**Eurasian Curlew Identification** 



#### 1. Introduction

Eurasian Curlew *Numenius arquata* (hereafter Curlew) are generally shy and elusive birds, which makes monitoring them during the breeding season a challenge for even the most experienced fieldworkers. Having an understanding of key identification criteria, along with potential identification challenges will enable observers to get to grips with Curlew in the field and provide a solid base from which to begin monitoring. This factsheet aims to outline how to separate Curlew from Eurasian Whimbrel *Numenius phaeopus* (hereafter Whimbrel), separate the sexes, and avoid misidentifying adults, juveniles and immature birds.

# 2. Identification

# 2.1. Curlew vs Whimbrel

Curlew is the largest wader species in the UK and is very distinctive with mottled grey-brown plumage, large body, long legs and a long decurved bill from which it gets its scientific name. The only species it can be mistaken for in the UK is the much less common Whimbrel, which, depending on habitat, can be found on spring and autumn passage on Curlew breeding grounds (NOTE: Whimbrel do breed in the UK in small numbers in the far north of Scotland).

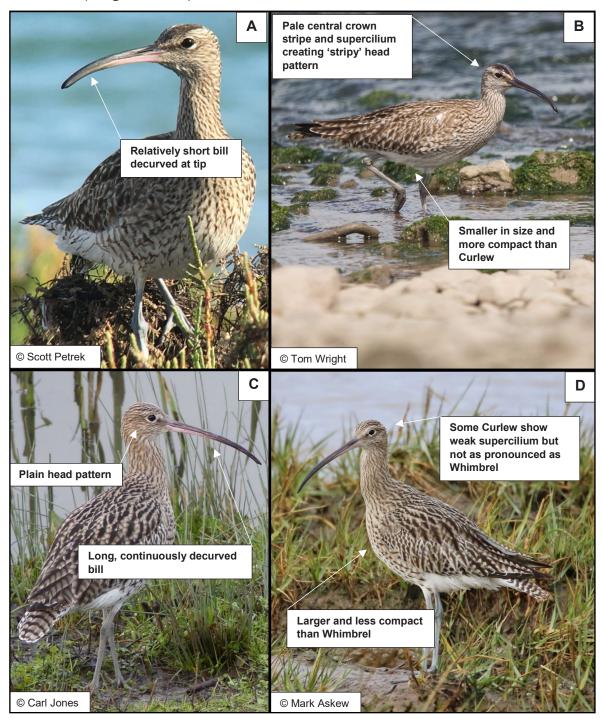
Whilst a large female Curlew will be fairly easy to identify when seen well, small males (in spring and autumn) and freshly fledged juveniles (summer/autumn) could potentially be mistaken for Whimbrel, especially to the inexperienced fieldworker. There are a number of key identification features used to separate the two species and there are some excellent online resources available including:

- BTO Bird ID YouTube video Curlew and Whimbrel
- Bird Guides online article August ID tips: Curlew and Whimbrel

As described in the resources, the key features to look out for are:

- **Size** Curlew is the larger species (roughly the size of a Herring Gull *Larus argentatus*). Whimbrel is smaller (roughly the size of a Common Gull *Larus canus*). Be aware of juvenile and small male Curlews that can appear considerably smaller than females.
- *Bill size and shape* a Curlew's bill is long and continuously decurved. A Whimbrel's bill is shorter, being straighter at the base and only decurved at the tip (see Figure 1 for examples). Again be aware of juvenile and male Curlew that can have noticeably short bills.
- *Head pattern* a Curlew's head pattern is generally plain, although some individuals will show a pale supercilium. A Whimbrel's head pattern shows a central crown stripe and pale supercilium, creating a 'stripy' head pattern when seen at close range (see Figure 1).
- *Vocalisations* Curlew on breeding territory will vocalise in a number of ways depending on the stage of the breeding cycle, including a <u>bubbling-song</u>, a 'COUR-li' <u>contact call</u> and a barking, sharp <u>five-note alarm call</u> (see vocalisations below for details). Whimbrel on passage will most likely be heard using their short, sharp, repetitive <u>contact/alarm call</u>, often informing an observer of the bird's presence before it is seen. Note that an old name for Whimbrel is 'seven-whistler' due to the nature of this call.

Figure 1. Photographs highlighting key plumage and structural differences between Whimbrel (images A and B) and Curlew (images C and D)

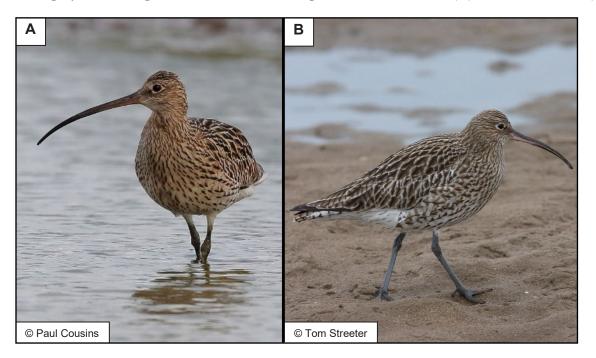


#### 2.2. Male vs female Curlew

Plumage-wise, male and female Curlew are identical, and it is generally only on size and bill length that the sexes can be split in the field (plumage, vocalisation and behavioural differences may also be of assistance, but typically require expert knowledge). Particular care should be applied when trying to assign sex to a lone individual, as size can be difficult to gauge when there is no other reference. It may be the case that the sex cannot be determined with sufficient certainty, and it should only be recorded when there is certainty.

