

Olive-tree Warbler in Shetland: new to Britain

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ABSTRACT An Olive-tree Warbler *Hippolais olivetorum* at Boddam, Shetland, on 16th August 2006 was the first record of this long-distance migrant in Britain and northwest Europe. Identification was initially problematic owing to misconceptions regarding the field appearance of this species, but was established retrospectively from photographs. Identification of Olive-tree Warbler and its separation from similar species is discussed. Prevailing weather conditions in the days preceding the bird's discovery were conducive to an arrival from southeast Europe.

At about 13.30 hrs on 16th August 2006, RM found a *Hippolais* warbler in a small garden at Boddam, Shetland. He identified it as an Icterine Warbler *H. icterina* based on its open-faced expression, yellowish-orange sides to the bill, greyish upperparts, pale underparts with a cream wash to the upper breast, striking whitish wing-panel and grey-blue legs. He also observed the bird tail-dip twice. Interestingly, his initial impressions were that the bird was similar to Barred Warbler *Sylvia nisoria* in size but, with no other birds present for comparison, he dismissed this as an artefact of seeing an unfamiliar bird in strange surroundings. He contacted Angus Murray at Bird-line Scotland, who thought that the bird sounded worthy of further investigation and passed the information on to PME.

PME was intrigued by the report and headed quickly to the garden at Boddam where, after half an hour or so, he managed a few brief views of the bird (the garden was private and viewable only from the public road). He became convinced that it must be an Eastern Olivaceous Warbler *H. pallida* but contacted Paul Harvey (PVH) for a second opinion. PVH arrived at about 16.40 hrs, together with several other observers, and was rather startled by his first brief views: the bird appeared large and grey, with an incredibly striking, silvery wing-panel and a broad, deep-based bill, and Olive-tree

Warbler *H. olivetorum* sprang to mind. A few minutes later, however, the bird appeared in a Sycamore *Acer pseudoplatanus* at the back of the garden, where it appeared altogether less impressive and immediately began dipping its tail in the manner typical of Eastern Olivaceous Warbler. Despite some reservations over size and plumage features, all observers eventually agreed with PME's identification and the news was put out on the local grapevine just before 17.00 hrs that the bird was an Eastern Olivaceous Warbler. More observers, including HRH, arrived at Boddam shortly afterwards.

Detailed description

The bird did look large, especially in flight, and was considered by HRH and PVH to be the size of Blackcap *S. atricapilla* or Garden Warbler *S. borin*. Attempts to compare it with Icterine Warbler suggested that it was of similar size, or possibly a little larger, and it certainly looked quite pot-bellied at times. There was, however, clearly some confusion over size interpretation as PME felt the bird to be as small as a Reed Warbler *Acrocephalus scirpaceus* and, subsequently, others suggested that it approached Barred Warbler in size.

Upperparts

The upperparts were a pale, cold grey, although PME considered there to be a slight brownish tone.

A short, fairly obvious supercilium extended to the eye and was bordered below by an indistinct dark eye-stripe (loral bar), which appeared to extend just beyond the eye. The forehead was usually 'sloping' and rather *Acrocephalus*-like, but occasionally the warbler raised its crown feathers and the forehead then appeared to be steeper. At other times the head shape appeared more rounded. The wings were especially striking, showing broad, silvery-white fringes to the tertials, secondaries, greater coverts and alula. The resulting wing-panel was evident even in flight. The alula was black and considered to be the darkest part of the bird. The greater coverts were dark-centred and the tertials appeared variously dark-greyish-centred or darker, depending on the light and viewing angle. The flight feathers were dark. The primary projection was estimated to be about two-thirds of the length of the exposed tertials (though photographs subsequently showed that primary projection was longer, c. 80–90%). The tail showed distinct white outer webs to the outer tail feathers and these were obvious in flight and when perched. PME noticed fine white tips to the outermost pair of tail feathers on one occasion. The tail itself was otherwise greyish and not particularly

contrasting with the upperparts, although Mark Chapman (MC) considered the tail to be darker than the upperparts.

Underparts

The underparts were rather plain whitish.

Bare parts

The bill was undeniably broad and deep-based, but was not felt to be excessively long and was, therefore, in proportion with the head. The lower mandible and sides of the upper mandible were a yellowish-orange and the culmen was dark horn. The legs were robust and grey in colour. The eye was dark.

