

The review of the record of Slender-billed Curlew at Druridge Bay, Northumberland

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Abstract The record of a Slender-billed Curlew *Numenius tenuirostris* at Druridge Bay, Northumberland, on 4th–7th May 1998, was recently reviewed by BBRC and BOURC. Both committees, on split decisions, found the identification to be Not Proven and hence the record is no longer acceptable. As a result, Slender-billed Curlew has been removed from the British List. This paper gives the background to the decision and summarises the review process. The bird showed plumage and structural features that were consistent with Slender-billed Curlew. However, several aspects of the descriptions and the photographic and video evidence assessed were considered insufficiently robust to secure the identification of this critically endangered, probably now extinct, bird as a first and thus potentially only record for Britain.

A small *Numenius* curlew observed at Druridge Bay, Northumberland, on 4th–7th May 1998 among a flock of Eurasian Curlews *N. arquata* and a Whimbrel *N. phaeopus* was identified as Slender-billed Curlew *N. tenuirostris* (Cleeves 1998). The bird attracted much discussion and controversy during and after its four-day stay, not least because it appeared to be in a second-calendar-year plumage not previously familiar to modern observers, and because it post-dated the disappearance of the last known Moroccan wintering bird in 1995. After assessment by BBRC and BOURC, the sighting was accepted as the sole record of Slender-billed Curlew for Britain and the species was added to Category A of the British List in 2003 (BOU 2003). The account of the circumstances of

the sighting, a full description of the bird and a detailed summary of the exhaustive, evidence-based assessment process undertaken by BBRC were published in this journal in 2002 (Cleeves 2002; Steele & Vangeluwe 2002). Those papers remain the definitive analysis of the plumage, structural and behavioural characters of what has become known as the ‘Druridge Bay curlew’. The detailed descriptions and commentary in those papers will not be repeated here. The 42nd BOURC report (BOU 2014) stated that the Druridge Bay curlew has subsequently been reviewed by BBRC and BOURC and that the identification is no longer regarded as being fully secure. Slender-billed Curlew has now been removed from the British List and this paper explains the process behind that decision.

The background to the review

The identification of the Druridge bird as a Slender-billed Curlew, while supported by many, has never been universally accepted. The original BBRC assessment had been an exercise in textual analysis, using techniques drawn from social science, which extracted all written textual material on each feature and matched it to all photographic and other evidence such that a consensus decision could be made about that feature. This was then compared with what was known about Slender-billed Curlew and the variability of the three subspecies of Eurasian Curlew. However, this was not an easy process, involving a species where extant individuals could not be located to provide evidence. The features had to be interpreted largely from images of museum skins, a process that BBRC members typically use to support an identification process rather than lead it. During the first BBRC adjudication, each feature of the bird had been crudely rated on two dimensions: 'hardness' and 'relevance'. Hardness was related to how 'certain' the feature was likely to be. Clear plumage features, such as flank spotting, were 'hard'; characters such as posture and behaviour were 'soft'. Relevance was related to whether the feature was in any way diagnostic compared with Eurasian Curlew. Hard and relevant data were very important, soft and not relevant carried little weight. During the first assessment, BBRC members were asked to use this approach in deciding their vote. Voters had no option but to use the data laid out in front of them because otherwise they would have to challenge the honesty of those data. In those circumstances, the bird had been accepted as a Slender-billed Curlew.

Although the objective, 'cold' approach to the original assessment of the Druridge Bay bird was correct and probably essential at the time, one side effect of was that voters, including those who actually saw it, never had the opportunity to give their 'impressions' of the bird. The common perception that the identification of the Druridge Bay bird was extremely subtle was never challenged publicly because the committees had to deal in facts. But for many committee members, as for most birders, impressions and gut feelings are an essential part of the

identification process. Partly because of the difficulty associated with assessing the 'soft' features of the bird (e.g. behaviour, posture), questions remained about whether the 'hard' identification features considered diagnostic of Slender-billed Curlew ruled out the possibility that the bird was a small Eurasian Curlew, and whether it had been seen well enough to be unequivocal about those features. The Druridge Bay curlew was subjected to an unprecedented level of 'trial by media', and the publication in *British Birds* of the papers documenting both the bird and its assessment did not fully resolve the situation. Many people did not find the evidence compelling. Some questioned whether all the relevant identification characters had been covered in the assessment process. In some of the images, which many people saw for the first time in Steele & Vangeluwe (2002), the bird did not look convincingly different from Eurasian Curlew. Finally, with the rise of the digital camera in the years following the occurrence of the bird, many people began to question whether, with changing standards and expectations, the quality of the photographic and video evidence was really sufficient to support identification.

The occurrence of a small Eurasian Curlew at Minsmere, Suffolk, in autumn 2004 raised further questions regarding the field identification of putative vagrant Slender-billed Curlews (e.g. *Brit. Birds* 99: 167; tinyurl.com/makyv6o). The first photos of the 'Minsmere curlew' showed that it had a short bill and white underwing, and suggested flank spotting or streaking consistent with identification as a potential juvenile Slender-billed Curlew. Many observers travelled to see the bird, with some supportive of this identification. Subsequently, higher-quality photos and closer observation showed that it was unequivocally a Eurasian Curlew, with a broad bill base and chevron patterns on growing flank feathers. This was further confirmed when DNA evidence analysed from faecal samples demonstrated that the mtDNA was from a Eurasian Curlew (Stefan Bensch *in litt.*). Irrespective of any personal issues or potential loss of face for people who had, at least initially, suggested that the Minsmere curlew was potentially a Slender-billed, a more significant issue had

been raised: a curlew that on the basis of relatively poor images was suggestive of *tenuirostris* turned out, upon close observation, to be an obvious *arquata*. Could something similar have happened if the Druridge Bay bird had been well photographed closer to the admiring crowd? Had the committees been hoodwinked into believing that the Druridge Bay curlew was Slender-billed? These issues needed to be addressed and were discussed at the BBRC AGM in 2005. There, it was decided that two members of BBRC who were judged to be independent of either record would assess the Minsmere curlew against the criteria used for assessment of the Druridge Bay bird. Their review was presented at the 2007 AGM; the conclusion was that the Minsmere curlew, if it had been submitted as a Slender-billed Curlew, would certainly not have been accepted; in other words BBRC's original process and criteria had been robust.

