

ACCIDENTAL OR PASSAGE BIRD SPECIES (VERTEBRATA: AVES) IN ROMANIAN FAUNA, OBSERVED IN BIHOR COUNTY (NORTH WESTERN PART OF ROMANIA) DURING 2014-2020

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Abstract

The paper presents the researches about the accidental or passage bird species in Romanian fauna, observed in Bihor county in the period 2014 – 2020. Were observed 40 bird species, belonging to 9 orders and 33 genera. 23 bird species were mentioned for the first time in Romanian fauna. From the point of zoogeographic spread, the following categories of species were identified: North American, Mediterranean, Arctic, Siberian, Asian, North and South European species. These migrations are also heavily influenced by recent climate changes. If these climate changes will intensify, these migrations will be observed in as many bird species as possible from areas very far from Romania.

Key words: accidental species, Bihor county, Romania

INTRODUCTION

The Bihor county is located in Crișana region, in the north – western part of Romania. It presents a varied landscape, including Crișurilor Plain, Crișurilor hills and a mountainous area, with the highest elevation of the county (Cucurbăta Mare peak – 1848 m), the climate is temperate – continental moderate. The drainage is represented by Crișul Negru, Crișul Repede Barcăul, Ier rivers and their tributaries, different lakes. The climat influence and the landscape variety determined the presence of numerous vegetal and animal species, some of these considered endemic and others representing rarities at national level.

Data about the accidental bird species in Bihor county were published by author (Ilie, 2014 a; 2014 b; 2016 a; 2016 b; 2017 a; 2017 b; 2018 a; 2018 b; 2018 c; 2019). This paper is a synthesis of the observations about the accidental bird species performed by the authors in Bihor county in the period 2014 – 2020.

MATERIAL AND METHOD

The bird species were observed with the help of the binoculars 20 x 50 and 8 x 25, completed with direct observations. For the determination of the species different guides were used (S.O.R. Hamlyn guide, 1999; S.O.R.,

2017) and for the validation of the existence in Romania or in its vicinity, the following electronic sources were consulted: wikipedia.org, ornitodata, rombird.ro, IUCN Red List for Threatened Species, rarebirds.hu.

RESULTS AND DISCUSSION

In the period 2014 – 2020 there were identified the following accidental bird species:

Order Suliformes

- *Phalacrocorax aristotelis* Linnaeus, 1761 – three specimens, Oradea, Crişul Repede river, April 1, 2019. This is the first mention of this species in the western part of Romania, the species being mentioned only in Dobroudja. According to IUCN Red List of Threatened Species, this species was mentioned in Poland, Austria, Serbia, Slovakia, being vagrant in these countries. Probably passage species in Bihor county. The species can be found along the rocky coasts of seas and oceans.

Order Anseriformes

- *Branta bernicla* Linnaeus, 1758 – four specimens, Boiu, December 19, 2019. This is the second mention in the western part of Romania, according to rarebirds.hu the species being found in 1906 at Făgăraş (Braşov county). According to rombird.ro this species was found in Romania in Tulcea, Brăila and Buzău counties. North American, North European and Siberian species.

- *Branta canadensis* Linnaeus, 1758 – three specimens, Râpa (Rogoaze lake), February 16, 2019; one specimen, Cheşa, May 4, 2019. North American species, vagrant in Europe during the cold season.

- *Anser brachyrhynchus* Baillon, 1834 – two specimens, Râpa (Rogoaze lake), February 15, 2019. This is the second mention in Romania, the first mention being in Giulvăz, Timiş county, 1931 (according to rarebirds.hu). Accidental species in Romania, migratory species from northern Europe.

Order Falconiformes

- *Falco rusticolus* Linnaeus, 1758 – two specimens, Cheşa, November 27, 2017 (the first mention in Romania); one specimen, Tinca, December 18, 2017; one specimen, Tinca, January 16, 2018 (probably the same specimen). Very rare, accidental species in Romania, arrives from northern Europe, vagrant in Austria, Ukraine, Poland, Czech Republic (according to IUCN Red List for Threatened Species). The species was observed in Austria, near the border with Hungary, in 1994 (according to rarebirds.hu). The plumage is variable, being white, silver, black, rarely brown (according to wikipedia.org).

