

SBRC position on Scottish Crossbill

M. LEWIS & C.J. MCINERNY

Since 2012 the Scottish Birds Records Committee (SBRC) has assessed records of Scottish Crossbill from Scottish regions that do not hold part of this species' core breeding range (ap Rheinallt *et al.* 2011). Acceptance was reliant on provision of recordings or sonograms of a 'type C' excitement call, which was considered to be unique to Scottish Crossbill (Summers *et al.* 2007, Summers 2020), with the SBRC acceptance criteria published on the SOC website: <https://www.the-soc.org.uk/content/bird-recording/sbrc/identification-of-scottish-and-parrot-crossbills>

However, recent research has shown that identification based on the 'type C' call can no longer be regarded as a reliable way to separate Scottish Crossbill from Common Crossbill.

Analysis published by Martin *et al.* (2019), which classified calls of European Crossbill species into over 20 different call types, suggests that the 'type C' call can no longer be considered to be unique

to Scottish Crossbill. During extensive recording sessions in the core range of Scottish Crossbill between 2014 and 2016, no recordings of 'type C' excitement calls were obtained from Scotland. However, extremely similar calls were widespread, if uncommon, across mainland Europe (called 'N2' under the recent classification) (Figure 1). Other calls ('N15') were also considered very similar to excitement call 'type C' and although again uncommon, were recorded from various parts of the UK and northwestern Europe.

However, the same study discovered a new call type that was apparently almost exclusively recorded in Scotland (classified as 'N20'), which is clearly different to the 'type C' excitement call (Figure 2).

It is possible that the 'N20' call refers to Scottish Crossbill for several reasons. First, the geographical spread of recordings is similar to the known range of Scottish Crossbill (Martin *et al.* 2019).

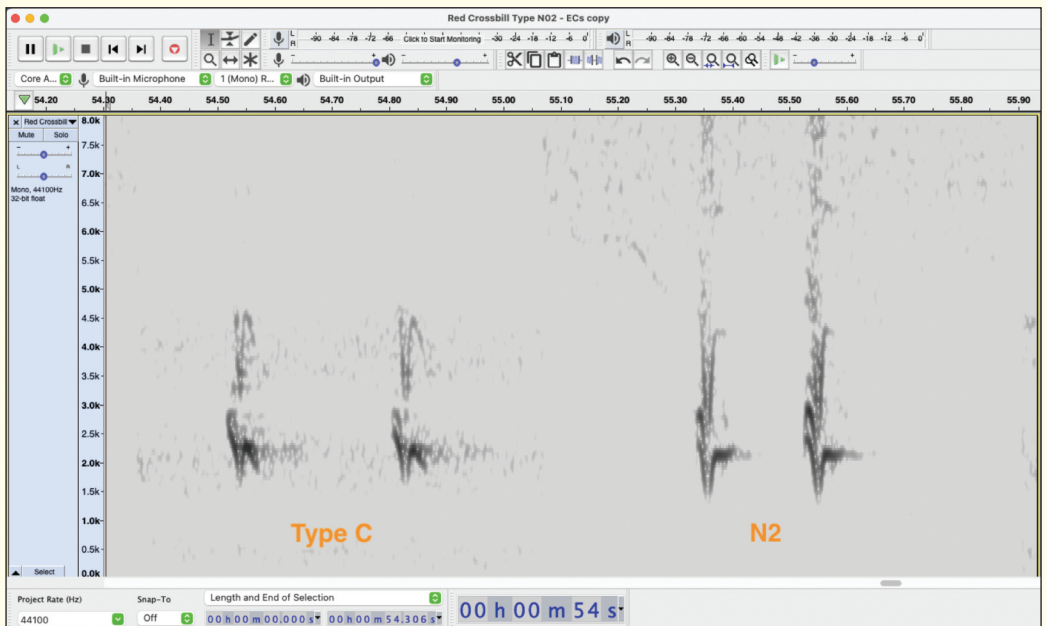


Figure 1. Sonogram showing similarities between Scottish Crossbill 'type C' and 'N2' crossbill calls. The former was recorded in Scotland in the breeding range for Scottish Crossbill, while the latter was recorded across mainland Europe.

