

## BASIC PRINCIPLES

**B**efore we try to identify out-of-range Kumlien's Gulls, it would be good if we could somehow define the taxon. This is where the problems start, however. The only thing we know for sure is that, even in this modern age of high-tech birding, Kumlien's Gull remains a big mystery.

Research on the topic has been hampered by the inaccessibility of both the species' high Arctic breeding areas and its breeding habitat of tall and steep cliffs. If you want to study these birds, it seems you'll need a sled with huskies, a friendly Inuit companion, professional climbing gear and plenty of thermal underwear!

There has also been some controversy among researchers, one accusing the other of having fabricated his data to an unknown extent (see Snell 1989, Smith 1991 and Snell 1991). No wonder that opinions on the taxonomic position of this gull vary widely: people see it as a subspecies of Iceland Gull, a valid species in its own right, or as a population of hybrids, a so-called 'hybrid swarm', produced by interbreeding between Thayer's and Iceland Gulls.

The last theory, in particular, seems to offer a valid explanation for the enormous plumage variation seen in Kumlien's Gull, and has therefore gained some general acceptance. But is that really all there is to it? Think about it:

- Extreme variation in a taxon is, in itself, not proof of anything. Do you consider Common Buzzard to be a good species, or do you believe that every pale individual is a hybrid with

Rough-legged Buzzard?

- The breeding areas of Thayer's and Iceland Gulls have been separated for well over a century now. The breeding area of Iceland Gull shrank significantly from 1860, and by 1900 the species was confined to Greenland (Weir *et al* 2000).

Thayer's Gull, on the other hand, breeds in the high Arctic region of Canada and has probably been absent as a breeding bird from Greenland since 1930 (Boertmann 2001). Moreover, its distribution in Greenland had always been limited to the extreme north-west (above 77°N), while Iceland Gull mainly breeds in the southern part of the island, reaching its northern limit at 74°N along the west coast (Boertmann 2001).

- Preliminary DNA results have shown that Thayer's Gull is more closely related to Glaucous-winged Gull than to either Iceland or Kumlien's Gulls (AERC TAC 2003; Gay *et al* 2005). Chu (1998) had reached the same conclusion previously, but on the basis of morphological and skeletal data.

- Kumlien's Gull has a separate range, in both summer and winter. Its breeding area is mostly limited to the southern half of Baffin Island, Canada. Thayer's Gull breeds in the northern half of Baffin Island and further to the north and west (Howell and Dunn 2007). Therefore, it is only on Baffin Island that the breeding areas of both taxa meet, in a 40-mile-wide zone at Home Bay.

In Greenland, no more than two breeding records of Kumlien's Gull have been published so far. One of these, in 1964, concerned a rather strange record of two chicks captured near Kangerlussuaq, south-west Greenland, that were transported to a zoo in

Germany, where they were reared and developed limited dark grey pigmentation on the outermost primary as adults (Gothe 1986). The other record referred to a Kumlien's Gull breeding on a cliff among Iceland Gulls near Nuuk in 2001 (Boertmann 2001).

Kumlien's Gull mainly winters along the east coast of Canada, while Thayer's migrates to the west coast and Iceland mainly winters in Greenland (and Iceland) (Howell and Dunn 2007; Olsen and Larsson 2003).

- The current breeding population of Kumlien's Gull is estimated at 2,500-7,500 pairs (Suell 2002), almost as high as that of Thayer's Gull (3,150-9,450) – quite a large number for any 'hybrid population'.

- When reading what is published about Kumlien's Gull in its breeding range, it is clear that most researchers seem to have underestimated its separation from Thayer's Gull in the field. They did not define a rigid set of criteria to tell blackish-winged Kumlien's Gulls from the latter at the start of their research, so it is difficult to interpret their reports of interbreeding. Many surveys were done with nothing more than a pair of binoculars. Some of the studies were even carried out from planes (given the difficulty of the terrain), making identification nigh on impossible – yet their results have been widely quoted.

The evidence for extensive interbreeding actually seems to be quite poor. In any case, the contact zone between the two taxa is very limited, and does not necessarily affect the taxonomic position of the two forms.

When you consider all this, does it not seem more likely

there is a stable, separate and self-sustaining population of Kumlien's Gulls? It may have sprung from past hybridisation but current knowledge seems to indicate that it is now claiming its own place in the world, behaving like a subspecies or, perhaps, even a full species in the making.

### Identification

We can think of Kumlien's Gull as a separate taxon, but can we identify it? Not every Iceland Gull is as pale-winged as the field guides show, while at the other extreme some Kumlien's Gulls have very pale wing-tips indeed.

Fortunately, the breeding and wintering ranges of both taxa are largely separate, so the simple solution is to compare birds from one range with those from the other, and to focus mainly on those birds that truly look different.

Newfoundland in winter, for instance, is a great place to study Kumlien's Gulls; both Iceland and Thayer's Gull are (very) rare there. On the other side of the Atlantic, Iceland in winter is a good place to learn about variation in Iceland Gull. Though small numbers of Kumlien's Gulls winter, the ratio of Iceland to Kumlien's more than 9:1.

Variation in both taxa is illustrated in the images accompanying this article and the additional online material (see the ID gallery on the Birdwatch website), which aim to be an aid in the identification of difficult individuals in Europe.

From a European perspective, it may be wise to think of all plumages of Kumlien's Gull as usually having a discernible, contrasting pattern on the outer primaries, vaguely suggesting Thayer's Gull. ■