Nevertheless, the damage had been done and the doubts about the Druridge Bay curlew that had rumbled on since its discovery finally crystallised: several members of BBRC felt that the identification criteria were incomplete and that the Druridge Bay bird also merited a review. This was put to the vote. The majority of BBRC members voted in favour of review in the light of the continuing controversy surrounding the record. This was announced in the Chairman's introduction to the 2006 BBRC Annual Report (*Brit. Birds* 100: 695).

Summary of the BBRC review

The BBRC review of the Druridge Bay curlew involved a considerable amount of work and took over three years to complete. All the material from the previous assessment had to be scanned and circulated to all members, along with a synopsis to accompany the file prepared by JGS. The video evidence remaining on file was viewed at the 2009 BBRC AGM, when it was apparent that not all of the video evidence originally submitted to BBRC was available. BBRC subsequently obtained copies of video recordings of the bird made by Justin Carr, Trevor Charlton, Peter Colston and Tom Francis, which were then digitised by JMC, who extracted every frame to allow them to be analysed individu-

ally (tens of thousands of images). Most of these frames were of low quality, backlit or affected by shake, and did not provide useful data on the appearance of the bird. However, that still left several hundred informative images that allowed an objective assessment of the Druridge bird. Video of two Moroccan birds taken by Andy Butler was also extracted and reviewed frame by frame for comparison. During this process, JMC also provided videograbs directly comparing the Druridge bird with Moroccan Slender-billed Curlews. No fewer than eight written descriptions of the Druridge bird were submitted; with this number of narrative accounts there were inevitable inconsistencies and a consensus was required. To ensure that all BBRC members had the opportunity to review the extensive and complex file, it was agreed that each would submit their comments and votes independently and that these would subsequently be circulated to all, with an opportunity to amend votes in the light of comments from other members. No members changed their comments or votes as a consequence of this final opportunity to review. The record received seven Not Proven votes out of ten on this recirculation. A majority decision is required in a BBRC review of a previously accepted record and the outcome was thus that the identification of the Druridge Bay bird was considered Not Proven upon review. There was no 'smoking gun' – no one single feature that disproved the identification – but the cumulative nature of the uncertainty surrounding several features underpinned most of the Not Proven votes. These can be summarised as follows:

Pattern on the underside of the outer primaries This potentially diagnostic feature, the relatively plain, grey-brown undersides to the outer primaries of Slender-billed Curlew, which was clearly illustrated in Hayman *et al.* (1986), was not well described for the Druridge Bay bird. The available evidence suggested that the Druridge Bay curlew was perhaps inconsistent with Slender-billed in this respect.

Tibia length and feathering Examination of photographs of known Slender-billed Curlews suggested that the tibial feathering

should be proportionately longer (and hence the length of exposed bare tibia proportionately shorter) than on Eurasian Curlew. Some BBRC members felt that this did not appear to be the case for the Druridge Bay curlew.

Length of primary projection in relation to tail This was consistently described as 'short', whereas the available evidence was that Slender-billed Curlews normally have a longer primary projection than Eurasian, with the primary tips falling level with or beyond the tail tip.

Size BBRC members measured specimens and acquired new data on the bill length of male and female Slender-billed Curlews. Some BBRC members remained concerned that the apparent short bill length suggested that the Druridge Bay bird was male, whereas the size of the bird in relation to Eurasian Curlews in the same flock suggested it would have to be a relatively large female. However, other BBRC members remained convinced that bill size and structure and the size of the bird were all within the range of Slender-billed Curlew.

Leg colour Although this was dealt with in the original assessment, and no new evidence was presented, the leg colour did not appear to be as dark as expected by several BBRC members; this remained a potential issue.

In addition, there remained some less specific concerns among members that the indistinct eye-ring and overall 'jizz' of the bird appeared to be incompatible with images and field experience of known Slender-billed Curlews. Further, concerns remained that the quality of the photographic and video evidence was insufficient to confirm key identification features and, ultimately, that a genuine Slender-billed Curlew should not be so difficult to identify.

While BBRC felt that the detail of the flank spotting, which was well described and visible in the images, continued to support the identification of the Druridge Bay bird as a Slender-billed Curlew, the points summarised above had, in combination, led to the identification being found Not Proven. The file was therefore passed to BOURC with that finding.

The BOURC review

BBRC provided full access to all material and comments from the review (and from the initial assessment) for all BOURC members. Provenance was never going to be an issue with this record and identification was the only aspect under review. BBRC is usually expected to lead on identification criteria, but BOURC needs to accept identification independently for admission of a species to the British List. Given the turn of events after this record had been accepted originally, some members of BOURC were dissatisfied that, first time round, BOURC's deliberations had been based primarily on an extensive summary of the evidence available to BBRC, with added pressure to come to a quick decision. It was thus decided that BOURC members would assess the evidence associated with specific identification concerns raised by BBRC directly, and would also be free to work over any aspect of the identification without pre-assumption.

