WOODCOCK (*SCOLOPAX RUSTICOLA* L.) DIVERSITY OF WING SAMPLE COLORS AND PATTERNS IN 2013 IN HUNGARY

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Abstract

Our results are based on the plumage pattern and colour characteristics of woodcock wing samples (n=1825), obtained during their migration through Hungary in spring 2013. We concluded, that the normal coloured birds were dominant (80.7%), followed by the flavistic colour type (13.0%). The remaining smaller proportion consists of the commonly designated melanistic, darker colour type (6.3%).
Keywords: woodcock, colour, pattern, flavistic, melanistic, normal colour.

Introduction

The European Union's Birds Directive within the legislation of Hungarian hunting 2008 brought significant changes to woodcock hunting and scientific research in Hungary. Even though the birds remained huntable there was no possibility to hunt any of them because no season was established on them in the 2009 season. Therefore, with the coordination of the Hungarian Hunters' National Association, the Woodcock Monitoring Program was launched in 2009. The Institute of Wildlife Management and Vertebrate Zoology in the Faculty of Forestry at the University of Sopron have joined the program with a biometric module. Where researches are in progress with the woodcocks since 1983 and the Hungarian Woodcock Monitoring published their result from 1995. The research, that started in 2010 – biometric, age, sex, migrations – offered a unique possibility to study the differences in colour and pattern in a huge amount of birds.

Material and method

Data providers in 2013 –as in previous years- have sent at least 40% of the wings from the birds hunted in the spring sampling to the Institute of Wildlife Management and Vertebrate Zoology. These wing-samples were good for diagnose the ages in first hand, but they also gave a good possibility to study the colours and patterns. Every wing was photographed in constant light conditions and were sorted by years and counties, as in previous years. Experts from France, who have a greater experience in sampling, separated 4 different colours; dark, brown; agate and Isabella, smaller categories divide it more specific (for example in black, grey; red and sprouts black). In connection with the normal coloured birds we made more differences like black pastel, agate pastel, red pastel or izabella pastel. Apart from the classic colour versions we could find pigment deficient pieces, this version is a considered a curiosum even in the countries that have a big bag such as France were this type is well published (Boidot 2002a; 2004; 2006; 2009a; 2009b; 2010a, b; 2013).

According to pigment deficiency three categories are in use as follows I. less than 10% white feathers of all ferathers; II. 10-50% white feathers; III. 50-95% white feathers (Boidot 2012b).

Results

For the Hungarian samples we use a more simple sorting method than the French one. We sorted our samples in normal (classic wild coloured) (1. figure), flavistic (bright, pastel shades) (2. figure) and the melanistic (dark, more pigmented) (3. figure) types.

Figure 1. Normal (wild) coloured wing

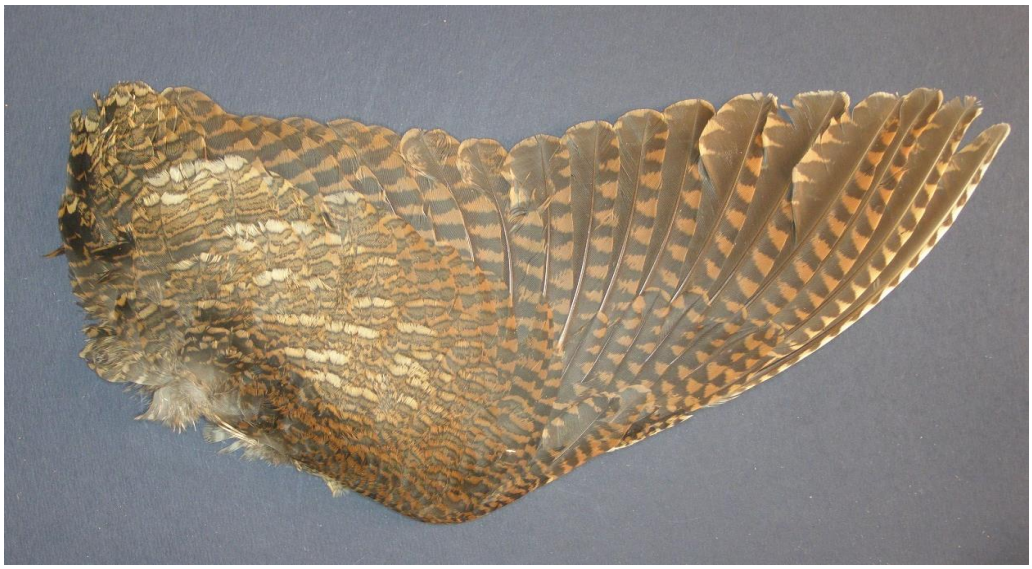

Figure 2. Bright, pastel shaded (flavistic) wing

Figure 3. Dark, more pigmented (melanistic) wing

Pigment deficient bird was not registered in the 1825 wing sample that we examined in 2013. Over the years of our examination we only found two birds whit pigment deficited feathers. In the samples, collected in 2012, we found one bird that was white on the first of primary wing feather (László et al. 2013). We found only one bird with white secondary coverts and only one feather had no pattern on its vane in the woodcocks collected in 2011 (Bende – László 2017b).

