SILAS OLOFSON (BIRDINGFAROES.WORDPRESS.COM)

1 Kumlien's and Iceland Gulls (Faroe Islands, February 2012). A typical scene from the 2012 invasion. An adult Kumlien's Gull (top left bird) among a flock of Iceland Gulls, including a few very brown immatures. The second-cycle bird at the front and left might be a Kumlien's Gull too, as suggested by the brown outer primaries contrasting slightly with pale inners, but this should be checked in flight.

ICELAND AND KUMLIEN'S GULLS PHOTO GUIDE

Peter Adriaens

Birdwatch A highlight of recent weeks has been one of Europe's biggest-ever invasions of Iceland Gulls, among them many birds with variable pigmentation on their primaries. And therein lies the identification headache: are they Kumlien's Gulls or not, and where does Kumlien's end and Iceland begin? *Peter Adriaens* investigates.

BASIC PRINCIPLES

Before 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 Kangerlussuac, 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 (Goethe 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 (Snell 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 is 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 aims 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. ■

FIRST CYCLE Juvenile » first-winter » first-summer

2

DOMINIC MITCHELL (WWW.BIRDINGETC.COM)

2 First-cycle Iceland Gull (Nimmo's Pier, Co Galway, 2 February 2012). A typical Iceland Gull in retained juvenile plumage, with whitish outer primaries and a coarsely marked tail. Perched birds look characteristically short legged.

5

BRUCE MACTAVISH

5 First-cycle Kumlien's Gull (Newfoundland, Canada, 13 February 2012). A rather pale individual, showing no clues to its identification when standing. This bird is in juvenile plumage, but has replaced one upper scapular.

3

PETER ADRIAENS

3 First-cycle Iceland Gull (Grindavik, Iceland, 28 March 2010). The primaries are slightly pale brown along the shafts. In this individual the bill pattern is fairly similar to Glaucous Gull, but the bill is shorter, and the smaller, more rounded head, more compact size and gentler demeanour all clearly belong to Iceland Gull.

6

BRUCE MACTAVISH

6 First-cycle Kumlien's Gull (Newfoundland, Canada, 13 February 2012). The same bird as in photo 5 above. In flight, the outer primaries are still quite pale, but the tail pattern differs from Iceland Gull: a solid brown tail band contrasts with the white tail base and prominent white tips to the tail feathers.

4

PETER ADRIAENS

4 First-cycle Iceland Gull (Grindavik, Iceland, 28 March 2010). A very whitish individual, but with rather extensive brown on the tail and pale brown streaks along the shafts of the primaries. Aged by the pointed, frayed tips of the outer primaries, worn tail feather tips and dull bill base.

7

BRUCE MACTAVISH

7 First-cycle Kumlien's Gull (Newfoundland, Canada, 29 December 2011). The dark brown outer webs of the outer primaries contrast with pale inner primaries, and the central tail feathers show a solid, dark brown pattern lacking the barring seen on the outermost feathers.

SECOND CYCLE Second-winter » second-summer

8

PETER ADRIAENS

8 Second-cycle Iceland Gull (Sandgerði, Iceland, 30 March 2010). This individual's plumage is typical for its age, but it has a somewhat bulky structure and the head appears rather flat and angular compared to the familiar profile of the species.

9

PETER ADRIAENS

9 Second-cycle Iceland Gull (Grindavik, Iceland, 23 March 2010). A pale second-winter bird, but with a slight brown colour at the base of the outer primaries, along the shafts. Such individuals can appear strikingly white in flight, and are thus readily separable from typical Kumlien's Gull.

10

PETER ADRIAENS

10 Second-cycle Iceland Gull (Sandgerði, Iceland, 1 April 2010). A bird with boldly patterned primaries, but it is mainly the central ones that are brown – the hand is still the palest part of the wing. Birds in Newfoundland do not look like this.

11

DOMINIC MITCHELL (WWW.BIRDINGETC.COM)

11 Second-cycle Kumlien's Gull (Nimmo's Pier, Co Galway, 2 February 2012). Birds like this need to be checked in flight, but the dark outermost primaries against the paler central primaries are an indication of Kumlien's.

12

BRUCE MACTAVISH

12 Second-cycle Kumlien's Gull (Newfoundland, Canada, 26 March 2011). Note the contrasting outer primary pattern, with whitish mirror and dark subterminal spot on the outermost feather. The tail pattern is a less reliable character at this age, but a strong contrast between the white tail bases and dark brown tail band is more typical of Kumlien's Gull.

13

BRUCE MACTAVISH

13 Second-cycle Kumlien's Gull (Newfoundland, Canada, 29 December 2011). The dark brown outer webs of the outer primaries contrast with pale inner primaries and pale secondaries. The whitish mirror on P10 is bordered by a dark subterminal band below.

Identification

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THIRD CYCLE Third-winter » third-summer

14

PETER ADRIAENS

14 Third-cycle Iceland Gull (Njardvik, Iceland, 30 March 2010). This bird differs from an adult in the lack of grey bases to its primaries, and in having white edges to some wing coverts. At this age some individuals can also have dark subterminal marks on the bill.