BOURC was and remains confident that its procedures for assessment (as laid down in its Standing Orders, some of which are summarised below) are fit for purpose and have been proven to work over many years. In this respect, the record was to be treated like any other first for Britain and subject to the normal high levels of proof. At the same time, it was apparent that the conservation implications of any decision would ensure that this would never be 'just another bird'. For most rarities, even firsts for Britain, the conservation consequences of whether or not the record is accepted are negligible; and if there are doubts about the identification, the 'safe' option is to reject the record. In this case, however, both committees agreed that this was a first-summer curlew, so its acceptance as a Slender-billed Curlew in 1998 would mean that Slender-billed Curlews bred somewhere in 1997, two years after the disappearance of the last known Moroccan bird. The implication of this would be that the last Moroccan bird was not the last individual of the species, and that unknown wintering grounds remained to be discovered. In contrast (and notwithstanding other claims of this species since 1995), a decision to reject the identification would raise the very real possibility that the last known Moroccan bird



Fig. 1. Direct comparison of the (first-summer) Druridge Bay curlew (right panels) with an adult Slender-billed Curlew from Morocco (left panels). Videograbs were taken of birds in poses that were as near identical as possible, and demonstrate the strong similarity. Note that the images have been scaled so that the Druridge Bay bird and Slender-billed Curlews appear the same size, whereas they may not have been the same size in life. The top-right panel, middle-left and bottom-left have been mirror-image reversed. Photographs of the Druridge bird by Justin Carr and Trevor Charlton, Moroccan bird by Andy Butler.

was the last individual of the species. Clearly, any decision would conceivably have significant implication for ongoing conservation efforts. In short, a negative verdict on this bird was not a 'safe' option.

During the assessment, the text and figures of a manuscript then being prepared

by Andrea Corso and others (Corso *et al.* 2014) were made available to BOURC, describing a review of the identification features of Slender-billed Curlew with some comments on the variability in Eurasian Curlew. This was also considered by BOURC members and made available to BBRC members.

BOURC members independently addressed multiple plumage and structural characteristics of the Druridge Bay curlew. These are described below. It was clear that there was a considerable degree of similarity between the Druridge Bay curlew and confirmed Slender-billed Curlews (fig. 1).

Under-primary pattern

As described and illustrated in both Hayman *et al.* (1986) and Corso *et al.* (2014), the underside of the outer four or five primaries of Slender-billed Curlew are typically rather uniform and dark, merging to almost black at the primary tips. There is individual variation, but from underneath, even in flight, this should present a uniform dark wedge to the 'hand' contrasting with the pale inner primaries and the secondaries. By comparison,

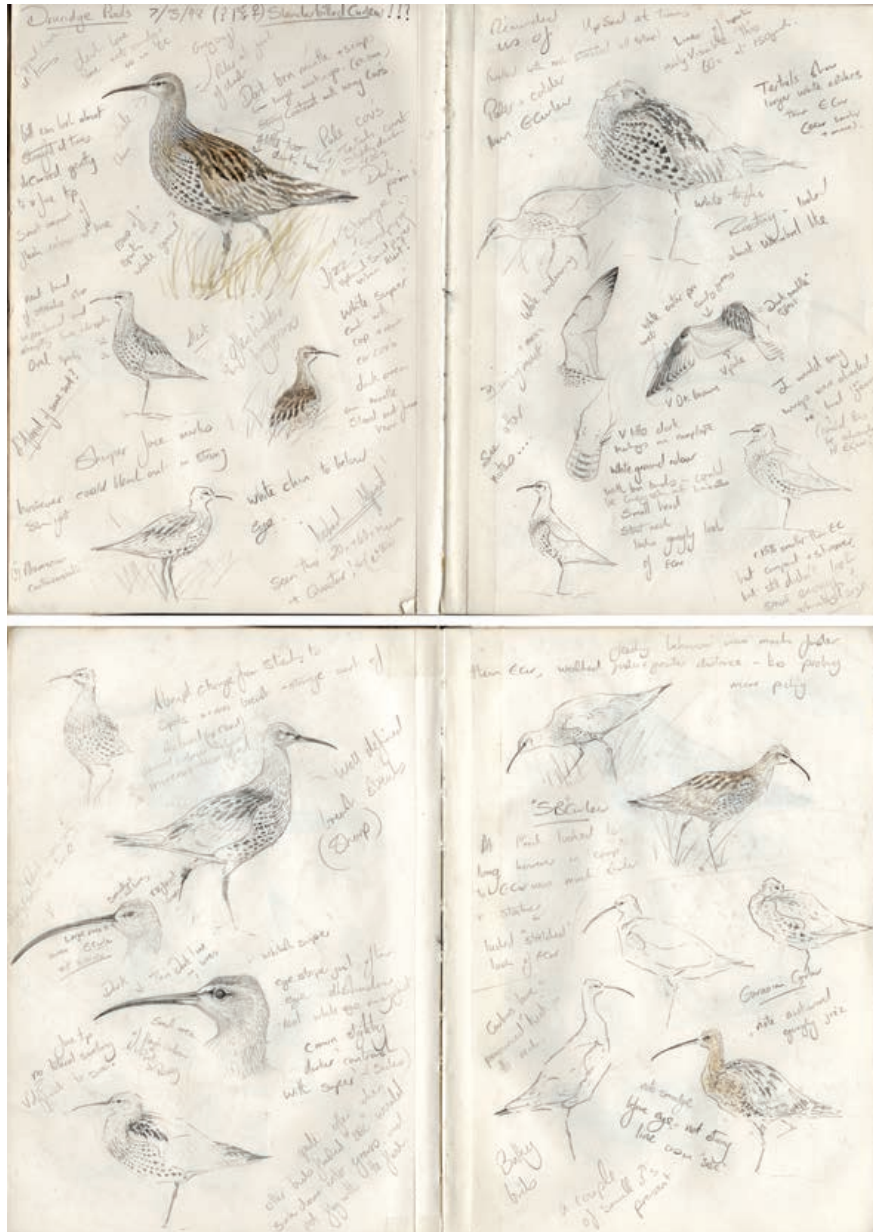


Fig. 2. Description and field sketches of the Druridge Bay curlew by Stephanie Thorpe. Although the committee reviews relied heavily on 'objective' photographic and video evidence, the bird was also extensively documented subjectively through descriptions and drawings, of which these are illustrative examples. Most of the pertinent features are described here, including the flank and breast spotting, details of the bill structure and colour, upperwing, tail and rump pattern. In contrast to the diagnostic and supportive identification features of Slender-billed Curlew, the sketch of the underwing shows pale primary bases, more compatible with Eurasian Curlew. As described in the text, this feature was not consistently described or illustrated by those who saw the bird. The observer also comments that the bird does not appear small enough.

