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NEW FAUNISTICAL RESEARCHES FROM TINCA (BIHOR COUNTY, ROMANIA)

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ABSTRACT. In this paper some faunistical news, as well as ethological & fenological aspects of vertebrates' fauna from Tinca area are presented (Bihor County, Romania) during February 1 - July 1, 2015.

Keywords: faunistical, ethological aspects, Tinca area.

REZUMAT. Noi cercetări faunistice din zona Tinca (județul Bihor, România). În această lucrare sunt prezentate unele noutăți faunistice, aspecte etologice și fenologice ale faunei de vertebrate din zona Tinca (județul Bihor, România) în perioada 1 februarie – 1 iulie 2015.

Cuvinte cheie: aspecte faunistice, etologice, zona Tinca.

INTRODUCTION

Tinca area is situated in the south-western part of Bihor County, belonging to the historical province Crişana, with a surface of 454 km², at the confluence of the Miersig Plain and the Holod Depression.

The average altitude is 115 m, the climate is temperate-continental, moderate, having one particular nuance, the Pannonic.

From the hydrographical point of view, the analyzed territory belongs to the inferior limit of the Crişul Negru River, middle course.

The vegetation of the area belongs to the oak stage, having a predominant Central-European origin.

The forests are formed of the species belonging to the genus *Quercus*, isolated troops of beech tree, false acacia, hornbeam, maple tree, ash tree.

In the lawns of Tinca area were identified different leguminous plants, graminaceae, some compositae, etc.

Tinca village includes Tinca, Gurbediu, Râpa, Belfir and Girişu Negru villages.

Notes about the vertebrates' fauna from Tinca were published by author in two books and some scientific papers (Ilie, 2008, 2009, 2012, 2013; Ilie & Marinescu, 2014).

MATERIAL AND METHODS

The observations were performed between February 1 and July 1, 2015, with binoculars 8x25 and 8x50, completed with direct observations, effectuated during all the moments of the day: diurnal, crepuscular and nocturnal.

For the determination of species different guides were used (Bruun et al., 1999; Gooders & Lesaffre, 1998; Bogoescu et al, 1980; MacDonald & Barrett, 1995).

RESULTS AND DISCUSSIONS

In the analyzed period were identified the following species:

The **REPTILIA** class:

- Coronella austriaca Laurenti, 1768
 - One entirely white specimen, with little blackish spots, Tinca, April 26.
- Natrix natrix Linnaeus, 1758
 - One entirely melanistic specimen, Tinca, April 13.
- Lacerta muralis Laurenti, 1768
 - One female specimen, June 1, Tinca spa.

The AVES class:

- Podiceps cristatus Linnaeus, 1758
 - One female specimen with two nestlings, May 24, Râpa, Rogoaze Lake. Summer visitor, relatively rarer species.
- Tachybaptus rufficollis Pallas, 1764
 - One specimen, March 14, Râpa.

Passage species, more rarely summer visitor in the area.

- Pelecanus onocrotalus Linnaeus, 1758
 - Two specimens, February 8, Râpa (Crişul Negru River).
 - One specimen, March 2, Râpa (Crişul Negru River).
 - Two specimens, March 9, Râpa (Crişul Negru River).
 - One specimen, March 15, Râpa (Rogoaze Lake).
 - Three specimens, April 19, Râpa (Rogoaze Lake).
 - Four specimens, April 18, Râpa (Rogoaze Lake).
 - Four specimens, April 27, Râpa (Rogoaze Lake).
 - Five specimens, May 24, Râpa (Rogoaze Lake).
 - Three specimens, May 31, Râpa (Rogoaze Lake).

Species identified for the first time in the area in 2010, winter visitor, rarely passage or summer visitor in the area.

- Phalacrocorax carbo Linnaeus, 1758
 - One flight with 30 specimens, March 23, Tinca.
 - One flight with 62 specimens, March 24, Tinca.

Passage species or summer visitor in the area.

- Ardeola ralloides Scopoli, 1769
 - One specimen April 4, Tinca.

Probably passage species or summer visitor in the area.

