

Eastern Bonelli's Warbler *Phylloscopus orientalis* (Ian Lewington)

IDENTIFICATION OF BONELLI'S WARBLERS

DOUG PAGE

ILLUSTRATED BY IAN LEWINGTON

The recent decision by the British Ornithologists' Union Records Committee to treat Bonelli's Warbler *Phylloscopus bonelli* as two species, Western Bonelli's Warbler *Phylloscopus bonelli* and Eastern Bonelli's Warbler *Phylloscopus orientalis* (*Ibis* 139: 197-201; *Brit. Birds* 90: 70; 91: 122-123), is a potential cause of frustration for the observer who has the good fortune to find a vagrant, silent 'Bonelli's warbler'. The two species are very similar, both structurally and in plumage features, but thankfully the calls are dissimilar and, in the case of *orientalis*, highly distinctive. The purpose of this short paper is to highlight the known identification features and to encourage observers to try to determine additional field characters of the two species.

Current knowledge suggests that the majority of silent individuals will not be readily identifiable in the field, but, with careful observation, at least some individuals may be specifically identified. Of course, if one is calling, the identification should be straightforward.

Up to the end of 1998, there has been a combined total of 145 Bonelli's warblers

recorded in Britain and Ireland, of which 56 have been accepted as *bonelli* and just three specifically assigned to *orientalis*. The paucity of records attributable to *orientalis* clearly reflects the respective population strengths and the north-south migration route of *orientalis*, which seems less likely to overshoot in spring, but a clear understanding and awareness of the field characters is also perhaps a contributory factor.

It should be noted that, although all three British records have occurred in autumn, of four accepted Dutch records up to 1995, three were in spring and one was in July.

DISTRIBUTION AND WINTERING AREAS

The Western form, *bonelli*, has a breeding range extending from Northwest Africa, north through Iberia and France, through Central Europe, Italy and east to Austria and northwestern former Yugoslavia. Numerically, the population is large, with an estimate in the *EBBC Atlas* of 1.5-4 million breeding pairs. The wintering area