Voice

The bird called occasionally. PVH rendered this as a subdued deep 'tchuk' with, on occasions, something of a Great Reed Warbler *A. arundinaceus* tone to it, although HRH heard a much louder call, which he transcribed as a deep 'tuc' reminiscent of a loud and deep Lesser Whitethroat *S. curruca*. These calls were reminiscent of calls we had heard from Eastern Olivaceous Warbler and recordings of the calls of Eastern Olivaceous Warbler on the iPod we had with us.



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52–55. Olive-tree Warbler *Hippolais olivetorum*, Boddam, Shetland, August 2006.

Behaviour

Perhaps the most persuasive feature in determining the bird's identification was the constant tail-dipping. When moving through cover and when the back end of the bird could be observed deep in cover, it could be seen to persistently dip its tail down from the horizontal every two or three seconds. This was not accompanied by any fanning or opening of the tail and all the observers present with relevant experience felt that these movements matched their experience of Eastern Olivaceous Warbler. HRH and MC did on one occasion notice the bird wave its tail in a complete 'oval' and spread it three times in succession before switching back to its normal tail-dipping.

Reviewing the possibilities

Because of the apparent size, bill depth and the striking wing-panel, we discussed the possibility of the bird being a 'grey-and-white' Icterine Warbler, or one of the *Hippolais* species not yet on the British List, including Western Olivaceous *H. opaca*, Upcher's *H. languida* and Olive-tree Warbler. HRH played recordings of the calls of Eastern Olivaceous, Upcher's and Olive-tree Warblers, and the songs of Eastern Olivaceous and Olive-tree, but the bird did not respond.

Initially, the possibility of Upcher's Warbler was taken most seriously because the size seemed to fit that species best, but it was eliminated on the basis of tail movements, the equal spacing of the tertial tips and the fact that the tail was not dark enough (although having subsequently seen a range of photographs of Upcher's Warbler, we acknowledge that our approach to eliminating this species at the time was simplistic). Although Olive-tree was undoubtedly a good fit on plumage, it too was dismissed based on our perception of the bird's size and its tail movements; none of us were aware of any literature suggesting that Olive-tree Warbler would ever tail-dip so persistently.

Over the next few hours the bird remained deep in cover in the original garden, occasionally visiting an adjacent garden. It made sporadic forays through the trees, where it gave reasonable although usually partially obscured views. Occasionally it would fly across the garden, but for one period of over an hour it was not seen at all. Occasionally, it betrayed its presence with its a subdued, deep 'tchuk' call. At around 20.15 hrs, the bird sat out in the open for a period of no more than three seconds, allowing HRH to get some rather poor, but what would prove to be extremely significant, photographs (plates 52–55).

Establishing the identification

That evening, all observers who had voiced an opinion left the bird believing it to be an Eastern Olivaceous Warbler. For reassurance about some of the features that we felt were anomalous for Eastern Olivaceous, notably bill depth, upperpart colour and silver edgings to the tertials and greater coverts, PVH e-mailed one of HRH's images to Brian Small. Unfortunately, this image was accompanied by comments describing the bird's tail movement and our perception of its size. Based upon these comments, no concerns were expressed and the identification as Eastern Olivaceous remained unchanged. The following morning, HRH discussed the bird at length with PVH, particularly the primary projection, which photographs established to be much longer than had been estimated in the field.

Images of the bird were posted on the internet but, over the following week or more, only three people contacted any of the main observers to express some doubts about the identification – Paul French, Paul Leader and Paul Whiteman. Bearing in mind these comments, and still concerned about what the photographs showed, particularly in terms of the primary projection, HRH e-mailed a photograph of the bird to Hadoram Shirihihi (HS) on 4th September. His response, that the bird was 'most probably an Olive-tree Warbler', was truly shattering! More photographs of the bird were quickly sent to HS, and also to Killian Mullarney (KM) and Lars Svensson (LS). HS's initial suspicions were quickly confirmed and the identification was supported by comments from KM and LS. The bird was clearly an Olive-tree Warbler but, from our point of view, this was greeted by none of the normal euphoria associated with nailing a 'first for Britain'!