Eurasian Curlew's outer primaries usually have extensive pale bases, white notches and darker primary tips, so that the underwing typically appears whitish with a contrasting black trailing edge formed by the primary tips. There is variation, and it needs to be acknowledged that we are extrapolating from a relatively small number of photographs and skins, but if the underwing is seen well the differences should be diagnostic. BOURC was concerned that this feature was not well described for the Druridge Bay bird. Whereas one observer described a dark wedge, consistent with Slender-billed Curlew (Steele & Vangeluwe 2002), other descriptions and a drawing that were available were, at face value, not consistent with Slender-billed Curlew (fig. 2). For example:

'...primary bases were also very pale, leaving the longest three or four black

primary tips to form a dark tip to the underwing' (Cleeves 1998).

While open to interpretation, and possibly recording only a brief sighting of the underwing, these words are more consistent with Eurasian Curlew.

It is important to bear in mind that, at the time, the key feature of the underwing that most observers were trying to see was the white axillaries and underwing-coverts. It was not clear to BOURC whether any observers had appreciated the importance of the pattern of the underside of the primaries. The images and video evidence were scrutinised, but no clear picture of the underprimary pattern was forthcoming. The flight shots by Gary Bellingham, although backlit, if anything contradict the published description given above, and indicate a dark wedge similar to that visible in flight shots of a



Fig. 3. Photographs of the upperwing and underwing of the Druridge Bay curlew (Gary Bellingham, upper panels) compared with photographs of a Slender-billed Curlew from Yemen in 1984 (Richard Porter, lower panels). The upper right panel is the best image of the underwing of the Druridge bird, showing the white axillaries and underwing-coverts, and an apparent dark wedge formed by the outer four primaries. This would appear to be consistent with Slender-billed Curlew and atypical, at least, for Eurasian Curlew. However, the wing is backlit and other interpretations may be possible. The images of the Yemen bird show the upperwing and dark underside of the primaries clearly.

Slender-billed Curlew from Yemen in 1984 (Porter *et al.* 2004) with the underside of the outer primaries apparently uniform grey (fig. 3). In the video by Justin Carr there is a sequence where the bird raises its wings, but this provides little detail of the underwing, which appears uniformly pale.

A clear image of the underwing, or a very careful description by an observer who was explicitly aware of the difference between the species, could perhaps have resolved the identity of the Druridge Bay curlew. In the event, this aspect of the evidence was equivocal.

Size

The size of the Druridge Bay bird was impossible to assess objectively. The bird was small but not 'tiny' and was probably at or near the bottom of the range for Eurasian Curlew. Some observers had commented that the Druridge Bay curlew did not appear to be small enough, and were concerned about its bulky, almost pot-bellied appearance (depending on posture). In some images there is no obvious difference in size compared with at least one Eurasian Curlew, although direct size comparisons were usually



Fig. 4. The Druridge Bay curlew (front) alongside another apparently small bird (rear); videograb by Tom Francis. Although in this image the back bird also looks short-billed, other videograbs show that the bill was much longer than it appears here.

difficult while the bird was walking through grass on uneven ground (fig. 4) and useless without knowing the sex of the accompanying Eurasian Curlew. Published measurements suggest that female Slender-billed Curlews can overlap in body length with smaller male Eurasian Curlews. However, the bill of the Druridge Bay curlew was very short, more or less proportionate with that of the (presumed) male Moroccan birds. BOURC had to assess whether the apparent discrepancy between body size (seemingly more consistent with female) and bill length (apparently consistent with male) cast doubt on the identification of the Druridge Bay curlew. Steele & Vangeluwe (2002) stated that studies of museum skins showed that large-bodied female Slender-billed Curlews could have a bill length similar to that of small-bodied males, and research by BBRC members during the review had found a female Slender-billed Curlew at NHM, Tring with a bill length only 5.5 mm longer than the mean bill size of males. The apparent length of the bill was therefore not necessarily inconsistent with a large female Slender-billed Curlew. Nevertheless, most female Slender-billed Curlews would be expected to have a longer bill than appeared to be the case with the Druridge Bay bird. The assessment of the length and bulk of the bird required a degree of subjective assessment – some BOURC members thought it was small enough, some were not sure. A size comparison between the Yemen bird and a Eurasian Curlew in fig. 5 is relevant here.

Tibia feathering

The white tibia feathering appears to be proportionately longer, with a correspondingly shorter exposed tibia, on Slender-billed compared with Eurasian Curlew. Several images of Moroccan birds suggested a full-feathered, 'trousered' appearance. No observers had commented on such an appearance for the Druridge Bay bird, and the lack of evidence on this feature was one of the reasons for the Not Proven



Fig. 5. The Yemen Slender-billed Curlew alongside an *orientalis* Eurasian Curlew, January 1984 (Richard Porter). Although clearly very much smaller than Eurasian Curlew, the Slender-billed did not always stand out among a flock of that species (observer's notes), though it could normally be picked out owing to its darker legs. On the basis of bill length, it is presumed to be a female.

verdict from BBRC. BOURC critically evaluated this feature. A series of images of known Slender-billed Curlews (from photographs and videos) showed that it appears to vary according to the posture of the bird – this may depend on whether the body feathering is fluffed up or not, and on the angle of the legs. It was concluded that extensive tibia feathering is likely to be a valid supporting identification feature for Slender-billed Curlew, but that this will not always be obvious in field views or photographs.

