

NEW ZOOLOGICAL DATA FROM TINCA AREA (BIHOR COUNTY, ROMANIA) DURING JANUARY 1 - SEPTEMBER 1, 2016

AURELIAN LEONARDO ILIE

Theoretical High School "Nicolae Jiga", Republicii Street, no. 36/A, 417595, Tinca, Bihor, Romania,
e-mail: aurelian_ilie@yahoo.fr

ABSTRACT. In this paper some faunistical news, as well as ethological & fenological aspects of vertebrates and invertebrates fauna from Tinca area are presented (Bihor County, Romania) during January 1 - September 1, 2016.

Keywords: zoological data, fenological aspects, Tinca area.

REZUMAT. Noi date zoologice din zona Tinca (județul Bihor, România) în perioada 1 ianuarie - 1 septembrie, 2016. În această lucrare sunt prezentate unele noutăți faunistice, aspecte etologice și fenologice ale faunei de vertebrate și nevertebrate din zona Tinca (județul Bihor, România) în perioada 1 ianuarie - 1 septembrie, 2016.

Cuvinte cheie: date zoologice, aspecte fenologice, zona Tinca.

INTRODUCTION

Tinca area is situated in the south-western part of Bihor County, belonging to the historical province Crișana, 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, is Pannonic.

From the hydrographical point of view, the analyzed territory belongs to the inferior limit of the Crișul 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 Girișu Negru villages.

Notes about the vertebrates and invertebrates fauna from Tinca area were published by author in some books and scientific papers (Ilie, 2008, 2009; Ilie, 2013-2015).

MATERIALS AND METHODS

The observations were performed between January 1 and September 1, 2016, with binoculars 8x25 and 20x50 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; Ciochia, 1992; Cîrdei & Bulimar, 1965; Neacșu, 2006; Pârvu et al., 1985; Rákósy, 2013).

RESULTS AND DISCUSSIONS

In the analyzed period were identified the following species:

Subphylum Crustacea, Class Branchiopoda

- *Triops cancriformis* (Bosc, 1801) syn. *Apus cancriformis* Bosc, 1801:
 - One specimen living in a pool, Tinca forest, April 15, 2016. Species rarer in area, mentioned for the first time, length = 5 cm.

Class Arachnida, Infraorder Acari, Order Prostigmata

- *Aceria tristriata* (Nalepa, 1891):
 - Many galls on the lamina of walnut (*Juglans regia* Linnaeus, 1758), Tinca, May 26, 2016. The galls of this species are mentioned for the first time in the area and probably in Bihor County. This species is presented in Muntenia province (Neacșu, 2006).

Class Insecta

Order Odonata

- *Sympetrum fonscolombii* (Selys, 1840):
 - One female specimen, Tinca, August 13, 2016. Species mentioned for the first time in area. Migratory species, rare in Romania and Central Europe.

Order Hymenoptera

- *Apis mellifera* Linnaeus, 1758:
 - One specimen, Tinca, February 9, 2016, t = 15 °C;
 - One specimen, Tinca, February 17, 2016, t = 17 °C. The premature appearance of this species is determined by the raised temperatures (the flying period is March - October).

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Order Coleoptera

- *Meloe proscarabaeus* Linnaeus, 1758:
 - One male specimen, March 11, 2016, Tinca, t = 12 °C;
 - One female specimen, March 20, 2016, Tinca, t = 10 °C.
- *Lucanus cervus* (Linnaeus, 1758):
 - Many specimens inside of Tinca village during June 2016. Very common species in area.
- *Melolontha melolontha* (Linnaeus, 1758):
 - One male specimen, March 28, 2016, t = 20 °C. The raised temperatures were determined premature appearance of this species (the flying period is the end of April - June).
- *Oryctes nasicornis* (Linnaeus, 1758):
 - One male specimen, Tinca, June 21, 2016. Relatively rare species in area.
- *Mononychus punctumalbum* (Herbst, 1784):
 - One female specimen, Tinca, May 23, 2016. Species mentioned for the first time in area.