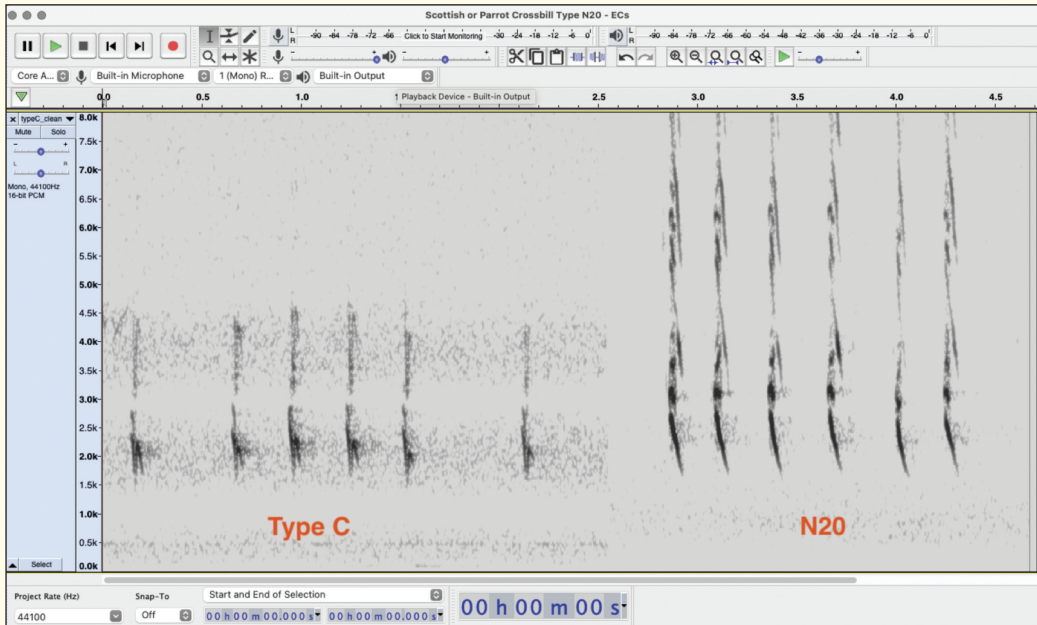


Figure 2. Sonogram showing differences between Scottish Crossbill ‘type C’ and ‘N20’ crossbill calls. Note that a different scale on the x axis (time) is used from Figure 1. Both were recorded in Scotland in the breeding range for Scottish Crossbill.

Second, the calls form part of a ‘fluent temporal transition from ‘type C’ from the year 2000 to type ‘N20’ in the present day’ (R. Martin pers. comm.). Finally, birds giving this call appeared to have intermediate sized bills between Parrot Crossbill and Common Crossbill, at least in the field, suggesting Scottish Crossbill. However, it is important to emphasise that there is reason to be cautious about assigning type ‘N20’ calls to Scottish Crossbill at present. This is primarily due to the fact that the call has not yet been recorded from any individuals with known bill measurements that are consistent with the birds being Scottish Crossbill.

Because of this current uncertainty, SBRC is no longer aware of any plumage, biometric, vocal or genetic criteria that can be used to identify Scottish Crossbill with confidence. As a result, SBRC will no longer consider any records of the species. Collecting full bill biometrics and recordings of calls from trapped birds might help define which calls are being used by Scottish Crossbills at this time.

When the situation is clarified about the identification of this endemic Scottish species, SBRC will update SOC members through *Scottish Birds*.

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References

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Mark Lewis, SBRC Chair.

Email: birdingofficer@the-soc.org.uk

Christopher J. McInerny, SBRC Secretary.

Email: Chris.McInerny@glasgow.ac.uk