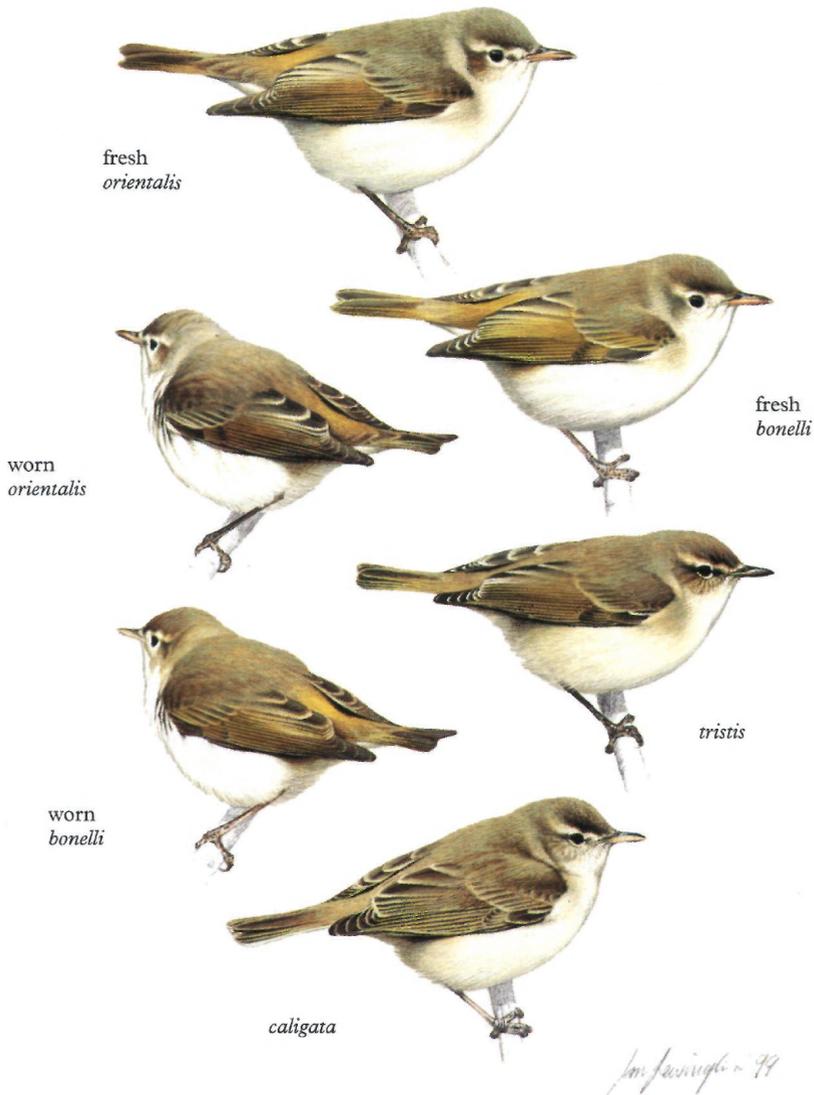


Figure 1. Eastern Bonelli's Warbler *Phylloscopus orientalis* and Western Bonelli's Warbler *P. bonelli*, and pit-falls: the Siberian race of Common Chiffchaff *P. collybita tristis* and the nominate race of Booted Warbler *Hippolais caligata* (Jan Lewington)

is along the southern edge of the Sahara, from Senegal in the west to northeast Nigeria and northern Cameroon in the east, roughly between 10° and 17°N. Given the West African wintering range, the main migration route is south to southwest in autumn, with the peak southerly movement occurring in August. Spring migration is from early March to the middle of May, with the peak in April

and early May.

The eastern form, *orientalis*, has a much smaller population, occurring in central and southern former Yugoslavia, northern Bulgaria, Greece and western Turkey, with small numbers in Lebanon and Syria. The estimated population given in the *EBBC Atlas* is only 15,000-40,000 breeding pairs, which represents just one percent of the number of *bonelli*. The complete extent of

Table 1. Plumage of Eastern *Phylloscopus orientalis* and Western Bonelli's Warblers *P. bonelli*.

Observers should note that there is a considerable degree of overlap between the two species. First-winter individuals of both species appear 'cleaner' and brighter than autumn adults, which have worn and bleached remiges and rectrices. Adults of *bonelli*, and presumably *orientalis*, tend to show a more contrasting rump-patch than do first-winters, which can be duller, showing less contrast.

Feature	<i>orientalis</i>	<i>bonelli</i>
Supercilium	Whitish, quite prominent, probably never showing any yellow tones	Whitish, but often tinged with yellow or buff and, therefore, less prominent
Lores	Pale, but the dark smudge in front of the eye tends to be more obvious	Pale, the dark smudge in front of the eye is rather diffuse and less obvious
Ear-coverts	Pale brown to warm almost gingery-brown, tending to contrast with greyish head tones	Pale brown. Less contrast with more brownish head tones
Upperparts	Cold, greenish-grey, lacking brown tones, often looking very grey with just a slight olive or green tone to the lower mantle	Less grey, more brownish-olive or pale brownish (can be quite similar in tone to Booted Warbler <i>Hippolais caligata</i>)
Fringes to remiges and rectrices	Duller greenish-lime	Brighter yellowish-green
Tertial fringes	More contrast with greenish-edged remiges, with whitish or silver-white edgings	Less contrast, with greyer tertial edgings
Axillaries and underwing-coverts	Pale yellow or whitish	Brighter yellow
Uppertail-coverts	More contrast between the yellow rump and dingy, longer uppertail-coverts	Less contrast between yellow rump and yellow tones of longer uppertail-coverts
Bill	Tends to show more-restricted pale base to lower mandible	Extensive pale pink lower mandible, upper mandible horn with pinkish cutting edge and base. Whole bill often gives impression of being pink
Legs	Dark grey-brown or blackish-brown	On average, paler, often with pinkish-brown tone

the winter quarters is as yet unknown, but migration is basically north-south, with at least part of the population wintering in Sudan south to about 9°N. Migrants have reportedly occurred in Malta, Tunisia and western Libya, so it is possible that part of the winter quarters lie farther to the west than is currently known. Timing of migration is similar to that of *bonelli*, but spring migration starts earlier, in late February.

FIELD CHARACTERS (table 1, fig. 1)

Both species are medium-sized *Phylloscopus* warblers, slightly smaller than Willow Warbler *P. trochilus*. Although size is of little value in the field, *orientalis* averages slightly larger than *bonelli*. Both species display a character similar to that of Wood Warbler *P. sibilatrix*, but appear proportionately longer tailed and are shorter winged than that species. Primary



190. Eastern Bonelli's Warbler *Phylloscopus orientalis*, Eilat, Israel, April 1987 (*Hadoram Shirihai*). A rather warm-coloured, yellow/greener individual, approaching Western *P. bonelli* in coloration.

projection is of medium length, falling between those of Willow Warbler and Common Chiffchaff *P. collybita*. In addition, the nasal hairs are more pronounced than those of *trochilus*, with the three rictal bristles overhanging the base of the nostrils (Williamson 1962).