Order Lepidoptera

- *Carcharodus alceae* (Esper, 1780):
 - One male specimen, Râpa, May 29, 2016. Relatively common species in area.
- *Iphiclides podalirius* (Linnaeus, 1758):
 - One specimen, Râpa, March, 4, 2016, t = 10 °C. The flying period is during the second half of April - September (Rákossy, 2013).
- *Papilio machaon* Linnaeus, 1758:
 - One specimen, Belfir, March 13, 2016, t = 12.5 °C. The flying period is similar to preceding species.
- *Pieris rapae* (Linnaeus, 1758):
 - One specimen, Râpa, March 6, 2016, t = 12 °C. Similar situation to preceding species;
 - One female specimen, belonging to ab. *lucifer* Avinoff, Tinca, August 21, 2016. This chromatic aberrant has grey-blackish wings, very rare in Romanian fauna.
- *Vanessa atalanta* (Linnaeus, 1758):
 - One specimen, March 6, 2016, Râpa, t = 12 °C. Literature (Rákossy, 2013) mentioned the flying period during April - August, but the raised temperatures registered were determined premature appearance of this species.
- *Aglais io* (Linnaeus, 1758) syn. *Inachis io* Linnaeus, 1758:
 - Two specimens, Râpa, March 8, 2016, t = 12 °C.
- *Nymphalis xanthomelas* (Esper, 1781):
 - One specimen, Tinca, May 30, 2016. Migratory species, mentioned for the first time in area. Rare, protected species (Rákossy, 2013).

- *Nymphalis vau-album* Denis & Schiffermüller, 1775:
 - One specimen, Tinca, June 10, 2016. Species mentioned for the first time in area. Very rare, protected species (Rákosy, 2013).
- *Apatura ilia* (Denis & Schiffermüller, 1775):
 - Many specimens observed at Râpa during May 2016. Relatively common species in area.
- *Minois dryas* (Scopoli, 1763):
 - One male specimen, Tinca, August 9, 2016. Common species in area.

Class Aves

- *Ciconia nigra* Linnaeus, 1758:
 - Two specimens, Tinca, April 26, 2016. Rarer, protected species.
- *Anser anser* Linnaeus, 1758:
 - One specimen, Tinca, April 29, 2016. Relatively common species in area.
- *Aquila pomarina* Brehm, 1831:
 - One male specimen inside Tinca village, July 24, 2016. It is surprisingly, the species prefers the areas near the forests.
- *Accipiter gentilis* Linnaeus, 1758:
 - Brooding in a nest with four eggs, Tinca, March 7, 2016, $t = 11\text{ }^{\circ}\text{C}$. The relatively raised temperatures were determined premature brooding of this species. Generally, the brooding is from the end of March till the beginning of April (Ciochia, 1992).
- *Accipiter nisus* Linnaeus, 1758:
 - One male specimen who hunts swallows, Tinca, July 27, 2016. It is a surprising hunter because the scientific literature indicates like food the birds with more slow flight.
- *Falco tinnunculus* Linnaeus, 1758:
 - One female specimen, Tinca, August 17, 2016. Common species in area.
- *Apus melba* Linnaeus, 1758:
 - One flight with 30 specimens, Tinca, August 13, 2016. Rare species in area, summer visitor.
- *Lanius minor* Gmelin, 1788:
 - One pair, Râpa, May 29, 2016. Relatively common species in area.
- *Ficedula albicollis* Temminck, 1815:
 - Two male specimens, Tinca, June 13, 2016. Common species in area.
- *Ficedula hypoleuca* Pallas, 1764:
 - One male specimen, Tinca, May 7, 2016. Summer visitor, very rare species in Romania.
- *Coccothraustes coccothraustes* Linnaeus, 1758:
 - One specimen, Tinca, June 26, 2016. Common species in area.

CONCLUSIONS

During January 1 - September 1, 2016, in Tince area were observed 29 species of invertebrates and vertebrates, belonging to four classes.

Some species are mentioned for the first time in area: *Aceria tristriata*, *Sympetrum fonscolombii*, *Nymphalis xanthomelas*, *Nymphalis vau-album*, *Mononychus punctum-album*, *Apus cancriformis*.

The premature warming of the weather in winter leads to some phenological changes of the fauna. For instance: *Apis mellifera*, *Melolontha melolontha*, *Iphiclydes podalirius*, *Papilio machaon*, *Pieris rapae*, *Aglais io*, *Vanessa atalanta*, and the brooding of *Accipiter gentilis* were signalled more earlier than normally.

The number of butterfly species identified in Tince area becomes in this way 102 (Ilie, 2013).

Some species are rare or rarer in the area: *Sympetrum fonscolombii*, *Oryctes nasicornis*, *Nymphalis xanthomelas*, *Nymphalis vau-album*, *Apus cancriformis*, *Apus melba* and *Ciconia nigra*.

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