one male specimen, February 9, 2018, t=4°C, Tinca. Unexpected appearance in winter and at this temperature!

The observed species (60) belongs to 10 orders: *Pelecaniformes* (2 species, 3,33%), *Ciconiiformes* (2 species, 3,33%), *Anseriformes* (4 species, 6,66%), *Falconiformes* (5 species, 8,33%), *Charadriiformes* (2 species, 3,33%), *Columbiformes* (1 species, 1,66%), *Piciformes* (2 species, 3,33%), *Passeriformes* (37 species, 61,66%).

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

However, we can make some considerations:

- *Oriolus oriolus L.* is summer visitor species at national level. The three specimens observed during December 4, 2017 – January 14, 2018 are unexpected presence for these data. According to eurobirdportal.org, this species was observed during the winter (January, February) in Belgium, Austria, Czech republic, Slovakia.

- *Ficedula albicollis Temm.* is mentioned for the first time during the winter at national level. This presence could be explained because her food: seeds, little fruits and the warmest winter from the history of the area.

- *Monticola solitarius L.* is mentioned for the first time in area, having a winter plumage.

- The big temperature registered during the winter 2017 – 2018 determined the appearance of some species summer visitors: *Pelecanus onocrotalus L.*, *Lanius senator L.* (probably the first mention during the winter at national level), *Luscinia svecica L.* (summer visitor or passage species in area).

- *Luscinia megarhynchos Brehm* is mentioned for the first time during the winter in Romania. According to eurobirdportal.org, these species were observed during the end of autumn and in winter in Holland and Germany.

- *Falco rusticolus L.* is mentioned for the first time in fauna of Romania, having plumage typical to Scandinavian peninsula.

Table 1

The bird species from Tinca area during the hiemal season 2017-2017 (original)

Species	No of specimens	Village	Period
<i>Pelecanus onocrotalus</i> L.	13	Tinca	10 XII-24 I
<i>Phalacrocorax carbo</i> Show et Nod.	54	Tinca	30 I
<i>Botaurus stellaris</i> L.	1	Râpa	14 I
<i>Egretta alba</i> L.	1	Râpa	14 I
<i>Anser albifrons</i> Scop.	160	Tinca	16 – 18 XII
<i>Anser erythropus</i> L.	2	Tinca	29 XII
<i>Anas platyrhynchos</i> L.	2724	Tinca	8 I – 13 II
<i>Aythia fuligula</i> L.	1 M	Tinca	8 I
<i>Falco rusticulus</i> L.	2	Tinca	18 XII, 6 I
<i>Falco peregrinus</i> Tunst.	1	Tinca	22 XII
<i>Falco tinnunculus</i> L.	1 M	Tinca	14 I
<i>Falco cherrug</i> Gray	1	Râpa	16 I
<i>Falco columbarius</i> L.	2 M	Tinca	22 I, 16 II
<i>Sterna hirundo</i> L.	2	Râpa	5 – 23 XII
<i>Chlidonias hybridus</i> Pall.	2	Râpa	21 I
<i>Larus ridibundus</i> L.	4	Tinca	7 II
<i>Streptopelia decaocto</i> Friv.	26	Tinca	30 XII – 16 II
<i>Strix aluco</i> L.	1 pellet	Tinca	31 XII
<i>Asio otus</i> L.	36	Tinca	1 XI – 28 II
<i>Glaucidium passerinum</i> L.	1 pellet	Tinca	25 I
<i>Ceryle rudis</i> L.	1	Râpa	13 II
<i>Dendrocopos major</i> L.	1 abandoned nest	Tinca forest	8 I
<i>Picus viridis</i> L.	1	Tinca	22 II
<i>Motacilla alba</i> L.	4 M	Râpa	14 I
<i>Lanius excubitor</i> L.	1 abandoned nest	Tinca forest	8 I
<i>Lanius senator</i> L.	1 M	Tinca	14 I
<i>Sturnus vulgaris</i> L.	25	Tinca	17 I - 26 II
<i>Oriolus oriolus</i> L.	1 M, 2 J	Gurbediu	4 XII, 11 XII, 14 I
<i>Garrulus glandarius</i> L.	36	Tinca	1 XI – 28 II
<i>Pica pica</i> L.	40	Tinca	1 XI – 28 II
<i>Corvus frugilegus</i> L.	430	Tinca	1 XI – 28 II
<i>Corvus corone cornix</i> L.	4	Tinca	26 II
<i>Corvus corax</i> L.	4	Tinca	21 XII – 16 II
<i>Troglodytes troglodytes</i> L.	2	Râpa	26 II
<i>Hippolais pallida</i> Erh.	1	Tinca	21 XII
<i>Ficedula albicollis</i> Temm.	1 M	Râpa	1 XII
<i>Oenanthe leucura</i> Gmel.	4 M	Tinca	19 I – 28 II
<i>Monticola solitarius</i> L.	1 M	Belfir	16 XI
<i>Phoenicurus ochruros</i> L.	2 M, 3 J	Tinca, Râpa	6 XII – 16 II
<i>Luscinia svecica</i> L.	1 M	Tinca	27 I
<i>Luscinia megarhynchos</i> Brehm.	2	Râpa	13 II
<i>Turdus pilaris</i> L.	15	Tinca	13 XII -28 II
<i>Turdus iliacus</i> L.	2	Tinca	24 XII, 17 I
<i>Turdus merula</i> L.	1 abandoned nest	Tinca forest	8 I