When the Druridge Bay curlew was present, it is likely that no observers were specifically looking for this feature. BOURC determined whether it was visible in the

images available. Because the bird was predominantly in long grass, few showed any useful detail. Of the images extracted from the videos, some appeared to show short or sparse tibia feathering, whereas others showed longer or fuller feathering. None of them, however, unequivocally resolved the issue one way or the other (fig. 6).

Leg colour

As described previously, the legs of Slender-billed Curlew are expected to be black or slate-grey. The legs of the Druridge bird were not. Although the first assessment had concluded that the leg colour of the Druridge bird was acceptable, BOURC reviewed this



Fig. 6. Videograbs of the Druridge Bay curlew (first six panels) showing fairly full tibia feathering and short length of exposed tibia, probably consistent with Slender-billed Curlew. The images are, however, not clear enough to resolve the fine detail. Moroccan Slender-billed Curlew included for comparison (bottom right two panels). Photographs of the Druridge bird by Justin Carr, Trevor Charlton and Peter Colston; Moroccan bird by Andy Butler.

feature in light of video evidence and the descriptions. While, for example, the bird observed in Yemen in 1984 could be picked out from a tight flock of Eurasian Curlews on the basis of leg colour (visible in fig. 5), the Druridge bird did not attract attention in this way. However, a careful description of this feature by Tim Melling confirmed that its legs were darker than those of the other curlews in the flock:

‘There is one other minor feature [on which] I differ from other observers but I am absolutely certain about and that is leg colour. When all the Curlews were roosting by the pool, I had the opportunity to compare them side by side. I described the colour of the Slender-billed Curlew’s legs as being “a tad darker” than Curlew. Once again, this difference seemed to fade in strong sunlight.’

A ‘tad darker’ does not suggest that the legs were dark enough, but Corso *et al.*

(2014) found that the legs of young Slender-billed Curlews are on average paler than those of adults. Furthermore, evidence from descriptions and photographs of Moroccan birds show that the legs need not necessarily appear particularly dark, with Pete Morris describing the legs of one Moroccan bird as ‘greenish grey’. The videos confirm this feature – whereas the bill always appears black in videos of the Moroccan Slender-billed Curlews, the legs appear greenish grey. It is possible that this is an artefact of dirt or reflection from wet legs, but it nevertheless holds that the appearance of the legs of the Druridge bird was not inconsistent with Slender-billed Curlew – in fact Tim Melling’s description strongly suggests that this was not just a normal Eurasian Curlew. The legs were one feature that could have been very supportive of identification as Slender-billed Curlew, but, unfortunately, the final conclusion was that they were deemed to be ‘interesting but indeterminate’.



Fig. 7. Bill structure of the Druridge Bay curlew. The bill was short and fine, narrow at the base and at the tip. The colour was black, with a restricted pale base to the lower mandible. Both mandibles were undamaged. Although juvenile Eurasian Curlews may have very short bills, and many adult Eurasian Curlews have rather fine bills, we are unaware of any fully developed Eurasian Curlew that shows all the bill features shown by the Druridge Bay bird. An image of the Minsmere curlew (bottom right) is included for comparison. The broad base and semi-spatulate tip of the bill of the Minsmere bird stands in contrast to the narrow bill base and almost needle-like tip of the Druridge Bay bird. Photographs of the Druridge bird by Justin Carr and Trevor Charlton; Minsmere curlew by Dick Newell.

Bill structure

The descriptions and images make it clear that the bill of the Druridge Bay curlew was slender, short and black, with a restricted pale base to the lower mandible and no broader bill tip, entirely consistent with Slender-billed Curlew and atypical, at least, for Eurasian Curlew. Videograbs confirm that the bill was parallel-sided laterally. Where it meets the feathers/skull, Eurasian Curlew's bill broadens more at the base than that of Slender-billed. Although the differences are subtle, the Druridge Bay curlew appears consistent with Slender-billed in this respect. The head-width: bill-width ratio (head width measured at eye-level and bill base measured at feathering, from videos) for the Druridge Bay bird was about 2.9 (the mean of the two frames where this was visible in fig. 7). For a Moroccan Slender-billed Curlew measurable from Andy Butler's video, it was also 2.9 (one frame only). For the Minsmere bird this same ratio was 2.4, indicating a relatively broader bill. The images and descriptions are in agreement that bill structure was a strongly pro-Slender-billed feature of the Druridge Bay curlew.

Flank spotting

Both BBRC and BOURC agreed that the flank spotting (black heart- or diamond-shaped spots on a white background) was well described and illustrated by observers, and was visible in multiple images of the

Druridge Bay curlew. Evidence has been presented, before and since (e.g. Corso *et al.* 2014), of Eurasian Curlews that demonstrate superficially similar patterns of flank spotting, at least on some feathers. It is unclear whether any of them were genuinely confusable with Slender-billed Curlew, if seen well. The committees looked in detail at the available evidence of the pattern of flank spotting. The spotting on Slender-billed Curlew is formed by the black, heart-shaped or broadly lanceolate subterminal markings to white feathers, which have more proximal black markings resembling bars or 'propeller shapes' (Steel & Vangeluwe 2002; Corso *et al.* 2014). On the larger rear-flank feathers, which are boldly marked and easily displaced, the barring may be visible. As described by observers, and visible in multiple images, there is at least one rear-flank



Fig. 8. Flank spotting of the Druridge Bay curlew. Images support multiple descriptions of black diamond- or heart-shaped spots on a white background. In particular, a larger rear-flank feather is visible in multiple images that has a diamond-shaped black tip and at least one more proximal black stripe, consistent with Slender-billed Curlew. This is visible in the split panel (bottom left) where the large rear-flank feather (bracketed) is displaced behind two arrow- or heart-shaped black feather tips (**). Note also the apparently extensive tibia feathering. Photographs by Justin Carr and Trevor Charlton.

feather on each side of the Druridge Bay bird that has broad, black lateral barring (or 'stripes') (fig. 8). The combination of diamond-shaped spots with individual barred rearmost feathers is absolutely consistent with Slender-billed Curlew and has never, to our knowledge, been documented on known Eurasian Curlews.

