

Subalpine Warblers on Fair Isle

The IOC announced on 6th May 2020 that it was splitting Subalpine Warbler into two species: Eastern Subalpine Warbler *Sylvia cantillans* (comprising subspecies *cantillans* and *albistriata*) and the monotypic Western Subalpine Warbler *S. iberiae*, following Zuccon *et al.* (2020). Moltoni's Warbler *S. subalpina* had already been split from the Subalpine Warbler complex in 2014. More details on the split can be found at: www.birdguides.com/articles/genetics-confirm-subalpine-warbler-complex-as-three-species/.

'Subalpine Warbler' is a scarce migrant to Fair Isle, with 101 records to the end of 2019, and has been recorded annually on the Isle since 2000. Moltoni's Warbler is a vagrant, with two Fair Isle records to date: 16th-27th May 2014 and 15th-25th May 2015.

Although it has long been recognised that there are different populations within 'Subalpine Warbler', the exact relationship between them, and the identification criteria required to separate them, have only fairly recently been clarified, with tail pattern, underpart coloration of males and calls all important factors, whilst biometrics may also be helpful. Current criteria suggest that Eastern Subalpine Warbler should be identifiable in the field, although not to subspecies (Svensson 2013, Stoddart 2014). Males have a distinctive underpart coloration and pattern and females require precise recording of the tail pattern; although there have recently been some questions as to whether this is as reliable a character as previously thought (Illa *et al.* 2019). Males of Western Subalpine Warbler and Moltoni's Warbler also each show distinctive underpart coloration, but females of these species are probably indistinguishable in the field from each other (and even in the hand), as they share a similar tail pattern. All three species can be distinguished on call, with Moltoni's sounding the most distinctive, although on Fair Isle at least, they are often stubbornly silent.

In recent years, the use of DNA analysis by Professor Martin Collinson and his team at Aberdeen University has also proved a useful tool, being able to confirm impressions of birds in the hand or, occasionally, correct mistakes made in the identification. The use of DNA also gives unequivocal proof of the identification, and there have been eleven birds for which this has been applied since 2012; five Western Subalpine (originally published as '*iberiae/inornata*' the latter taxon is now considered invalid and so these are now known to be *S. iberiae*), four Eastern Subalpine (three *S. c. albistriata* and one *S. c. cantillans*) and two Moltoni's. DNA analysis was also carried out on a bird shot on Fair Isle in 1908, which is stored in the National Museums Scotland, and this was also confirmed as *S. c. albistriata* (Collinson *et al.* 2014). Feathers from one male Western Subalpine Warbler failed to yield a useable DNA sample, whilst two samples from birds (one Western Subalpine and one Western Subalpine or Moltoni's) were unfortunately lost in the postal system.

The DNA analysis have provided some especially interesting results. In particular, the female Moltoni's Warbler in 2014 was only identified thanks to the DNA analysis, whilst the Eastern Subalpine Warbler of the subspecies *S. c. cantillans* was the first of this subspecies to be identified in the UK (BOU 2017).

As with several recent taxonomic decisions, the splitting of the 'Subalpine Warbler' complex has left many of the old records in limbo, with not enough detail contained in the original descriptions to narrow down the record to one of the three current species. Although the BBRC seem likely to review old records of the group, it is likely that many of Fair Isle's 'Subalpine Warblers' will remain in an 'either/or' category. It was hoped that the original written descriptions for some of the older

records may have revealed details that enabled the birds to be accepted to species level and so those that existed were purchased from the BBRC in 2018. Unfortunately, the descriptions were lost in the Obs fire in March 2019 and, with no backups, that option is no longer possible.

Several of the older Fair Isle records were published in FIBO Annual Reports as belonging to either the 'eastern' or 'western' subspecies, although they were usually published in BBRC reports without confirmation of this, or with the caveat that the bird was 'probably showing characteristics of' a particular subspecies. It is likely that many of these older records will not be acceptable to species level unless there is evidence of why they were originally thought to belong to one or other of the eastern or western group. Most older records are now likely to be acceptable as only belong to the 'Eastern Subalpine/Western Subalpine/Moltoni's Warbler group'. It is also worth bearing in mind the changing taxonomy over the years when looking at old records, with '*cantillans*' previously referring to 'western' birds and '*albistriata*' referring to any 'eastern' birds.

The following table gives a list of all Fair Isle 'Subalpine Warbler' records up to the end of 2019 (although not the two Moltoni's Warblers). It includes notes on what the birds were identified as at the time (usually taken from the FIBO Annual Report for that year) and what they were published as by the relevant committee. Until the end of 2005, all 'Subalpine Warblers' were assessed by BBRC. From 2006 to 2014, only 'eastern' birds were assessed by BBRC, with 'western' and unidentified birds going onto the Scottish Birds Records Committee (SBRC) list, although Fair Isle records were assessed by the Shetland Bird Club Records Committee (SBCRC). From 2015, the BBRC again assessed 'western' birds (along with those that were in the 'western/Moltoni's' group), with SBCRC continuing to assess only birds that could not be assigned to either group. From 2019, this somewhat messy situation was cleared up by the BBRC again assessing all 'Subalpine Warbler' records, irrespective of whether they were identified to subspecific level or not.

The table shows that, whilst Western is perhaps the slightly commoner of the two species occurring on the Isle, the actual numbers accepted are: Eastern Subalpine Warbler 10 (plus another five 'probably showing characteristics' of this species and Western Subalpine Warbler 11 (including one accepted by the BOU in 1971, although not published by BBRC as Western), plus another four accepted as Western or Moltoni's Warbler.

We would like to ask anyone with field notes or photos that include any of the main identification features for birds not shown as accepted to species level, to get in touch. If you have photos, videos or field notes (for any of the records not accepted to species level) that show:

- underpart coloration and pattern on males
- tail pattern (particularly the extent of the white on second outermost tail feather)
- call

then please get in touch. They don't have to be good photos, and it's possible that if you have any images of birds in flight, or being ringed, that the tail pattern may be visible, even if the rest of the bird is out of focus, facing away etc.

It is likely that this table will need updating following any review published by BBRC; we'll forward any relevant material we receive to the BBRC to help identify any records to species level and update this table as soon as there's any significant changes to report.

David Parnaby
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References

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