Among the pro-Olive tree Warbler features HS, KM and LS pointed out from the photographs were:

- long primary projection;
- deep orange tinge to the pale areas of the strongly built bill;
- supercilium limited to the region above the indistinct loreal stripe;
- narrow, pale 'eye-lids';
- greyish head and dorsal areas contrasting with dark wings;
- strong wing-panel composed of pale fringes to the greater coverts and tertials;
- strong, long grey legs;

- long tail (despite proportionally long primary projection) with extensive white edges.

HS also added that the Lesser Whitethroat-like deep 'tuc' call fitted that of Olive-tree Warbler, which he was familiar with in autumn. On further examination of the photographs, it can be seen that the first primary was minute as it is not apparent at any time; this also supports the identification as Olive-tree Warbler. The bird's identification was discussed at length in Harvey *et al.* (2006).

Size and tail movements

Two key features that are not apparent in the photographs are the size of the bird and the tail movements. Our preconceived impression of what an Olive-tree Warbler should look like and how it should behave had a direct bearing on the initial misidentification of the Boddam bird. These features are poorly documented and even misleading in the readily available literature, and the comments below may go some way to clarifying the appearance and behaviour of Olive-tree Warbler in the field.

Size

In retrospect, it is quite clear that this was a large bird and we made a gross error of judgement in allowing ourselves to believe that it was small enough to be an Eastern Olivaceous. A search of published biometrics by PVH suggested that, while Olive-tree Warbler is likely to invite comparison with Barred Warbler, perhaps heightened by plumage similarities, it is quite likely that many Olive-tree Warblers will appear smaller than that species in the field. Although wing length of the two is similar, on average Barred Warbler has a longer tail and a significantly greater body mass, typically up to one-third heavier than Olive-tree Warbler. In fact, published weights of migrant Olive-tree Warblers are similar to those of Garden Warblers. With this in mind, the often-quoted size comparison of Olive-tree Warbler with Great Reed Warbler is surely greatly exaggerated.

Tail movements

Our understanding of the apparently diagnostic tail movements of *Hippolais* warblers has been well and truly turned on its head by this experience. In fact, this behaviour contributed more than any other single feature to the collective misidentification. The Boddam Olive-tree Warbler persistently dipped its tail down from

the horizontal every two or three seconds, reminiscent of the supposedly diagnostic manner of Eastern Olivaceous Warbler. The tail-dipping of the Boddam bird was not accompanied by calling, but this has been the case with some Eastern Olivaceous that we have observed.

Most recent publications that have highlighted tail movements of Olive-tree Warbler suggest that these consist of waving the tail from side to side, or tail-dipping accompanied by the tail being fanned. Interestingly, however, there is a comment in Cramp (1992) relating to a migrant Olive-tree Warbler in Saudi Arabia that was observed pumping its tail down regularly for ten minutes, while Baker (1997) referred to Olive-tree Warblers flicking their tails in shallow downward movements, and sometimes fanning them at the same time. Comments in Urban *et al.* (1997) also mention that the species flicks its tail, but with no further explanation of movements.

Additional thoughts

Once the identification debate had been opened up, PVH sent six photographs of the bird to David Pearson, who has extensive experience of Olive-tree Warbler from Kenya. Some of his helpful comments are reproduced below:

'My first impressions, based, I suppose, on the colour of the upperparts and bill, were that this did not look quite right for Olive-tree. But on consideration of proportions and structure (especially wing and bill) and the prominence of the whitish wing-feather edgings, I believe it fits perfectly well and I don't see what else it can be.

'Bill size and shape is right for Olive-tree, but the overall pinkish look in some of the photos put me off. Olive-tree in the field always seems to show an orange-yellow tinge to the lower mandible. But there is an orange-yellow look in photographs 4 and 5, for example.

'The long wing with almost 100% primary projection and eight evenly spaced primary tips is diagnostic, I think, given that this is clearly not an aberrant Icterine (bill too large, legs too robust, supra-loral stripe too prominent). It certainly rules out Upcher's and Eastern Olivaceous Warbler. The legs look too strong for Upcher's or Eastern Olivaceous Warbler. If the photo can be relied upon, they are grey without any pinkish or brownish tinge, and this too should rule out the smaller grey *Hippolais*.