There is one image (reproduced in fig. 6 and again in fig. 9 at higher magnification) where apparent vertical marks are visible on 5–6 of the spots in the middle of the flanks. These vertical bars give a superficially chevron-like appearance to these spots. Other flank spots in the image are apparently the arrow-and diamond-shapes expected of Slender-billed Curlew. The extent to which this pattern is real, or affected by the shake of

the image or the video processing artefacts is unclear. However, similar vertical bar-like patterns are also discernible in comparable images of the same feathers of Slender-billed Curlew flank spotting, such as on the adult Moroccan bird photographed by Chris Gomersall (fig. 9). They do not represent Eurasian Curlew chevron patterns.

Upperparts

Published images of Moroccan Slender-billed Curlews show birds where the buff fringes and notches to the dark brown mantle and scapular feathers formed a rather muted pattern. The upperparts of the Druridge Bay curlew seemed very different from this. The upperparts appeared highly contrasting, with very dark feather centres broadly fringed and

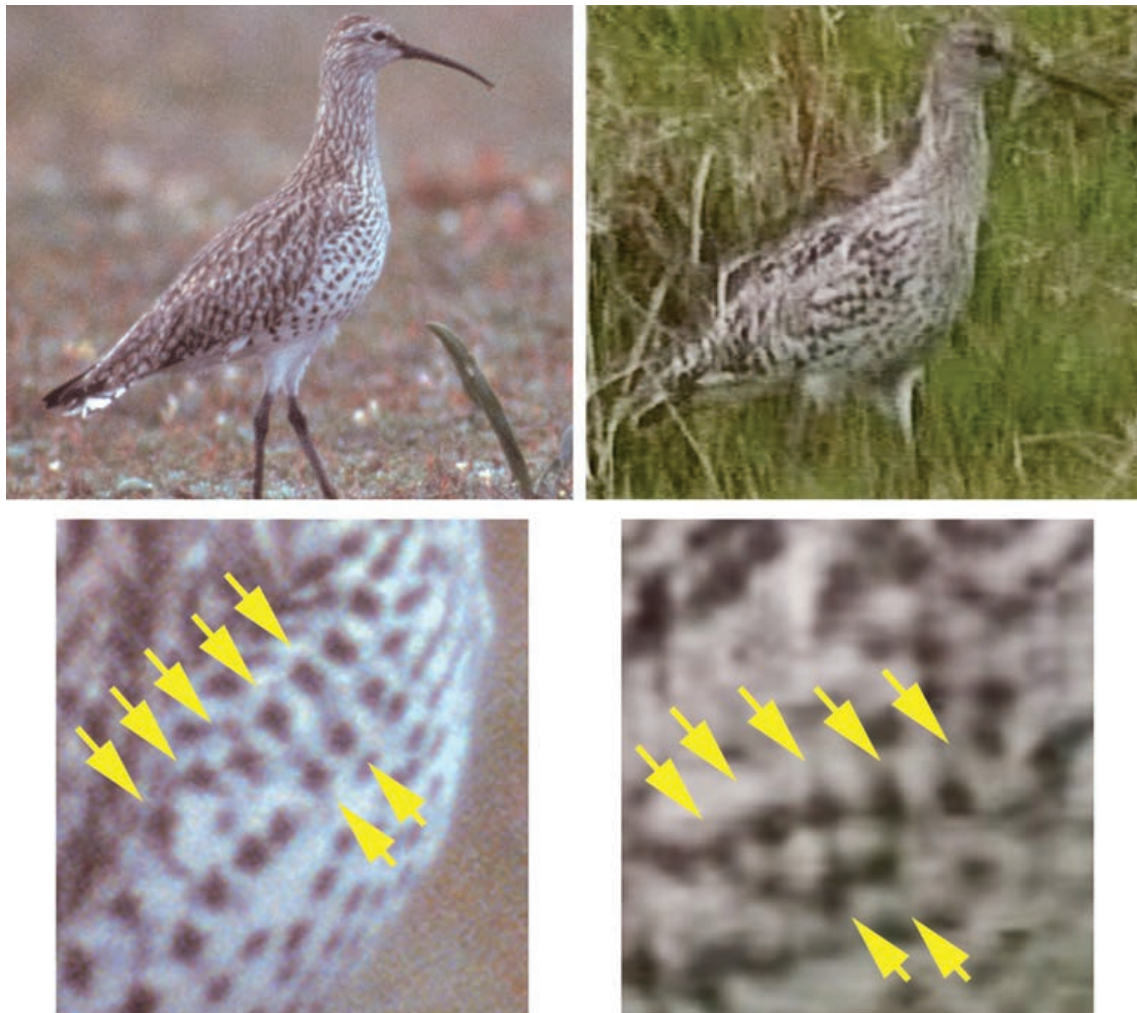


Fig. 9. Detail of apparent flank spotting on the Druridge Bay curlew (right-hand images) compared with adult Slender-billed Curlew photographed in Morocco. While it is necessary to be extremely cautious in interpreting these highly magnified, low-resolution images, the arrows indicate a group of flank feathers on both birds that give the impression of vertical smudges projecting from the diamond-shaped black feather markings. Photographs of the Druridge bird by Trevor Charlton; Moroccan bird by Chris Gomersall.

notched pale, with characteristic large, heavily patterned drooping rear scapulars and tertials. The contrast of the feathers may be exaggerated by video artefacts but it was also clearly described and illustrated. In general, the upperparts appeared to be a much better match for Eurasian Curlew – a conclusion drawn by several observers, who noted the similarity of the Druridge Bay curlew to Eurasian Curlews in this respect.