- Nycticorax nycticorax Linnaeus, 1758
 - One specimen, June 14, Tinca.

More rarely species, summer visitor.

- Ciconia ciconia Linnaeus, 1758
- One specimen, February 11, Râpa (Crişul Negru River), (first observation of the year).
 - One specimen, March 10, Gurbediu.
 - One specimen, March 15, Râpa (Rogoaze Lake).
 - One specimen, March 24, Tinca.
 - One specimen entirely melanistic, April 1, Tinca.

The species nests in the area, summer visitor, sometimes some specimens winter in warm winters.

- Anser anser Linnaeus, 1758
 - 12 specimens, February 14, Tinca.
 - 50 specimens, March 11, Tinca.

Passage or summer visitor in the area.

- Anser erythropus Linnaeus, 1758
- Two specimens who presented melanismus: the forehead was black and not white, undertail coverts were black and not white. Generally, the coloring of the body was black, rarely alternately with grey portions, February 11, Râpa.

Passage visitor in the area.

- Hieraaetus pennatus Gmelin, 1788
 - One specimen, April 20, Tinca.
 - One specimen, May 12, Tinca.

Species mentioned for the first time in the area, summer visitor.

- Buteo buteo Linnaeus, 1758
- Numerous specimens in all researched period. Also, this species could be on the watch for hunting even on places at relatively little height (1.70 meters).
- Buteo rufinus Cretzschmar, 1826
 - One specimen, March 21, Lunca Gurbediului.

Summer visitor or passage species, presence rarer in the area.

- Pernis apivorus Linnaeus, 1758
 - One female specimen on nest, April 17, Tinca (forest).

Relatively rare species, summer visitor.

- Accipiter gentilis Linnaeus, 1758
 - One male specimen, March 4, Tinca.
 - One female specimen, March 18, Tinca.

- One male specimen, April 8 and April 11, Tinca.
- One female specimen, May 1, Valea Gurbediului.
- One egg on the ground broken, May 19, Lunca Gurbediului (forest).

Common species in the area, sedentary.

- Accipiter nisus Linnaeus, 1758

- Three specimens during February 7-13, Tinca.
- One specimen hunting in crepuscule (19 p.m.), April 3, Tinca and February 24 (19:30 p.m.), Tinca.

The number of specimens during the winter is more big than the rest of year, at national level this species is winter visitor or sedentary.

- Milvus migrans Boddaert, 1783

- One specimen, March 7, Tinca.

Very rare species in the area, passage species or summer visitor.

- Circus cyaneus Linnaeus, 1758

- One male specimen, March 15, Râpa (forest).

Winter visitor in the area.

- Circus pygargus Linnaeus, 1758

- One male specimen, March 19, Gurbediu.
- One male specimen, April 10, Tinca.
- One female specimen, March 31, Tinca (19:40 p.m.).

Probably passage species in the area.

- Circus macrourus Gmellin, 1771

- One male specimen, February 13, Gurbediu.
- One male specimen, February 21, Râpa.
- One male specimen, February 22, Tinca.

Passage visitor in the area, rarely summer visitor.

- Falco peregrinus Tunstall, 1771

- One specimen, March 29, Tinca.
- One specimen, June 19, Tinca (20:00 p.m.).

Sedentary or passage species in the area.

- Falco subbuteo Linnaeus, 1758

- One specimen, March 28, Tinca.

Summer visitor, nests in the area.

- Falco columbarius Linnaeus, 1758

- One male specimen, Râpa, February 14.

Species very rare, winter visitor.

- Falco vespertinus Linnaeus, 1758

- Two males specimens, February 3, Tinca.
- One female specimen, June 7, Tinca (forest).

Surprising presence of this species in winter, at national level it is summer visitor.

- Falco tinnunculus Linnaeus, 1758

– One brace who nests in the spire of Protestant church from Tinca village. Partial migrant species in the area.

- Perdix perdix Linnaeus, 1758
 - 40 specimens, February 9, Râpa.

Relatively common species in the area, sedentary.