As a rule, females are larger and have longer bills than males (Figure 2) and when a pair are seen together it can be fairly easy to separate the sexes. A head-bill ratio can be used to determine the sex also (female bill 2.5 head-lengths or more; males 2 heads). However, there is a degree of overlap in biometrics between the sexes and when a small female and large male are seen together it can be a challenge to tell them apart.

Figure 2. Photographs showing the difference in bill length between a female (A) and male Curlew (B)



# 2.3. Adult male vs recently fledged juvenile

This issue can occur late in the season when chicks are fledging and beginning to migrate to the coast, turning up for short periods of time in suitable habitat along the way. Recently fledged juveniles can turn up with the adult male, alone, or in a small cohort flock. Although they won't be mistaken for an adult female it possible that they could be mistaken for adult males, especially at a distance. However, there are some features to look out for to prevent misidentification:

- *Bill length* most fresh juveniles will have short, relatively stubby bills, which grow out to full length over the subsequent weeks. At this stage their bills more resemble Whimbrel in length (see Figure 3), however some adult male Curlew can have very short bills and care should be taken when birds are seen at distance. The stubby nature of a juvenile's bill is key to separating them here, as although males can have surprisingly short bills, they will be fully developed and have a noticeable curve to them
- Plumage fresh juveniles will often retain some downy feathers, which can be especially noticeable around the head and neck (see Figure 3). Adults will have worn plumage as they begin to moult and the head and neck feathers can appear ragged, which can give the impression of down feathers at a distance. However, juvenile plumage will be fresh with rich hues which will be in contrast with the noticeably worn, washed out plumage of adults. If seen in flight at this, some adults will have begun to lose flight feathers, producing noticeable gaps in their wings, whereas juveniles will have uniform flight feathers.

Fresh juveniles are still in the process of growing out their flight feathers at this time, which won't be at full length immediately after fledging. This creates a 'rounded' appearance to their rear end as their flight feathers don't extend (or only slightly) past their tertial and tail feathers, compared to adults whose primaries extend further and create a sleeker, more pointed appearance (see Figure 4). This rounded back end, coupled with a relatively short, stubby bill can give the impression of an oversized Ruff *Philomachus pugnax*, especially at distance.

Figure 3. Photograph showing a freshly fledged juvenile Curlew, highlighting the short stubby bill and downy fluff

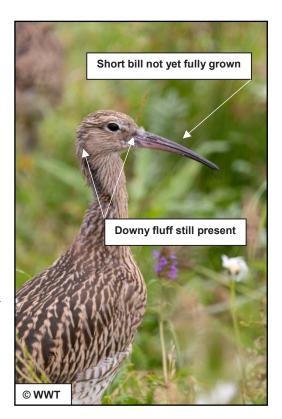
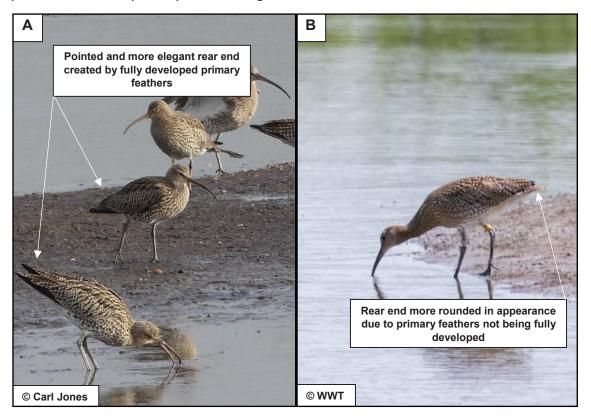


Figure 4. Photographs showing the difference between adult (A) and juvenile (B) Curlew rear ends, created by the difference in primary feather length



# 2.4. Adult vs immature Curlew

Once the primary flight feathers have grown out completely and the bill has reached full length, separating adult and juvenile Curlew can be challenging. There are a few things to look out for however, that will assist in separating them in the field:

- *Tertial feather pattern* A key feature to distinguish juveniles from adults is the feather pattern on their tertials. Extensive monitoring of high tide roosts along the Severn estuary by John Sanders has shown that juvenile tertial feathers show a distinct white/cream triangular notch pattern, whilst adult tertial feathers show a barred pattern (see Figure 5); this barred pattern may lead to irregular feather wear through the winter and triangular notches in the feathers by the following spring.
- Behaviour and conspecific interactions juveniles can be picked out of a flock of Curlew based on their behaviour and their interactions with conspecifics. When seen foraging, juveniles will often show their inexperience, picking sporadically at the ground rather than the focused, intent foraging of an adult. When mixing with adults, juveniles will often be chased off when they get too close, being easily out-competed for food. Juveniles will often mix together, forming loose groups in which they chase each other around whilst getting harassed by adults when they get too close. They can also be observed shaking their wings in a manner that resembles trying to scratch an itch, or like they are trying to shake free of their wings. This is often coupled with a jerky, short run, as if they might attempt to take to the air.

Figure 5. Photographs showing the difference between juvenile and adult tertial pattern. Juvenile tertials show a triangular notch pattern, whilst adult tertials show a barred pattern. In the field (A) and close up (B).