Studies of specimens have suggested that the variation in Slender-billed Curlew upperpart plumage was more extensive than the narrow search image presented as the ‘classic’ plumage. It will of course also be affected by abrasion and bleaching. A conclusion of Corso *et al.* (2014) is that the mantle and scapular plumage has little or no relevance for identification of Slender-billed Curlew. Direct comparisons of the Druridge Bay curlew with Moroccan Slender-billed Curlews in videograbs (fig. 10) suggest that the upperpart pattern was acceptable. However, some committee members remained concerned by the similarity to the heavily patterned and notched upperpart feathers of Eurasian Curlew.

In flight, the upperwing of the Druridge Bay bird showed a combination of very dark primaries (the darkness was commented on in descriptions) and conspicuous pale inner primaries and secondaries, forming a very pale trailing wedge in the wing (almost like that of a Common Redshank *Tringa totanus*). This combination is characteristic of Slender-billed Curlew, but may also be shown by some Eurasian Curlews (Corso *et al.* 2014).

Length of the primary projection

Although BBRC members had presented evidence that this feature was variable within Slender-billed Curlew, concerns had been expressed that the primary projection of the Druridge Bay curlew was too short to be consistent with Slender-billed. The videograbs showed no difference between the primary projection of the Druridge bird and Moroccan Slender-billed Curlews, and thus no BOURC members thought that this was an issue. At the same time, primary projection was well within the range of Eurasian Curlew.

Tail and rump pattern

Tail pattern and pigmentation of Slender-billed Curlews have been well described, with thinner brown/black tail-barring on a more uniform white background than would be typical on Eurasian Curlews, and an unspotted white rump (Glutz von Blotzheim *et al.* 1977). The descriptions of the Druridge Bay bird fitted Slender-billed Curlew. The videos and photographs were of little help as in most cases the tail was obscured or the white areas were overexposed. However, the possibility of a Eurasian Curlew with a weakly marked, white tail and unmarked rump could not be ruled out.

Other features

The well-marked supercilium and darker lores were generally supportive of identification as Slender-billed Curlew. The ‘capped’ appearance and thin median crown-stripe were also consistent with Slender-billed Curlew, as was the sharp demarcation between the streaked, buffish upper breast

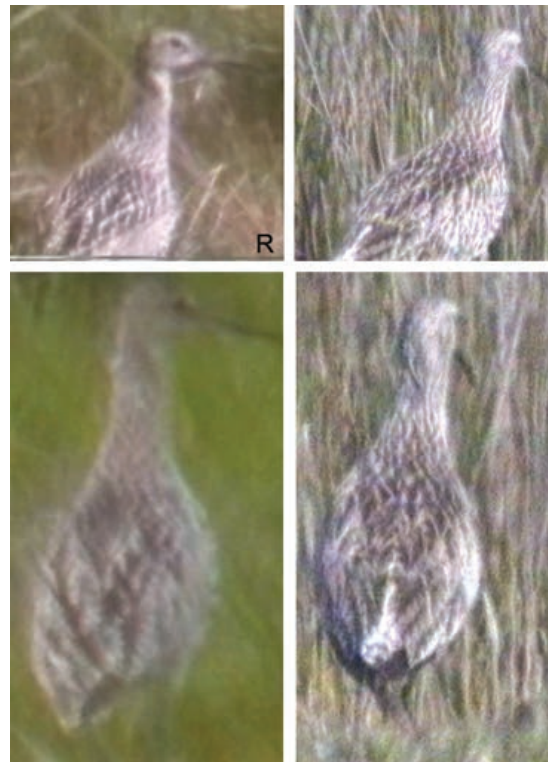


Fig. 10. Mantle and scapular pattern of the Druridge Bay curlew (left panels) in direct comparison with Slender-billed Curlew from Morocco (right panels). ‘R’ indicates a mirror-image reversal of the original capture. Photographs of the Druridge bird by Trevor Charlton, Moroccan bird by Andy Butler.

and black-streaked lower breast and spotted white flanks, creating something of a pectoral band. The white axillaries and underwing-coverts were well described and photographed and represented an essential component of the claim of the Druridge Bay bird as a Slender-billed Curlew. These features were, however, of little use in eliminating Eurasian Curlew, which can also show all these characters. The pale eye-ring of the Druridge bird was weaker than that visible in published images of Slender-billed Curlew and this remains unexplained. However, both Steele & Vangeluwe (2002) and Corso *et al.* (2014) had concluded that the eye-ring was not a clinching identification feature, and BOURC concurred.

BOURC decision

BBRC and BOURC follow similar guidelines for acceptance of the identification of firsts for Britain: it is not always necessary for every diagnostic feature of the species to be described on an individual bird, but the available evidence must eliminate alternative identifications and if there is any feature of the bird that is unambiguously wrong for the species under consideration, the record will normally not be accepted. Hence, even if the descriptions suggest apparently diagnostic features of the species claimed, it may still not be acceptable if important aspects of the descriptions or other evidence are not consistent with the identification. BOURC members had to decide both whether diagnostic features of Slender-billed Curlew had been robustly proven, and whether, conversely, any of the features of the Druridge Bay curlew were unambiguously wrong for Slender-billed Curlew. With several aspects of the evidence open to interpretation, this was very likely to lead to differences of opinion among the committee.

BOURC Standing Orders relating to acceptance of identification are as follows:

- For all records (including the review of previously accepted records), decisions to accept identification must be unanimous.
- Where there are between one and four dissenters on identification, the file is recirculated immediately in a different sequence.
- If, after recirculation, there remains more

than one dissenter, the record is rejected.