- Grus grus Linnaeus, 1758
 - One flight with 63 specimens, February 12, Girişu Negru.
 - One flight with 127 specimens, February 13, Tinca.
 - One flight with 79 specimens, February 13, Tinca.
 - Three specimens, February 25, Belfir.

Passage species in the area.

- Crex crex Linnaeus, 1758
 - One specimen, June 7, Belfir.

Summer visitor in the area.

- Vanellus vanellus Linnaeus, 1758
 - One specimen, March 7, Belfir (first observation of the year).
 - Many specimens observed at Tinca, Gurbediu and Belfir.

Common species in the area, passage or summer visitor.

- Tringa ochropus Linnaeus, 1758
 - One specimen, March 21, Lunca Gurbediului.

Passage species in the area.

- Chlidonias leucopterus Temminck, 1815
 - 4-5 flights with 20-30 specimens, March 4-6, Gurbediu.
 - One flight with 40 specimens, March 12, Gurbediu.

Passage species in the area.

- Streptopelia turtur Linnaeus, 1758
 - One specimen, May 17, Girişu Negru.

Relatively rarer species, summer visitor, nests in the area.

- Otus scops Linnaeus, 1758
 - One female specimen, March 2, Tinca.
 - One female specimen, March 3, Tinca.
 - One female specimen singing, March 7, Tinca.

This species nests in Tinca village, summer visitor in the area.

- Bubo bubo Linnaeus, 1758
 - One specimen, February 20, Gurbediu forest.

Very rare species in the area, sedentary.

- Strix uralensis Pallas, 1771
 - One specimen March 10, Belfir.
 - One specimen, February 17, Râpa.

Relatively rare species in the area, winter visitor.

- Asio otus Linnaeus, 1758
 - Nest with nestlings, May 2, Tinca (park).
 - Many specimens in the area.

Common species, sedentary.

- Asio flammaeus Pontoppidan, 1763
 - One specimen, March 2, Râpa, Dealu Burzău.

Passage species in the area.

- Tyto alba Scopoli, 1769
 - One specimen, April 14, Tinca.

Relatively common species, nests in the area.

- Caprimulgus europaeus Linnaeus, 1758
 - One specimen, April 29, Râpa (forest).

Summer visitor, nests in the area.

- Apus apus Linnaeus, 1758
 - One specimen, March 4, Râpa.

Passage species in the area.

- Apus melba Linnaeus, 1758
 - One specimen, April 29, Râpa.

Passage species or rarely summer visitor in the area.

- Ceryle rudis Linnaeus, 1758
- Two specimens, one flying, the other fishing, June 8, Râpa, (Valea Pustei).

Erratic species, coming from Asia and Africa to east or south-eastern part of Europe. In Europe, it is vagrant in: France, Greece, Poland, and Ukraine (according to The IUCN Red List of Threatened Species).

- Merops apiaster Linnaeus, 1758
 - One flight with 30 specimens, February 20, Tinca.
 - Many specimens during May 3, till to present.

Passage species or summer visitor in the area.

- Coracias garrulus Linnaeus, 1758
 - One specimen, April 29, Râpa.

Very rare species, summer visitor, nests in the area.

- Upupa epops Linnaeus, 1758
 - One specimen, March 15, Râpa (forest).
 - One specimen, March 1, Gurbediu.
 - Two specimens, May 1, Gurbediu.
 - One specimen singing, May 18, Tinca.
 - One specimen singing, May 23 and June 6, Tinca.

Common species nests in the area.

- Picus viridis Linnaeus, 1758
 - One specimen, February 21, Tinca.

Sedentary species in the area.

- Dendrocopos syriacus Hemprich et Ehrenberg, 1833
 - One female specimen, March 2, Tinca.

Common species, sedentary in the area.

- Dryocopus martius Linnaeus, 1758
 - One specimen, April 19, Râpa (forest).

Sedentary species, nests in the area.

- Jynx torquilla Linnaeus, 1758
 - One specimen, February 18, Tinca.

- One specimen singing, April 17, Tinca forest.

Passage or summer visitor in the area.