Plumage is rather plain with, for a *Phylloscopus*, a rather bland facial expression, owing to a lack of obvious loreal or eye stripes. A pale supercilium is rather diffuse, and a rather large, dark eye, accentuated by a complete pale eye-ring, stands out in the pale face. Mantle and scapulars are plain greyish-brown or brownish-grey, with greenish or olive tones; tertials are dark-centred, with paler, 'faded' fringes; and the wing-coverts, remiges and rectrices are edged lime or yellowish-green. When wing-flicking or fly-catching, a small,



192. Two Eastern Bonelli's Warblers *Phylloscopus orientalis*, Eilat, Israel, April 1986 (*Hadoram Shirihai*). Showing individual variation in size and coloration.



191. Eastern Bonelli's Warbler *Phylloscopus orientalis*, Eilat, Israel, April 1986 (*Hadoram Shirihai*). A paler/greyer individual than that in plate 190.

bright golden-yellowish patch can be seen on the rump, although this is dull on first-winters and on a few spring birds. Underparts are a clean, chalky-white, often described as silky-white, with, occasionally, a pale-buff, greyish or yellow wash to the breast sides and/or yellow streaking on undertail-coverts.

The bill is relatively long, and of medium strength, fleshy-orange, with dark culmen and tip, and can appear remarkably pale when viewed from below. Legs and feet, although variable, are generally grey-brown or blackish-brown, or pinkish-brown.

Differences between the two species are, at best, subtle, but on some individuals a combination of characters may be present which helps to afford a specific identification (see below and table 1).



193. Eastern Bonelli's Warbler *Phylloscopus orientalis*, Sumburgh Hotel and Grutness, Shetland, August 1998 (*Bill Jackson*)



194-196. Western Bonelli's Warbler *Phylloscopus bonelli*, Sumburgh Head, Shetland, September 1995 (Bill Jackson)

Eastern *orientalis* has a 'sharper', better-defined head pattern owing to a whitish supercilium, which on Western *bonelli* tends to be tinged with buff or yellowish. Also, although the lores of both species are pale, there is a small dark smudge just in front of the eye and this tends to be more obvious on *orientalis*, but more diffuse on *bonelli*. The head colour is greyer on *orientalis*, and the pale-brown or ginger-brown ear-coverts tend to contrast with the grey tones, whereas, with the head colour of *bonelli* browner, the ear-coverts show less contrast.

Upperpart tones vary, but generally

those of *orientalis* are colder grey, lacking the brown tones of *bonelli*. The latter can, however, also appear very pale greyish-brown, often with an olive-brown tone (such pale, grey-brown-mantled individuals have, surprisingly, on more than one occasion in autumn been misidentified as Booted Warbler *Hippolais caligata*). This, coupled with its grey head, makes *orientalis* a colder, altogether greyer-looking species. On *orientalis*, the fringes of the remiges and rectrices are dull greenish-lime, whereas on *bonelli* they are brighter, yellowish-green, forming a more obvious panel on the closed wing. Although there is much overlap, the dark-centred tertials of *orientalis* show a more contrasting pattern against the greenish-edged remiges, as the actual fringes to the tertials are white, silvery-white or yellowish-white compared with the duller, greyer fringes on *bonelli*.

Although of limited use in the field, the



197 & 198. Western Bonelli's Warbler *Phylloscopus bonelli*, Sumburgh Head, Shetland, September 1995 (L. Dalziel)

axillaries and the underwing-coverts of *orientalis* are whitish or a pale yellow, as opposed to the rather bright yellow of *bonelli*.

Since the general upperpart tones are duller on *orientalis*, the yellow rump patch may show more contrast or stand out more clearly than does that of *bonelli*.

As with plumage features, there is considerable overlap between the coloration of the two species' bare-parts, but generally those of *bonelli* average paler than those of *orientalis*. The bill of *bonelli* can look remarkably pale pink, especially when viewed from below, whereas that of *orientalis* tends to be darker, with a restricted pale base to the lower mandible.

Leg colour is generally dark on both species, but that of *bonelli* can show a pink, paler tone, particularly at the rear.

Despite the above, observers should be aware that some of these features are subjective and, at present, the majority of

silent individuals will inevitably remain indeterminate.

MOULT Worn adults of both species in autumn are more likely to appear faded and bleached, with worn and faded remiges and rectrices, than fresh first-winter individuals. Ageing, especially of those in autumn, although not a prerequisite to acceptance, would certainly help in the identification process.

Adults undergo a partial post-breeding moult of the body feathers, and occasionally the tertials, on or near the breeding grounds in July-August. The pre-breeding moult, usually undertaken from mid October onwards in the winter quarters, is complete, with primaries moulted descendently.

Juveniles undertake a partial moult of the body only from July or August to September.