Order Galliformes

- *Alectoris rufa* Linnaeus, 1758 – one specimen, probably escaped from captivity, Belfir, May 14, 2019. South – west European species, it was introduced in different parts of Europe for hunting or beauty purposes, existing in captivity.

Order Coraciiformes

- *Ceryle rudis* Linnaeus, 1758 - two specimens, one flying, the other fishing, Râpa, (Pusta Valley), June 8, 2015 (the first mention in Romania); one specimen, Tinca, Crișul Negru river, September 2, 2016. Erratic species, coming from Asia and North Africa to east or south – eastern part of Europe. In Europe, it is vagrant in France, Greece, Poland, Ukraine (according to IUCN Red List of Threatened Species).

Order Charadriiformes

- *Stercorarius pomarinus* Temminck, 1815 – one specimen, Cheșa, November 21, 2017. Rare, passage species in Romania, Arctic species.

- *Charadrius mongolus* Pallas, 1776 – one specimen, Tinca, near Crișul Negru river, January 18, 2017; one male specimen, Râpa, May 18, 2019. Accidental species in Romania, East and Central Asian species, strongly migratory, vagrant in Europe during the cold season.

- *Limnodromus scolopaceus* Say, 1823 – one specimen, Tinca, near Crișul Negru river, January 14, 2017 (the first mention in Romania). North American species, accidental species in Romania. According to rarebirds.hu, in Hungary 25 observations were recorded in the period 1995 – 2019, most of them in the Hajdu – Bihar area, near the border with Romania.

- *Limnodromus griseus* Gmelin, 1780 – one specimen, Tinca, near Crișul Negru river, January 12, 2017. Very rare, accidental species in Romania from North America.

- *Ichtyaetus audouini* Payraudeau, 1826 – one specimen, Râpa, Crișul Negru river, November 12, 2017. Mediterranean species, mentioned for the first time in Romania.

- *Charadrius vociferus* Linnaeus, 1758 – two specimens, Tinca, near Crișul Negru river, September 8, 2017. American species, accidental in Romania, vagrant.

- *Charadrius asiaticus* Linnaeus, 1758 – one specimen, Râpa, near Crișul Negru river, October 1, 2017 (the first mention in Romania). Erratic, Asian species, vagrant in Romania (according to IUCN Red List of Threatened Species).

- *Tringa melanoleuca* Gmelin, 1789 – one specimen, Belfir, May 20, 2019. Species mentioned for the first time in Romania, North American species, vagrant in Europe.

- *Pagophila eburnea* Phipps, 1774 – one specimen, Tinca, Crișul Negru river, January 26, 2020 (the first mention in Romania); one specimen,

Tinca, March 29, 2020. Arctic species. According to IUCN Red List for Threatened Species, this species is vagrant in Czechia, Poland, Russian Federation, western and northern Europe.

Order Columbiformes

- *Streptopelia orientalis* Latham, 1790 – one specimen, Râpa, March 22, 2019. Asian species, some specimens migrate in Europe in autumn, winter and spring.

Order Strigiformes

- *Bubo scandiacus* Linnaeus, 1758 - one specimen, the edge of Tinca forest, December 14, 2014 (the first mention in Romania); one specimen, Tinca, January 27, 2016; one specimen, Tinca, March 20, 2016; one specimen, Râpa, November 14, 2016; one specimen, Tinca, December 14, 2016 (probably the same specimen); one specimen, Belfir, January 10, 2019. Arctic species, during the winter, many specimens migrates to southern regions. According to rarebirds.hu, six specimens were observed in Hungary and Slovakia, during 1891 – 2015.