- Riparia riparia Linnaeus, 1758

– Two specimens, March 15, Râpa (first observation of the year).

Common species, summer visitor, nests in the area.

- Hirundo rustica Linnaeus, 1758

- Two specimens, March 15, Râpa (first observation of the year).
- Many specimens observed in the area.

Common species, summer visitor.

- Delichon urbica Linnaeus, 1758

- Two specimens, April 1, Belfir (first observation of the year).
- Many specimens in all area.

Common species, nets in the area.

- Anthus trivialis Linnaeus, 1758

- Three specimens, June 7, Tinca (forest).

Common species in the area, summer visitor.

- Anthus pratensis Linnaeus, 1758

- Nest with eggs (5), April 25, Râpa.
- For specimens, May 1, Valea Gurbediului.

Summer visitor in the area, species mentioned for the first time in the area.

- Anthus campestris Linnaeus, 1758

- Ten specimens, May 1, Valea Gurbediului.

Species mentioned for the first time in the area, summer visitor.

- Motacilla flava Linnaeus, 1758

- One female specimen, March 8, Tinca.
- Eight specimens, May 13, Râpa.
- Two specimens, March 30, Râpa.

Summer visitor.

- Motacilla alba Linnaeus, 1758

- One male specimen, March 1, Râpa (first mention of the year).
- Many specimens during the analyzed period.

Common species in the area, summer visitor.

- Lanius senator Linnaeus, 1758

- One female specimen on nest, May 31, Râpa.
- One specimen, June 1, Belfir.

Species mentioned for the first time in the area. Summer visitor in the area.

- Lanius minor Gmelin, 1788

– Nest with eggs, April 26, Râpa.

Summer visitor.

- Lanius excubitor Linnaeus, 1758

- One specimen, May 31, Râpa.

Partial migrant species or winter visitor in the area.

- Oriolus oriolus Linnaues, 1758

- Two specimens, February 10, Râpa (near Crişul Negru River).

- Two male specimens, April 22, Râpa.

Surprising presence of this species in winter, at national level is summer visitor.

- Sturnus roseus Linnaeus, 1758
 - Two specimens, April 15, Râpa.

Species mentioned for the first time in the area, probably passage species.

- Sturnus vulgaris Linnaeus, 1758
 - Three specimens, February 24, Tinca (first observation of the year).
 - Many specimens during March 4 till to present.

Very common species in the area, partial migrant species, sometimes sedentary.

- Corvus corax Linnaeus, 1758
 - One specimen, March 24, Tinca.
 - One specimen, April 17, Râpa. Sedentary, species nests in the area.
- Troglodytes troglodytes Linnaeus, 1758
 - Nest with eggs (4), April 27, Protestant cemetery, Tinca.

Common species, partial migrant species in the area.

- Prunella modularis Linnaeus, 1758
 - Nest with eggs (4), April 23, Tinca (forest).

Summer visitor.

- Acrocephalus scirpaceus Hermann, 1804
 - Nest with eggs (5), April 27, Râpa (Rogoaze Lake).

Relatively common species, summer visitor.

- Hippolais icterina Veillot, 1817
 - One specimen, March 30, Râpa.

Summer visitor in the area.

- Sylvia atricapilla Linnaeus, 1758
 - One nest, March 21, Lunca Gurbediului.
 - Many specimens in all area.

Common species, summer visitor.

- Ficedula albicollis Temminck, 1815
 - One male specimen, March 12, Tinca.
 - One male specimen, March 29, Tinca.

Species relatively common in the area, summer visitor.

- Oenanthe oenanthe Linnaeus, 1758
 - One male specimen, June 7, Tinca.

Relatively rare species, summer visitor in the area.

- Phoenicurus ochruros Gmelin, 1774
 - One male specimen, March 7, Tinca (first observation of the year).
 - Many specimens observed till to present.
 - One nestling 100% white, May 3, Râpa.

Common species in the area, summer visitor.

- Luscinia svecica Linnaeus, 1758
 - One male specimen, April 1, Râpa.