VOICE The song of both species is a short, loose shivering trill of an unvaried note; lower-pitched, slower, the notes more separated, and more musical than that of Wood Warbler and lacking that species' acceleration and increased vibrancy. The character is reminiscent of Lesser Whitethroat *Sylvia curruca* or a distant Cirl Bunting *Emberiza*



199-201. Western Bonelli's Warblers *Phylloscopus bonelli*, The Gambia, February 1996 (R. Riddington)



202. Eastern/Western Bonelli's Warbler *Phylloscopus orientalis/bonelli*, Exnaboe, Shetland, October 1992 (L. Dalziel)



203. Western Bonelli's Warbler *Phylloscopus bonelli*, Portugal, June 1991 (Kevin Carlson)

cirlus. Although the songs of the two Bonelli's warblers are extremely similar, that of *orientalis* is reputed to be shorter, less vigorous and less frequently uttered than that of *bonelli*. It must be noted, however, that there is individual variation in the song of both species and identification on song alone, under field conditions, is inadvisable.



BIOMETRICS The two species are extremely similar in their measurements, and even when in the hand can be difficult to separate.

Although *orientalis* is

204. Western Bonelli's Warbler *Phylloscopus bonelli*, Spain, August 1997 (Roger Tidman)

Without doubt, the biggest single aid to identification and perhaps the only conclusive element is the call. That of *bonelli* is a rather typical *Phylloscopus* 'poo-weet', 'hoo-eet', 'chweet' or 'clo-eee', resembling that of Willow Warbler, but slower, shriller and clearly more disyllabic. The call of *orientalis* is totally different, being most un-*Phylloscopus*-like. It is an abrupt, sharp, quite loud, monosyllabic 'chip', 'tchip' or 'khip', recalling a distant, less incisive Common Crossbill *Loxia curvirostra* or even a sparrow *Passer*.

The British records of *orientalis* have involved particularly vocal individuals, and it may be that *orientalis* does call more often than *bonelli*, but this could be biased by the particularly distinctive note of *orientalis*. It is also obvious that silent *orientalis* will currently make up an unknown proportion of the 59% of British & Irish records not assigned to either species.



205 & 206. Western Bonelli's Warblers *Phylloscopus bonelli*, Spain, May 1994 (Mike Lane)

slightly larger than *bonelli*, with fractionally longer wings, such differences are of little use in the field. Wing-formula differs in that *bonelli* has the second primary usually just shorter than the sixth, whereas *orientalis* has the second primary usually just longer than the sixth. Similarly, the sixth primary of *bonelli* is often emarginated, but that of *orientalis* is not clearly emarginated (although many individuals show at least a hint of emargination).

CONCLUSIONS

Observers should be aware that there is a wide range of overlap between the two species so far as plumage, bare-part characteristics, wing-formula and biometrics are concerned, and the utmost caution is therefore needed when attempting to identify specifically either species, even in the hand.

The distinctive calls, of which there is no known overlap, are by far the safest and easiest way for an accurate identification to be made.

It should be noted that date and geographical location (as mooted in some circles) are in no way an indication of which species may be involved when dealing with silent individuals. There are several examples of late-autumn birds from the Northern Isles, the English east coast and the Isles of Scilly which have been proven to be *bonelli*.

It seems likely that this species pair will, for the foreseeable future, pose severe

recognition problems, but, with time and careful observation, it is hoped that some of the rather tentative criteria put forward here will be confirmed as distinct features which will help to make the identification of silent individuals more certain.

ACKNOWLEDGMENTS

Lance Degman, Paul Harvey, Mike Rogers and Grahame Walbridge all provided constructive criticism of the draft paper. Thanks are due to the photographers who provided reference material, as well as the 17 portraits included here: Dr Kevin Carlson, Larry Dalziel, Bill Jackson, Mike Lane, Dr Roger Riddington, Hadoram Shirihai and Roger Tidman. Special thanks are due to Ian Lewington for his superb plate of Bonelli's Warblers.

REFERENCES

- Cramp, S. 1992. *The Birds of the Western Palearctic*. vol. 6. Oxford.
- Hagemeijer, W. J. M., & Blair, M. J. 1997. *The EBBC Atlas of European Breeding Birds*. London.
- Harris, A., Tucker, L., & Vinicombe, K. 1989. *The Macmillan Field Guide to Bird Identification*. London.
- Svensson, L. 1992. *Identification Guide to European Passerines*. Stockholm.
- Williamson, K. 1962. *The Genus Phylloscopus. Identification for Ringers 2*. Tring.

AUTHOR

Doug Page, 11 Ashley Court, Finningley, Doncaster, South Yorkshire DN9 3RA

