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 26th May 2020

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No.	Year	First Date	Last Date	Sex	Age	Identified as:	Trapped	Accepted as:	DNA results
1	1908	6 May		male		eastern	shot	BBRC and BOURC accepted (as Eastern)	DNA (albistriata)
2	1951	20 May	27 May	male		eastern	trapped	BBRC accepted (BOU 1971, accepted as resembling Eastern)	
3	1951	2 Jun	9 Jun	male			trapped	BBRC accepted	
4	1958	12 Jun		male	2cy		trapped	BBRC accepted	
5	1958	13 Jun	14 Jun	female			trapped	BBRC accepted	
6	1964	23 Apr	24 Apr	male		eastern	trapped	BBRC accepted (no race published) (BOU 1971, accepted as resembling Eastern)	
7	1966	19 May		male			trapped	BBRC accepted (BOU 1971, accepted as Western)	
8	1967	25 Jun	27 Jun	male			trapped	BBRC accepted	
9	1967	26 Jun		female				BBRC accepted	
10	1969	13 Jun		female				BBRC accepted	
11	1971	22 May		male			trapped	BBRC accepted	
12	1972	26 Jun	5 Jul	male			trapped	BBRC accepted	
13	1974	16 May		female			trapped	BBRC accepted	
14	1975	9 May		male			trapped	BBRC accepted	
15	1975	8 Jun		female			trapped	BBRC accepted	
16	1975	8 Jun	10 Jun	male			trapped	BBRC accepted	
17	1976	1 Jun		male		(sketches suggest western)	trapped	BBRC accepted	
18	1977	29 May		male			trapped	BBRC accepted	
19	1979	1 Jun	10 Jun	female			trapped	BBRC accepted	
20	1979	4 Oct						BBRC accepted	
21	1980	16 May		female			trapped	BBRC accepted	
22	1983	13 Jun	15 Jun	male				BBRC accepted	
23	1984	25 May	1 Jun	prob. female				BBRC accepted	
24	1985	27 May	28 May	female				BBRC accepted (possibly female)	
25	1985	22 Jul	2 Aug	male	2cy		trapped	BBRC accepted	
26	1986	3 Jul		male	adult	western	trapped	BBRC accepted	
27	1987	28 Apr		male				BBRC accepted	
28	1987	29 May		male				BBRC accepted	
29	1988	27 Apr	14 May	male		eastern	trapped	BBRC accepted (probably showing characteristics of <i>albistriata</i>)	
30	1988	8 May	10 May	male		western		BBRC accepted	
31	1988	14 May		female				BBRC accepted (probable female)	
32	1988	22 May		male		eastern		BBRC accepted (probably showing characteristics of <i>albistriata</i>)	
33	1989	8 May	9 May	male				BBRC accepted (as 7th- 8th May)	
34	1989	19 May		male		eastern	trapped	BBRC accepted (probably showing characteristics of <i>albistriata</i>)	