- One male specimen, April 2, Râpa.
- Two male specimens, April 19, Râpa.

Species mentioned in the first time in the area. Probably passage species in the area.

- Luscinia calliope Linnaeus, 1758

- One female specimen, February 27, Belfir.

Accidental species in Europe, probably mentioned for the first time in Romania. In Europe, it is vagrant in: Denmark, Finland, Germany, Iceland, Italy, Sweden, United Kingdom (according to The IUCN Red List of Threatened Species).

- Turdus torquatus Linnaeus, 1758

- One male specimen, June 1, Tinca.
- One male specimen, June 6, Râpa.

Accidental species mentioned for the first time in the area.

- Turdus philomelos Brehm, 1831

- Five nests with eggs (5), April 26, Tinca (forest).

Common species. Summer visitor.

- Turdus pilaris Linnaeus, 1758 17 specimens, February 9, Tinca.
 - Two groups of 4-6 specimens, March 21, Lunca Gurbediului.

This species nests for the first time in the area, before was winter visitor in the area.

- Parus palustris Linnaeus, 1758

- One male specimen with xanthocroismus: all the belly to chin was yellow, the rest of the coloring of the body was normal, February 9, Tinca.
 - 35 specimens during February 10 April 3.

Common species in the area.

- Parus montanus Conrad, 1827

- Two specimens, March 15 Râpa (forest).

Winter visitor or passage species in the area.

- Parus cristatus Linnaeus, 1758

- One male specimen, March 15, Râpa (forest).
- One male specimen, March 30, Râpa (forest).

Winter visitor or passage species in the area.

- Parus major Linnaeus, 1758

- One male specimen with white belly, not yellow like the normal specimens, February 20, Tinca.

Sedentary species, common in the area.

- Aegithalos caudatus Linnaeus, 1758

- One nest with nestlings, orthodox cemetery, April 18, Tinca.

Sedentary species, common in the area.

- Remiz pendulinus Linnaeus, 1758

- Two specimens, April 19, Râpa.

Relatively rare species in the area, partial migrant species, nests in the area.

- Trichodroma muraria Linnaeus, 1758

- One specimen, February 21, Râpa (calcareous quarry Dealu Burzău)
- One specimen, March 11, Râpa (the same place).
- One nest observed, March 15, Râpa (the same place).
- One specimen, April 19, Râpa (the same place).
- One nest with 4 nestlings, May 7, Râpa (the same place).
- One specimen, on the ground, on the lots of broken stones, May 8, Belfir.
- Six specimens (two adults and four juveniles) who leaves Dealu Burzău, May 18, Râpa.
 - The second nest and six specimens, May 24, Râpa (Dealu Burzău).
 - Two specimens, June 2, Râpa (Dealu Burzău).

Species mentioned for the first time in the area. Dealu Burzău – calcareous quarry (150 meters altitude) becomes the more reduced altitude for the nesting of this species. The scientific literature indicates 400-1900 meters altitude for nesting.

- Certhia familiaris Linnaeus, 1758

- One specimen, April 19, Râpa (forest).

Sedentary species, nests in the area.

- Passer domesticus Linnaeus, 1758

- One female specimen with unilateral albinism. The specimen presented less coverts and secondary entirely white, but only at one wing. The other wing presented the normal coloring of the species, March 7, Tinca.

Very common species in the area.

- Fringilla coelebs Linnaeus, 1758

- One nest with nestlings April 10, Tinca.

Common species, sedentary.

- Pyrrhula pyrrhula Linnaeus, 1758

- Two specimens, April 19, Râpa.

Sedentary species, rarer in the area.

- Coccothraustes coccothraustes Linnaeus, 1758

- 10 specimens during February 9 March 8, Tinca.
- Two specimens (one male, one female), June 14, Tinca.
- Three specimens, June 18, Tinca.

Common species in the area.

- Carduelis spinus Linnaeus, 1758

- 40 specimens, February 11, Râpa
- 30 specimens, February 22, Râpa (near Crişul Negru River)
- 20 specimens, March 14, Râpa (forest). Winter visitor in the area.