Order Passeriformes

- *Cyanistes cyanus* Pallas, 1770 – three specimens, Tinca, November 12, 2016; one specimen, Tinca, December 17 and 20, 2016; one specimen, Tinca, January 14, 2017 (probably the same specimen); one specimen, Belfir, April 7 and May 29, 2019 (probably the same specimen). Accidental species in Romania, observed in autumn, winter and rarely in spring. Russian, Central and North – western Asian species.

- *Calliope calliope* Pallas, 1776 – one female specimen, Belfir, February 27, 2015 (the first mention in Romania); one male specimen, Tinca, January 12, 2017. Siberian species, it is an extremely rare vagrant to Europe during the cold season.

- *Pinicola enucleator* Linnaeus, 1758 – two female specimens, Belfir, February 14 (the first mention in Romania) and 17, 2015; two female specimens, Tinca, November 17, 2016; one male specimen, Cheşa, November 4, 2017; one female specimen, Tinca spa, March 4, 2018. Erratic species in Romania, coming from northern Europe and Siberia. It is vagrant in Hungary, Serbia, Ukraine (according to the IUCN Red List of Threatened Species). According to rarebirds.hu four observations were recorded in Hungary and Slovakia in the period 1928 – 1985.

- *Zoothera aurea* Holandre, 1825 – one specimen, Tinca, May 16, 2018 (the first mention in Romania). Accidental species in Europe, probably it was in passage to his breeding place from Siberia (at the end of May).

- *Tarsiger cyanurus* Pallas, 1773 – two male specimens, Gurbediu, December 12, 2014 (the first mention in Romania); two male specimens, Tinca, March 2, 2016; one male specimen, the edge of Râpa forest, April 11, 2016; two male specimens, Râpa, November 27, 2016; one male

specimen, Tinca, October 3, 2017; one female specimen, Râpa, January 25, 2019; one male specimen, Râpa (the pine forest), February 5, 2019. Relatively rare species in Romania, vagrant species from northern Europe and Asia.

- *Poecile cinctus* Boddaert, 1783 – two specimens, the edge of Tinca forest, November 24, 2014 (the first mention in Romania); five specimens, the edge of Râpa forest, January 12, 2019 also together with other tit species. North American, North European and Siberian species, very rare in Romania during the cold season.

- *Turdus migratorius* Linnaeus, 1766 – one specimen, Râpa, May 28, 2017 (the first mention in Romania); one specimen, Cheşa, March 4, 2018; one specimen, Felix spa forest, August 27, 2018. This species is coming from North American territory, being vagrant in Europe in autumn and winter.

- *Oenanthe leucura* Gmelin, 1789 – one male specimen, Tinca, March – May, 2017 (the first mention in Romania); one male specimen, Cheşa, November 18, 2017; one male specimen, Râpa, near the limestone quarry, March 18 and April 25, 2019 (same place, probably the same specimen); one male specimen, Belfir, May 11, 2019. Erratic species, coming from southern Europe and North Africa, it is vagrant in Bulgaria, Serbia (according to IUCN Red List of Threatened Species).

- *Montefringilla nivalis* Linnaeus, 1766 – one male specimen, Tinca, June 14, 2017 (the first mention in Romania); two male specimens, Cheşa, November 25, 2017. Erratic species, coming from South Europe and Asia Minor, it is vagrant in Hungary, Serbia, Ukraine, Slovakia, in mountain areas, there is a few data about his presence at reduced altitudes (according to the IUCN Red List of Threatened Species). According to rarebirds.hu, the last date of this species in Hungary is November 1, 2017.

- *Loxia leucoptera* Gmelin, 1789 – one male specimen, Cheşa, August 28, 2017 (the first mention in Romania); one male specimen, Cheşa, March 18, 2018. North- East European and Siberian species, erratic species in Romania.

- *Passerella iliaca* Merrem, 1786 – one specimen, Cheşa, October 3, 2017 (the first mention in Romania); one specimen, Belfir, May 28, 2019. North American species, it is vagrant in Italy, Germany, Russian Federation (according to IUCN Red List of Threatened species).

