Molecular sexing of Eurasian Woodcock *Scolopax rusticola*

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Molecular techniques have already been used for several years for sex determination in birds. The procedure described by Griffiths *et al.* (1998) enables researchers to sex most species. In this, identification is based on an analysis of the CHD gene, situated in the avian sex chromosomes. Z and W chromosomes contain different forms of the gene; hence, females are heterogeneous for it. However, there could be species-specific limitations in the analysis. We checked whether the method can be used for sex identification in the Eurasian Woodcock *Scolopax rusticola*.

Blood samples were taken from 34 birds and stored in 70% alcohol. Blood-sampling took place in September and October 2000, in Jõgeva County, Estonia.

We amplified an intron of the CHD gene from blood samples of four Woodcock individuals, using the standard polymerase chain reaction. Products showed no detectable length differences in 3% agarose gel but after sequencing the products, two individuals appeared to be heterogeneous, i.e. they were females. Comparison of sequences from males and females showed that only W forms of the CHD gene contain a BshNI restriction enzyme cleavage site. After restriction with BshNI it was easy to detect three DNA bands in females and only one band in males using simple 2% agarose gel electrophoresis. After preliminary analysis, we repeated restriction analysis successfully in 30 individuals, whereas sequencing verified the results of restrictions. Alternatively, we used the restriction enzyme Kpn2I and got similar results.

In conclusion, it is easy to sex Woodcocks using the robust and simple CHD gene analysis with BshNI or Kpn2I restrictases.

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Griffiths, R., Double, M.C., Orr, K. & Dawson, R.J.G. 1998. A DNA test to sex most birds. *Molecular Ecology* 7: 1071–1075.

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Common Sandpiper *Actitis hypoleucos* attempting to evade capture by swimming underwater

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Clive Minton's note (Minton 2001) about waders swimming underwater, apparently to evade capture, prompts me to describe a relevant experience.

For several years in the early 1980s, several of us stayed near Dumfries, southern Scotland, for a few days in April and May whilst cannon-netting spring passage waders with the North Solway Ringing Group at Waterfoot, Annan. For a pre-breakfast activity we set a mist-net across the local stream resulting, in the first couple of years, in the capture of several Dippers *Cinclus cinclus* and a Kingfisher *Alcedo atthis*. In the third year, I was very surprised to catch two adult Common Sandpipers. After extracting the second one, and whilst trying to put it into a bird-bag as I was still standing in mid-stream, I am ashamed to recount that I dropped the bird. It then swam vigorously underwater, using its wings to propel it, like a Guillemot *Uria aalge*, and headed off downstream with me in hot pursuit. It was not easy for me to keep up with the bird because the water depth was about 0.6 m (between knee-height and the top of my waders) and the riverbed consisted mostly of slippery stones. Eventually, after pursuing it for 10–15 m, I managed to catch it by hand while it was still underwater. It had swum underwater for all of that distance, apparently with ease. I cannot recall whether the bird felt dry or wet, but it was certainly not waterlogged and, after ringing, flew off normally.

I note that several of the replies to Clive Minton's note, and other references cited, refer to Common or Spotted Sandpipers *A. macularia*, so perhaps the habit is particularly common in these species.

Minton, C. 2001. Waders diving and swimming underwater as a means of escape. *Wader Study Group Bull.* 96: 86.