- Carduelis flammea Linnaeus, 1758

- Four specimens, March 14, Râpa (forest).

Winter visitor or passage species in the area.

- Carpodacus erythrinus Pallas, 1770

- One male specimen, April 20, Râpa.
- One male specimen, April 17, Belfir.

Rare species, nests in the area, summer visitor.

- Pinicola enucleator Linnaeus, 1758
 - Ttwo female specimens, February 14, Belfir.
 - One female specimen, February 17, Belfir.

Probably, this species is mentioned for the first time in Romania, being accidental or passage species. In Europe, it is vagrant in: Austria, Belgium, Czech Republic, Denmark, France, Germany, Greenland, Hungary, Montenegro, Netherlands, Poland, Serbia, Switzerland, Ukraine, United Kingdom (according to The IUCN Red List of Threatened Species).

- Loxia curvirostra Linnaeus, 1758
 - One specimen, March 30, Râpa (forest with pine trees).
 - One specimen building one nest, April 2, Râpa (the same place).
 - Two specimens, April 19, Râpa (the same place).

Erratic species, mentioned for the first time in the area.

- Calcarius lapponicus Linnaeus, 1758
 - Two male specimens, March 4, Gurbediu.

Species mentioned for the first time in the area. Probably passage species (northwards) or accidental in the area.

The **MAMMALIA** class

- Many traces of Capreolus capreolus Linnaeus, 1758, Mustela erminea Linnaeus, 1758, Sus scrofa Linnaeus 1758, Vulpes vulpes Linnaeus, 1758, Canis lupus Linnaeus, 1758, Felis silvestris Linnaeus, 1758, Cervus elaphus, Linnaeus, 1758, Lepus europaeus Pallas, 1764, Mustela nivalis Linnaeus, 1758, Lynx lynx, Linnaeus, 1758.
- One nest of *Sciurus vulgaris* Linnaeus, 1758, February 14, Râpa (forest).
- Many galleries of *Microtus arvalis* Pallas, 1764, *Oryctolagus cuniculus* Linnaeus, 1758, *Talpa europaea* Linnaeus, 1758.
- *Erinaceus europaeus* Linnaeus, 1758
 - Three specimens, Tinca
- Castor fiber Linnaeus, 1758
 - Five specimens, May 24, Râpa (Crişul Negru River).

Relatively recently species introduced in the Crişul Negru basin.

- Lutra lutra Linnaeus, 1758
 - One specimen who feed ducklings, April 24, Belfir, Crişul Negru River.
- Myocastor coypus Molina, 1782
- One specimen, probably escaped from a nursery, May 20, Belfir, Crişul Negru River.
- Myotis myotis Borkhausen, 1797
 - Many specimens observed at Tinca village.
- Rhinolophus ferrumequinum Schreber, 1774
 - One little colony (11 specimens), March 28, Gurbediu.
- Arvicola terrestris Linnaeus, 1758
 - One specimen, May 1, Valea Gurbediului

CONCLUSIONS

During February 1 – July 1, 2015, in Tinca area were recorded 120 species of vertebrates, belonging to three classes.

Some species are erratic in Europe; they are probably observed for the first time in the Romanian fauna: *Ceryle rudis*, *Pinicola enucleator*, *Luscinia calliope*. The species appeared here because of the climatic changes and Romania becomes a new country in Europe where they were certainly registered.

Other species are mentioned for the first time in the fauna of this area: Trichodroma muraria, Calcarius lapponicus, Loxia curvirostra, Lanius senator, Turdus torquatus, Anthus pratensis, Sturnus roseus, Anthus campestris, Hieraaetus pennatus, Castor fiber, Myocastor coypus.

There were identified some chromatic aberrant at some species of birds: *Passer domesticus*, *Parus palustris*, *Parus major*, *Anser erythropus*, *Ciconia nigra*.

The premature warming of the weather in winter leads to some phenological changes of the ornithofauna. For instance, *Merops apiaster* and *Jynx torquilla* were signaled two - two and half month earlier than normally; also, they become species of passage.

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