Turdus viscivorus L.	9	Tinca	9 XII – 24 II
Parus montanus L.	1	Tinca	21 XII
Parus major L.	63	Tinca	1 XI – 28 II
Sitta europaea L.	2	Tinca	25 XII
Passer montanus L.	135	Tinca	1 XI – 28 II
Passer domesticus	29	Râpa	1 XI – 28 II
Aegithalos caudatus L.	7	Tinca	22 I
Fringilla coelebs L.	2 M	Tinca	3 II
Pyrrhula pyrrhula L.	39 M, 4 F	Tinca,	4 XII – 28 II
Coccothraustes coccothraustes L.	54	Tinca	4 XII – 18 II
Carduelis cannabina L.	135	Tinca	22 XII -27 II
Carduelis spinus L.	3	Tinca	25 I
Carduelis carduelis L.	169	Tinca	10 XII - 28 II
Calcarius lapponicus L.	2 M	Tinca	2 XII, 20 XII
Plectrophenax nivalis L.	1 M	Tinca	18 XII
Emberiza citrinella L.	7 M, 3 F	Tinca	26 II

Legend: M= male; F = female; J = juvenile.

- *Ceryle rudis L.* is mentioned for the first time during the winter in Romania. The species is very rare, accidental for Romanian fauna, being mentioned for the first time in Romania by Ilie in Pusta Valley (Râpa village) in 2015 (2016).

- The pellet of *Strix aluco L.* has L= 8,5 cm (very big comparatively with the scientific data: 6 cm), l=2 cm, conditioned two teeth of *Ratus ratus Linnaeus*, 1758, two ribs and one mandible of a woodshrew (*Sorex araneus Linnaeus*, 1758).

- The pellet of *Glaucidium passerinum L.* has L= 1,5 cm, l = 1,3 cm, contained ribs and skulls of *Mus musculus Linnaeus*, 1758 (one specimen) and *Apodemus sylvaticus Linnaeus*, 1758 (one specimen).

The Mammalia class:

- *Erinaceus europaeus Linnaeus*, 1758: one scat L = 5 cm, l = 1 cm, who contained seeds of fruits, peels of grapes, Tinca, January 12, 2018; other scat (L = 5,1 cm, l = 0,80cm) who contained seeds and peels of grapes, Tinca, January 20, 2018. Common species in area.

- *Martes foina Erxbben*, 1777: one scat (L = 4 cm, l = 1,5cm) who contained masticated remains of grains of maize and sunflower, Tinca, January 11, 2018. The presence of sunflower grains like food of this species is not indicated in the scientific literature (Ilie, 2016; Murariu & Munteanu, 2005).

Common species in area:

- *Castor fiber Linnaeus*, 1758: one specimen, Tinca (Crișul Negru river), January 4, 2018. Relatively rare species in area (Crișul Negru river).

CONCLUSIONS

In the analyzed period in Tinca area were observed 64 species belonging to three classes. We noticed one species mentioned for the first time in Romania and one species for the first time in Tinca area.

Some phenological anomalies were observed at seven species of birds and one at one species of amphibians.

There were obtained new data about the compositions of the pellets of some owl species and of the scats of some mammals.

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