We published our results of the differencis between the wing patterns on woodcocks collected in Hungary in the spring of 2013, by the same methods that were already published in 2010, 2011, 2012 years. This year, fitting the last year's methodology, we sorted the wings in three categories (melanistic, normal (wild) coloured, flavistic) (4. figure) (László et al. 2013; Bende – László 2017a, b).

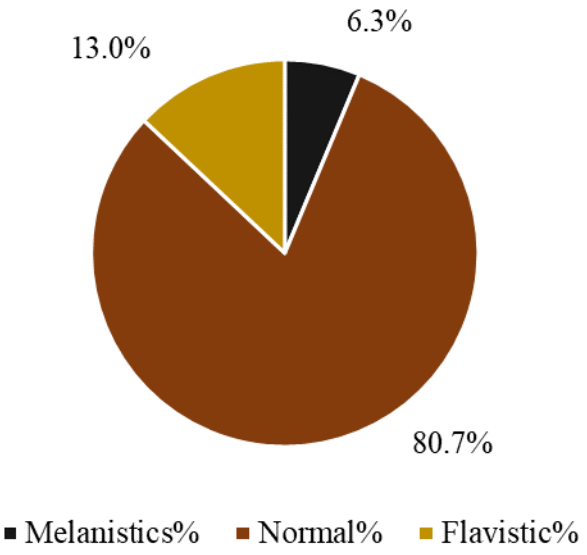

Figure 4. Sorting of Woodcocks (Scolopax rusticola L.) by colour and pattern in 2013 in Hungary

We concluded that the normal coloured birds are the most dominant (80.7%) ones, followed by the flavistic (13.0%) and the remaining ones are the melanistics (6.3%) in Hungary.

Résumé

In the Hungarian Woodcock Monitoring Program we examined wings by their colour and pattern sent into the Institute of Wildlife Management and Vertebrate Zoology in 2013. Estimating the 1825 sample the normal coloured birds are the most dominant (80.7%) ones, followed by the flavistic (13.0%) and the remaining ones are the melanistics (6.3%) in Hungary. The results from 2013 are nearly the same as the ones already published in 2010, 2011 and 2012.

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Bibliography

1. Bende. A. – László, R. (2017a): Az erdei szalonka (*Scolopax rusticola* L.) szárnyminták szín és mintázatbeli változatossága 2010-ben Magyarországon. In: MESTERHÁZY B. (szerk.) Eötvös Lóránd Tudományegyetem XVI. Természet-, Műszaki és Gazdaságtudományok alkalmazása Nemzetközi Konferencia Absztraktkötet. Konferencia helye, ideje: Szombathely, Magyarország, 2017.05.20. Szombathely: ELTE, 2017. p. 23.
2. Bende. A. – László, R. (2017b): Erdei szalonka *(Scolopax rusticola L.)* színváltozatok előfordulása 2011-ben Magyarországon. In: BIDLÓ A, FACSKÓ F (szerk.) Soproni Egyetem Erdőmérnöki Kar VI. Kari Tudományos Konferencia Absztraktkötet. Konferencia helye, ideje: Sopron, Magyarország, 2017.10.24. Sopron: Soproni Egyetem Kiadó, 2017. p. 38.
3. Boidot, J-P. (2002a): Un nouveau plumage inhabituel et exceptionnel chez la bécasse des bois. La MORDOREE, No 223. pp. 190-193.
4. Boidot, J-P. (2004): Curiosités. La MORDOREE, No, 231. pp. 178.
5. Boidot, J-P. (2006): Bécasse a panachure balanche limitée. La MORDOREE, No, 238. pp. 96.
6. Boidot, J-P. (2009a): Curiosités. La MORDOREE, No, 249. pp. 25-25.
7. Boidot, J-P. (2009b): Curiosités. La MORDOREE, No, 251. pp. 213-218.
8. Boidot, J-P. (2010a): Bécasse des bois à plumage inhabituel. La MORDOREE, No, 255. pp. 221-226.
9. Boidot, J-P. (2010b): Différentes observations de bécasses des bois à panachure blanche limitée. La MORDOREE, No, 255. pp. 219-221.
10. Boidot, J-P. (2012a): Bécasse des bois à plumage inhabituel. La MORDOREE, No. 261. pp. 29-38.
11. Boidot, J-P. (2012b): Curiosités. La MORDOREE, No. 264. pp. 65-66.
12. Boidot, J-P. (2013): Curiosités. La MORDOREE, No. 266. pp. 40.
13. László R., Bende A., Faragó S. (2014): Szín és mintázatbeli eltérések a magyarországi erdei szalonka szárnyminták között. In: BIDLÓ A., HORVÁTH A., SZŰCS P. (szerk.) IV. Kari Tudományos Konferencia: Konferencia kiadvány. 407 p. Konferencia helye, ideje: Sopron, Magyarország, 2013.12.10. Sopron: Nyugat-magyarországi Egyetem Erdőmérnöki Kar, 2014. pp. 265-268.