No.	Year	First Date	Last Date	Sex	Age	Identified as:	Trapped	Accepted as:	DNA results
35	1992	21 May	25 May	male	2cy		trapped	BBRC accepted	
36	1992	27 May		male				BBRC accepted	
37	1992	27 May		female				BBRC accepted	
38	1992	28 May		male		eastern		BBRC accepted (no race	
20	1002	2 1						published)	
39	1992	2 Jun		male				BBRC accepted	
40	1992	2 Jun		male				BBRC accepted (as 3rd June)	
41	1992	12 Jun		male				BBRC accepted	
42	1993	24 Apr		male		(western?)	trapped	BBRC accepted (no race published, although 'easterns' were published that year)	
43	1993	24 May		female			trapped	BBRC accepted	
44	1994	10 May	12 May	male	2cy	eastern		BBRC accepted (no race	
45	1994	12 May		male		western		published) BBRC accepted (no race	
	255 .							published)	
46	1994	12 May	20 May	male	2cy			BBRC accepted	
47	1994	30 May		female	2cy	eastern	trapped	BBRC accepted (no race published)	
48	1995	27 May		male	2cy			BBRC accepted (probably 1st-summer)	
49	1995	13 Jun		female				BBRC accepted	
50	1996	24 May		male				BBRC accepted	
51	1996	24 May		female				BBRC accepted	
52	1997	10 May		male		eastern		BBRC accepted (no race published)	
53	1997	16 May		female				BBRC accepted	
54	1997	28 May	29 May	unsexed	unaged			BBRC accepted	
55	1998	22 May		male				BBRC accepted	
56	2000	20 Apr	03 May	female	2cy		trapped	BBRC accepted	
57	2000	7 May	11 May	male				BBRC accepted	
58	2000	14 May		male				BBRC accepted	
59	2000	1 Jun	3 Jun	male	2cy			BBRC accepted	
60	2000	10 Jun		female				BBRC accepted	
61	2001	22 May	30 May	female				BBRC accepted	
62	2002	12 May	15 May	female				BBRC accepted	
63	2002	31 May	7 Jun	female	2cy	western	trapped	BBRC accepted (no race published)	
64	2003	21 May	22 May	female	2cy			BBRC accepted	
65	2003	3 Jun	6 Jun	female	2cy	unraced (call suggested western)		BBRC accepted	
66	2004	1 May	2 May	female		eastern	trapped	BBRC accepted (no race published)	
67	2004	23 May	24 May	male		eastern		BBRC accepted (no race published)	
68	2005	1 Jun	5 Jun	female	2cy			BBRC accepted (no race published)	
69	2006	6 Jun		male	2cy	western		SBCRC accepted?	
70	2007	23 May	24 May	female	2cy			SBCRC accepted	
71	2007	20 Oct	29 Oct	male	1cy		trapped	SBCRC accepted (unraced) (as 20th-24th)	

No.	Year	First Date	Last Date	Sex	Age	Identified as:	Trapped	Accepted as:	DNA results
72	2008	9 May	18 May	female	2cy	(photos suggest eastern)	trapped	SBCRC accepted (unraced)	
73	2008	17 May	20 May	female	2cy		trapped	SBCRC accepted	
74	2009	20 May	21 May	male	2cy	western		SBCRC accepted (probably 1st-summer western)	
75	2010	26 Sep		unsexed	unaged	unraced		SBCRC accepted?	
76	2011	24 Apr	3 May	female	unaged	unraced		SBCRC accepted	
77	2011	29 Apr	4 Jun	male	2cy	eastern	trapped	BBRC accepted (as Eastern)	
78	2011	31 May		male	2cy	western	trapped	SBCRC accepted (as Western)	
79	2011	6 Jun		male	prob. 2cy	eastern		BBRC accepted (as Eastern)	
80	2012	26 May	27 May	female	2cy	eastern	trapped	BBRC accepted (as Eastern)	DNA (albistriata)
81	2013	25 May		female	2cy	eastern	trapped	BBRC accepted (as Eastern)	DNA (albistriata)
82	2013	3 Jun	14 Jun	male	2cy	western	trapped	SBCRC accepted (as Western)	DNA (iberiae)
83	2013	17 Jun	27 Jun	male	unaged	western	trapped	SBCRC accepted (as Western)	DNA (iberiae)
84	2013	26 Jun		female	unaged	unraced		SBCRC accepted (as Subalp sp?)	
85	2013	5 Jul	14 Sep	male	unaged	western		SBCRC accepted (as Western)	
86	2014	25 Apr	2 May	male	2cy	western	trapped	SBCRC accepted (as Western)	DNA (iberiae)
87	2014	3 May	21 May	male	2cy	western	trapped	SBCRC accepted (as Western)	DNA test failed
88	2014	13 Jun		male	unaged	western		SBCRC accepted (as Western)	
89	2014	8 May		male	2cy	eastern	trapped	BBRC/BOU accepted S.c.cantillans	DNA (cantillans)
90	2015	30 Jun	3 Jul	male	2cy	western	trapped	BBRC accepted (as Western)	DNA (iberiae)
91	2016	8 May		female	unaged	eastern		BBRC accepted (as Eastern)	
92	2016	9 May		male	2cy	western	trapped	BBRC accepted (as Western)	DNA test failed/missing
93	2016	9 May		female	2cy	western	trapped	BBRC accepted (as Western or Moltoni's)	DNA test failed/missing
94	2016	10 May		male	(adult?)	eastern		BBRC accepted (as Eastern)	
95	2016	10 May		female	unaged	western (or Moltoni's)		BBRC accepted (as Western or Moltoni's)	
96	2016	10 May		female	unaged	western (or		BBRC accepted (as	
97	2017	30 May	1 Jun	male	2cy	Moltoni's) western	trapped	Western or Moltoni's) BBRC accepted (as Western)	DNA (iberiae)
98	2018	22 May		female	2cy	unraced		SBCRC accepted (as Western or Moltoni's)	
99	2018	1 Jun	31 Jul	female	2cy	eastern	trapped	BBRC accepted (as Eastern)	DNA (albistriata)
100	2019	13 May		male	unaged	(eastern?)		in circulation	
101	2019	9 Jun	11 Jun	male	unaged	eastern		BBRC accepted (as Eastern)	