'The face pattern fits Olive-tree, especially the short but well-marked supercilium, reaching just to the eye. In Upcher's and Eastern Olivaceous Warbler this extends to behind the eye. The cheeks appear less dark than Olive-tree sometimes shows, but darker

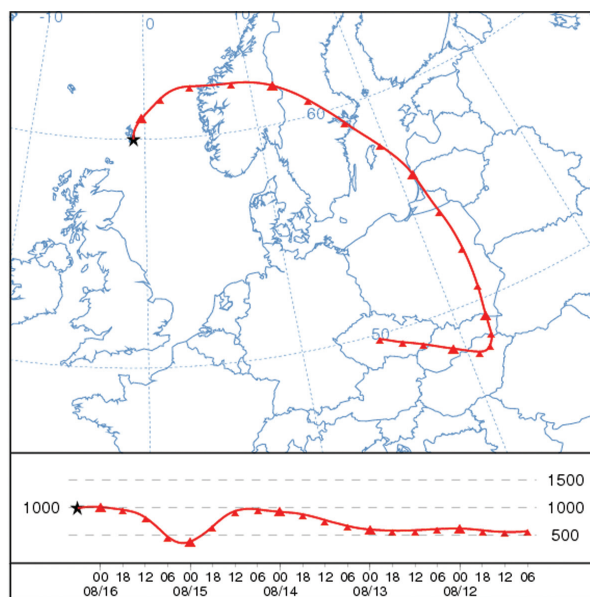


Fig. 1. Backward trajectory analysis of air above Shetland at 06.00 hrs on 16th August 2006 (from NOAA HYSPLIT model). The larger symbols along the trajectory represent positions at midnight on each date from 12th August. The lower graph illustrates the altitude (m) of the parcel of air with time since 12th August. The authors gratefully acknowledge the NOAA Air Resources Laboratory (ARL) for the provision of the HYSPLIT transport and dispersion model and the READY website (<http://www.arl.noaa.gov/ready.html>) used in this figure.

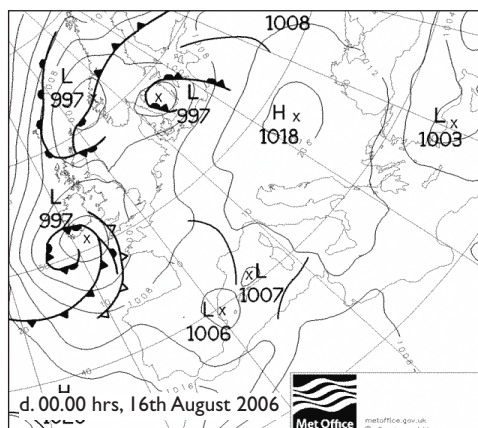
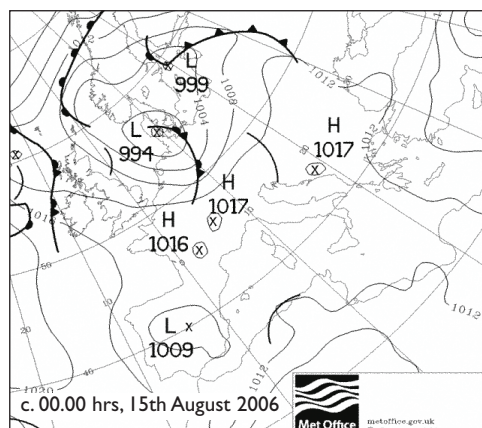
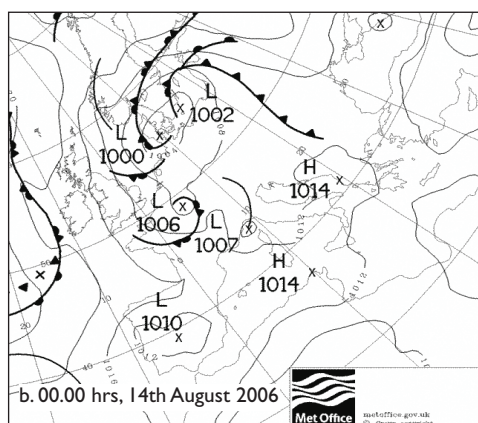
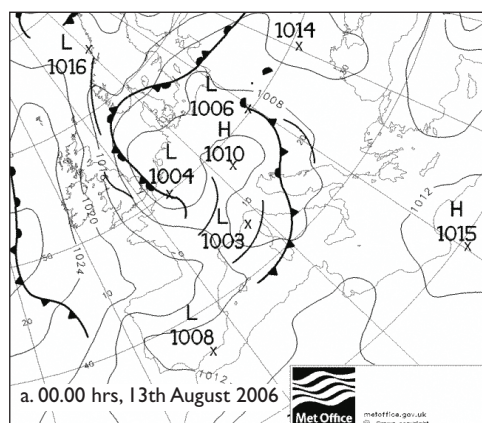