At the BOURC meeting in June 2012, the record had accumulated four votes in favour of rejection. The record was discussed and members were asked to review their votes in light of other people's comments and interpretations of the data – in effect a recirculation. As a result of this process, at the BOURC meeting in June 2013 the situation was unchanged, with four votes in favour of rejection. The record was discussed at length, with strong views expressed both for acceptance and for non-acceptance of the identification. In reviewing the votes and comments, it was noted that across the two committees there was no clear pattern of voting: among those who had seen the Druridge Bay curlew there were those who voted for acceptance and those who did not, with a similar split response from those who had not seen the bird. Some of the professional scientists on the committees had analysed the data and voted to accept, whilst others voted against acceptance. Some of the committee members were top rarity finders, and again some had voted to accept and some to reject. All committee members were extremely experienced in record assessment, yet members analysing the same images at the same time expressed diametrically opposite and strongly held views over the identification of the bird. In those circumstances, the data relating to the Druridge Bay curlew were self-evidently equivocal, and it was inconceivable that a consensus to accept the identification unambiguously was achievable. It was agreed therefore to concur with the BBRC decision that the identification was Not Proven and to reject the record.

What now for the Slender-billed Curlew?

Many rarity reports are found Not Proven by BBRC on the basis that, although the bird *may* have been the species claimed, the level of evidence presented is not sufficient to confirm the identification. It is not the role of BBRC or BOURC to identify birds – the committees are charged with determining whether they are acceptable as the species claimed – but if the Druridge Bay bird was not a Slender-billed Curlew, what could it have been? Could it really have been a

Eurasian Curlew? Could the hybrid possibility be ruled out? The bird showed specific detailed features of flank spotting and bill morphology that are widely considered diagnostic of Slender-billed Curlew, and several other features that are supportive, while not themselves diagnostic. It is not difficult to document Eurasian Curlews that are small, or have unusually short or slender bills, or that have some flank spotting, or white axillaries and underwing-coverts, or a white, poorly marked tail. However, examinations of skins (and wild birds) have not, to our knowledge, produced any examples of Eurasian Curlew that have *all* these features and look like the Druridge Bay bird. Several BBRC and BOURC members felt that the identification of the Druridge Bay curlew as Slender-billed had been demonstrated to the level of confidence required for acceptance as a first for Britain. Those who voted to reject the record did so on the basis of the quality of the evidence, the size of the bird, leg colour, upperpart plumage and underprimary pattern. For some members, these features, while perhaps not eliminating Slender-billed Curlew, as a package constituted too many characters that needed explaining for comfortable acceptance of such an iconic record. Features such as size, leg colour, the pattern of the underside of the primaries and upperpart plumage – which, on another individual, might have more closely matched our understanding of the characters of a ‘classic’ Slender-billed Curlew – were either anomalous or not possible to assess conclusively on the Druridge Bay bird. Steele & Vangeluwe (2002) stated that ‘in normal circumstances, this record would have been straightforward to accept’. Some BBRC and BOURC members felt that they could not support that statement.

The Druridge Bay curlew was arguably the best documented of any of the Slender-billed Curlews claimed since the apparent disappearance of the Moroccan wintering population. An unpublished RSPB database of all claims of Slender-billed Curlews shows that since the Moroccan records of 1995 there have been 28 apparently accepted records from seven countries, though in most cases we do not know the details of the review processes that verified these records. BOURC

does not comment on decisions made by other national committees. However, following the experience with the Druridge Bay individual, BOURC would encourage those national records committees who have accepted records since 1995 to re-examine them to the level of scrutiny to which the Druridge Bay bird has been subjected. Because we now know so much more about the pitfalls of the identification of Slender-billed Curlew, our experience suggests that without good photographic confirmation an identification is likely to prove impossible. Documenting extinction is not a happy task and is fortunately one that is not (yet) frequently necessary for avian species. The lessons of the Eskimo Curlew *N. borealis*, which continued to turn up on migration for over 70 years after the population crash that ultimately doomed the species (Gollop *et al.* 1986), teach us not to write off Slender-billed Curlew lightly. But if the Slender-billed Curlew is indeed extinct, we should honour its exit with accuracy and dignity. Conservationists use species records to describe patterns in decline associated with extinction, to estimate extinction dates and to model extinction rates. These models rely on accurate data, and erroneous records can have large effects on models. Mistakes in the assessment process could impair the understanding of patterns, and therefore result in failure to detect species showing signs of slipping to extinction.

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Review



Hummingbirds – a life-size guide to every species

By Michael Fogden, Marianne Taylor and Sheri L. Williamson

Ivy Press, 2014

Hbk, 400pp; 300+ colour photographs

ISBN 978-1-78240-089-9 Subbuteo code M24160

£19.99 **BB Bookshop price £17.99**

Hummingbirds make up the second-largest family of birds in the world and, depending on which checklist you follow (this book follows Howard & Moore (2013) taxonomy), there are around 338 of them. This book sets out to provide a description of each species together with brief information on distribution, habitat, size and status. A colour distribution map is also provided for each species.

The main attraction for most people will be the photographs of this attractive family. The largest contribution comes from Michael Fogden, who has spent much of his life writing about and photographing hummingbirds, although the work of around 40 photographers is included. Each image is 'cut out' and shown against a white background, and while this rather clinical approach reduces some of the natural beauty of the images, it allows species to be compared on the same basis. All

images are shown at life size, but often just one sex is depicted.

The text has been gathered by Marianne Taylor and Sheri Williamson, and this includes 22 pages that provide an overview of how hummingbirds live. This is followed by the individual species accounts in taxonomic order. However, 76 species are not included here but are placed at the end of this section and without any illustrations. The text explains that these are mostly the rarely seen species. While this may be true for some, it certainly is not for others such as Reddish Hermit *Phaethornis ruber* and Black-eared Fairy *Heliothryx auritus* that are widespread and relatively easy to see. In a quick search on the internet I found photographs of many of these species very quickly. So for them to be dumped into an 'also ran' section is most disappointing and really devalues the book.

Keith Betton