'Subalpine Warblers' (including Moltoni's Warblers) on Fair Isle

Below are photos of 'Subalpine Warblers' on Fair Isle. Please refer to the table for details of records. Any birds mentioned in the table but not featured below are those that we don't currently have photos for (if you have any, please send them in). Note that the names are of the photographers, not necessarily the finders of the birds (see the relevant reports for the finders names).



'Subalpine Warbler'. 13.05.2019. Richard Cope. This bird didn't call or show its outer tail feathers. Although it looked most like Eastern, the underpart colour varied considerably in the light. It is still under consideration by BBRC.



Eastern Subalpine Warbler. 09.06.2019. Chris Dodd



Eastern Subalpine Warbler. 01.06.2018. Ian Andrews



Western Subalpine Warbler. 30.05.2017. Ciaran Hatsell.



Eastern Subalpine Warbler. 08.05.2016. Ciaran Hatsell (left) and Lee Gregory (right)



Western Subalpine or Moltoni's Warbler. 10.05.2016. David Parnaby



Eastern Subalpine Warbler. 10.05.2016. Lee Gregory



Western Subalpine or Moltoni's Warbler. 10.05.2016. Lee Gregory





Western Subalpine Warbler. 09.05.2016. Lee Gregory





Western Subalpine Warbler. 30.06.2015. Lee Gregory



Western Subalpine Warbler. 13.06.14. Richard Cope i





Eastern Subalpine Warbler S.c.cantillans. 08.05.2014. David Parnaby





Western Subalpine Warbler. 03.06.13. David Parnaby





Eastern Subalpine Warbler. 25.05.2013. David Parnaby



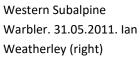
Eastern Subalpine Warbler. 26.05.2012. Will Miles



Eastern Subalpine Warbler. 29.04.2011. Will Miles



Eastern Subalpine Warbler. 06.06.2011. David Parnaby (left)









'Subalpine Warbler'. 24.04.2011. Rory Tallack. The right hand photo possibly shows a hint of 'Eastern' tail pattern.



'Subalpine Warbler'. 26.09.2010. Simon Slade.



'Subalpine Warbler'. 20.05.2009. Jack Ashton-Booth



'Subalpine Warbler'. 09.05.2008. Mark Breaks. Although not accepted to race, this bird clearly shows an 'Eastern' tail pattern.



'Subalpine Warbler'. 20.10.2007. Rob Hughes.

This bird appears to show a 'non-Eastern' tail pattern.







'Subalpine Warbler'. 01.06.2005. Rebecca Nason



'Subalpine Warbler'. 10.06.2000. Keith Reagan.