Fig. 2a–d. The weather charts show the ridge of high pressure over southeast Europe on 13th and 14th August. The small warm sector moving across the Baltic states on 14th and 15th was associated with a complex area of low pressure which generated an east to northeast airstream over Scandinavia and the northern North Sea on 15th and 16th. © Crown copyright 2008, charts supplied by the Met Office.

than I'd expect on Upcher's or Eastern Olivaceous Warbler. The upperparts look a bit pale for Olive-tree, but not seriously so. Maybe the bird looked a bit darker grey in the field. There is not an obvious distinction between greyer mantle/scapulars and browner wing-coverts as is typical in Olive-tree, though less marked, I guess, in fresh young birds. But maybe this was apparent in the field.

'The broad and well-demarcated whitish edges to the tertials, greater coverts and alula would fit, I think, with young Olive-tree, although these are largely worn away in the birds we see in Kenya in November. Young Eastern Olivaceous Warbler in early autumn has less of a wing stripe or panel and the pale edges are buffier. Young Upcher's would already be worn in August, I think.

'So a number of features fit first-autumn Olive-tree perfectly, and there seems nothing to seriously challenge this identification. It cannot be any other *Hippolais*. The bird was described as large. Whereas Eastern Olivaceous Warbler is Reed Warbler-sized or smaller, and Upcher's is Common Whitethroat *S. communis*-sized, Olive-tree will appear distinctly larger, though not as big as a Barred Warbler. Olive-tree does dip its tail regularly, perhaps less persistently than Eastern Olivaceous Warbler, but I do not think it accompanies this all the time with a 'chack' call as in Eastern Olivaceous Warbler.'

Weather conditions

Norman Elkins kindly reviewed the prevailing weather conditions and provided the following summary. Unlike many vagrants, the Olive-tree Warbler's arrival could be associated with a particularly interesting weather situation. After reviewing computer simulations of the track of the air mass found over Shetland on 16th August (plotting its trajectory during the preceding days), it became apparent that a route from the Black Sea to Shetland via the Baltic States and Scandinavia was quite feasible during the days leading up to its discovery (fig. 1). To support this hypothesis, synoptic charts, satellite images, thunderstorm location and temperature charts were scrutinised. By superimposing the bird's likely movements within this air-mass trajectory, it is possible to speculate how it may have arrived in Shetland.

Assuming that, as a nocturnal migrant, its passage occurred at an altitude of between 500 m and 1 km, with daylight periods spent off passage, a possible sequence of events unfolds as follows. On 13th August, a ridge of high pressure lay over its breeding grounds along the western coast of the Black Sea. Assuming that the bird departed late on 12th August and on a reverse heading, it would have flown north-

wards in clear skies and almost calm conditions to reach Moldova, where it remained off passage during the day on 13th. The following night saw a continuation of this northward passage within a plume of warm and light SSE wind ahead of a strengthening cold front. The next period off passage would have been in northern Belarus, where it spent the day on 14th. Skies remained clear but as it continued that night, it began to run into cloud bands and thundery rain associated with a small wave depression. In the circulation of this system, it veered northwest in strengthening southeasterlies, bringing it into eastern Sweden (c. 62°N), where it remained off passage on 15th. Its final nocturnal stage was in partially clear skies but in an east to northeast windflow in the now weakening warm plume. This carried it across Scandinavia and southwest into Shetland by early on 16th, arriving in a light, misty and damp north to northeasterly wind (see fig. 2). If the bird had spent less time off passage, it would still have taken a similar track, but would have had a departure somewhat later than 12th.

Distribution and migration

The breeding distribution of Olive-tree Warbler lies exclusively within the Western Palearctic, extending from Croatia south to Greece and from extreme southeastern Romania and eastern Bulgaria south to western and southern Turkey and to northern Israel (Hagemeijer & Blair 1997). The species departs from its breeding grounds from mid July to early September and the main southerly passage through Israel and Syria occurs from mid July to mid August. It winters in eastern and southern Africa, from Kenya south to South Africa. This is the first record of vagrancy by Olive-tree Warbler to the north and west of its breeding range.