- *Alaudala rufescens* Vieillot, 1819 – one specimen, hit by a car, Râpa, September 15, 2017. Accidental species from South Europe.

- *Turdus eunomus* Temminck, 1820 – one specimen, Tinca, April 16, 2017 (the first mention in Romania). Siberian species, it is rare vagrant to Europe in the cold season.

- *Phylloscopus trochiloides* Sundevall, 1837 – one specimen, Tinca, April 7, 2017; one specimen, Râpa, March 30, 2019; one specimen, Tinca,

September 8, 2019. Accidental or passage species in Romania. Asian species, is strongly migratory, some specimens are vagrant in Central Europe.

- *Lanius isabellinus* Hemprich & Ehrenberg, 1833 – one specimen, Tinca, August 12, 2018, Orthodox cemetery; two specimens with winter plumage, Tinca, March 9, 2019. Accidental species in Romania. According to S.O.R. guide (2017), this species arrives from Asia in Europe in autumn, but according to rarebirds.hu the species was identified in May 1997 in Austria, near the border with Hungary.

- *Phylloscopus proregulus* Pallas, 1811 – one specimen, Râpa forest, November 20, 2019. Accidental species in Romania. Siberian species, migratory, some specimens have been found in Europe in autumn or in winter.

- *Emberiza leucocephalos* Gmelin, 1771 – one male specimen, one male specimen, Belfir, May 5, 2019; two female specimens, Miersig forest, January 23, 2020. Erratic species in Romania. According to IUCN Red List for Threatened Species this species is vagrant in Bulgaria, Serbia, Ukraine and other countries of Europe.

- *Emberiza aureola* Pallas, 1773 – one male specimen, Râpa, May 20, 2019 (the first mention in Romania); one male specimen, Râpa, January 20, 2020. North European and Asian species, migratory.

- *Setophaga americana* Linnaeus, 1758 – one specimen, Râpa, September 3, 2018. Species mentioned for the first time in Romania. Accidental, North American species, according to IUCN Red List for Threatened Species, this species is vagrant in western Europe.

- *Junco hyemalis* Linnaeus, 1758 – one specimen, Râpa, January 25, 2020. Species mentioned for the first time in Romania. North American species, migratory. According to IUCN Red List of Threatened Species, this species is vagrant in western Europe, Poland, Russian Federation.

- *Pheucticus ludovicianus* Linnaeus, 1766 – one male specimen, Tinca, March 5, 2020. Species mentioned for the first time in Romania. North American species, vagrant to western Europe.

- *Saxicola maurus* Pallas, 1773 – one male specimen, Girişu Negru, April 17, 2020. Accidental species in Romania, Asian species, vagrant in Europe in the cold season.

There were identified 40 bird species belonging to 9 orders and 33 genera, 23 bird species were mentioned for the first time in Romanian fauna: *Falco rusticolus* L., *Ceryle rudis* L., *Charadrius asiaticus* L., *Limnodromus scolopaceus* Say, *Tringa melanoleuca* Gmel., *Pagophila eburnea* Ph., *Bubo scandiacus* L., *Calliope calliope* Pall., *Pinicola enucleator* L., *Zoothera aurea* Hol., *Tarsiger cyanurus* Pall., *Poecile cinctus* Bodd., *Turdus migratorius* L., *Oenanthe leucura* Gmel., *Montefringilla*

nivalis L., *Loxia leucoptera* Gmel., *Passerella iliaca* Mer., *Turdus eunomus* Temm., *Setophaga americana* L., *Junco hyemalis* L., *Pheucticus ludovicianus* L., *Ichtyaetus audouini* Payr., *Emberiza aureola* Pall.

From the point of zoogeographic spread were identified different categories of species: North American, Siberian, Mediterranean, North and South European, Arctic, Asian.

CONCLUSIONS

In the period 2014 – 2020, in Bihor county were identified 40 accidental or passage bird species belonging to 9 orders and 33 generations, 23 species being mentioned for the first time in Romanian fauna. These bird species are different from the point of zoogeographic spread.

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