There have been two previous claims of Olive-tree Warbler: from Scilly in September 1972, and St Kilda, Outer Hebrides, in August 1999. Both were rejected on the basis of being inadequately documented. The date of the Boddam record both fits the species' normal autumn migration period and matches the arrival dates of some vagrants from southeast Europe. Remarkably, it was found in the same garden as Britain's first Rüppell's Warbler *Sylvia rueppelli*, in August 1977, although, since the latter was in primary moult when discovered, it seems likely that it had arrived in Shetland the previous spring and spent the summer in Shetland undiscovered.

Vagrancy from the eastern Mediterranean

Olive-tree Warbler joins an increasing list of vagrants with breeding ranges centred on south-eastern Europe and the eastern Mediterranean to have reached Britain and northwestern Europe in recent years. Although few birders had seriously predicted Olive-tree Warbler as a potential vagrant to Britain, it was mentioned by Wallace (1980) as one of four long-distance migrants which breed in southeastern Europe that could turn up in Britain. Of these predictions, two Rüppell's Warblers had already arrived in the 1970s and a further three have occurred subsequently, while two Masked Shrikes *Lanius nubicus* and now Olive-tree Warbler have also reached our shores in recent years, leaving only Semi-collared Flycatcher *Ficedula semitorquata* to make the journey. Other vagrants from southeast Europe which have also reached Britain include four Eastern Bonelli's Warblers *P. orientalis* (including an August bird in Shetland) and three Cretzschmar's Buntings *Emberiza caesia*, while Eastern Olivaceous Warbler has occurred on 11 occasions, including four in July and August. From slightly further east, several White-throated Robins *Irania gutturalis* have reached northwest Europe, including Britain, and there have been four August occurrences, from Norway, Sweden, The Netherlands and Belgium. Also from this region, a Cinereous Bunting *Emberiza cineracea* was discovered in Denmark in May 2005. In the future, perhaps we can look

forward to the possibility of birds such as Persian *Oenanthe chrysopygia* and Finsch's Wheatears *O. finschii*, Upcher's and Ménétries's Warblers *S. mystacea* making landfall in Britain.

Acknowledgments

We owe a great deal of thanks to Killian Mullarney, Lars Svensson and, in particular, Hadoram Shirihi for pointing out the errors of our ways and ensuring that the bird was eventually correctly identified as an Olive-tree Warbler. Paul Harvey was instrumental in documenting the occurrence and this paper is based on much of what he and the authors have already published elsewhere in other ornithological literature. We would also like to thank Mark Chapman for useful discussion about the bird; Brian Small for assisting with our deliberations and looking at skins; Yoav and Gidon Perlman for supplying photographs of *Hippolais* warblers from Israel soon after the event and commenting on our bird; and David Pearson for his useful comments, many of which are reproduced here. Steve Gantlett provided a tremendous amount of logistical support in sourcing photographs for another article on this bird (Harvey et al. 2006). Norman Elkins provided a detailed summary of the prevailing weather conditions leading up to the bird's discovery.

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EDITORIAL COMMENT Colin Bradshaw, Chairman of BBRC, commented: 'When commenting on firsts, it is traditional for the BBRC Chairman to distil the identification features into a couple of sentences. On this occasion I am going to break with that tradition as there is nothing I can add to the features so well discussed in this article. What is particularly interesting about this record is how a single vagrant can change everyone's perception of what a species looks like and how it behaves. Prior to the discussions around this record, I am fairly confident that most British birders would have described Olive-tree Warbler as a large, heavy, long-winged and long-billed warbler that crashes around in trees. The reality, as painfully learnt by some of Shetland and Britain's top birders is different. Although sympathetic to their plight, we should really be grateful that a chance to change widely held but erroneous beliefs has occurred and we now all know what to look for in the future.'

Bob McGowan, Chairman of BOURC, commented: 'It was not surprising, given the rather brief views of the bird, that field identification was not straightforward. Although it was clearly a *Hippolais* sp., initial indications towards Icterine Warbler were overturned in favour of Eastern Olivaceous. Subsequent detailed examination of photographs, however, indicated that it was a first-winter Olive-tree Warbler and it was accepted as such by BBRC and BOURC. It seems that the identification of vagrant *Hippolais* warblers in Britain has suddenly got more complicated.'