15

PETER ADRIAENS

15 Third-cycle Iceland Gull (Sandgerði, Iceland, 22 March 2010). The brown colour is slightly paler than the primary coverts, and there is no sign of a white mirror on the outermost primary – a feature usually present in third-winter Kumlien's Gull. The residual tail band is weak, but not helpful in separation from Kumlien's at this age.

16

PETER ADRIAENS

16 Third-cycle Iceland or Kumlien's Gull (Keflavik, Iceland, 31 March 2010). A good example of a bird that may prove impossible to identify. It has no contrasting pattern on the outer primaries, yet shows a distinct white mirror on the outermost (P10). The thin, sharp dark subterminal marks on the primary coverts look unusual for either taxon at this age.

17

BRUCE MACTAVISH

17 Third-cycle Kumlien's Gull (Newfoundland, Canada, 24 January 2012). A typical bird, with outer primaries darker brown than the primary and greater coverts, and with a white mirror visible on the underside of the far wing-tip. The iris is pale in this individual.

18

BRUCE MACTAVISH

18 Third-cycle Kumlien's Gull (Newfoundland, Canada, 26 March 2011). Birds of this age can look retarded, making them tricky to age correctly. Although the overall plumage of this bird suggests second-winter, note the adult-like inner primaries (bluish-grey, with well-defined, broad white tips) and vivid bill colour.

19

BRUCE MACTAVISH

19 Third-cycle Kumlien's Gull (Newfoundland, Canada, 29 December 2011). The outer primaries are darker than the greater and primary coverts. There is also a hint of a white mirror on P10, and the tail pattern looks almost black and white. From this age on, a dark iris colour may also be worth looking into.

FOURTH CYCLE Fourth-winter/adult winter » adult summer

MARTIN ELLIOTT

20 Adult Iceland Gull (Newlyn, Cornwall, 2 February 2008). A typical adult Iceland Gull showing all the classic features of the species. Note, however, how the light in the photograph affects the inner webs of the primaries, making them appear a slightly darker grey than the outer webs (a pattern nonetheless unlike typical Kumlien's Gull).

BRUCE MACTAVISH

22 Adult Kumlien's Gull (Newfoundland, Canada, 3 February 2012). Adults often show a distinct primary pattern, making them unlikely to be confused with Iceland Gull – indeed, more heavily marked individuals than this may be closer to Thayer's Gull. Note also the dark iris in this bird – in adult Iceland it is typically pale yellow, contributing to a different facial expression.

PETER ADRIAENS

21 Adult Iceland or Kumlien's Gull (Grindavik, Iceland, 23 March 2010). This individual demonstrates that, even with good views, some birds may have to be left unidentified. It has pale wing-tips and a dark iris, but Iceland Gulls breeding in Greenland are always thought to have pale irides; identification is therefore problematic. Note that the outer web of the outermost primary has a faint dark grey wash.

BRUCE MACTAVISH

23 Adult Kumlien's Gull (Newfoundland, Canada, 26 March 2011). A bird with a fairly limited pattern on the outer primaries. In this individual, the contrast between the grey wing and the white trailing edge seems a bit more striking than in the average adult Iceland Gull; Kumlien's can be subtly darker grey above than Iceland, enhancing this contrast, but there is considerable overlap in this feature.

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ÓMAR RUNÓLFSSON

24 Adult Kumlien's Gull (rear) with third-cycle Iceland Gull (Grindavik, Iceland, 10 February 2012). Although the latter outnumbers the former by about 9:1 in Iceland, it remains the best location to study them side by side.

PETER ADRIAENS

25 Flock of Iceland Gulls (Njardvik, Iceland, 2 April 2010). In this impressive scene some 77 Iceland Gulls are visible, along with a few Lesser Black-backed Gulls, but there are no Kumlien's in the flock.

FINDING ICELAND AND KUMLIEN'S GULLS

During the recent influx, Iceland Gulls, as well as the odd Kumlien's, had the potential to turn up at almost any harbour, reservoir roost or landfill site. They are normally much more scarce, but the sites listed below produced the most birds recently and may also attract 'white-wingers' during a regular year.

England

Scilly: Porthmellon beach and dump, St Mary's (SV 919123)
Dorset: Radipole Lake RSPB (SY 731789)
Surrey: Queen Mary Reservoir (TQ 071695)
Greater London: Beddington sewage farm (TQ 287664)
West Yorkshire: Swillington Ings (SE 367298)
Co Durham: Sunderland harbour (NZ 408582)

Wales

Glamorgan: Pontsticill Res (SO 055131)
Pembrokeshire: Llys-y-fran Res (SN 077269)
Gwent: Llandegfedd Res (ST 325994)

Scotland

Aberdeenshire: Peterhead harbour (NK 129453)
Highland: Mallaig harbour (NM 676969) and Ullapool (NH 128939)
Outer Hebrides: Stornoway harbour, Lewis (NB 423323)
Orkney: Sand Geo, Mainland (HY 226235)
Shetland: Catch Fish Factory, Lerwick, Mainland (HU 468398), Skaw, Unst (HU 317627) and Symbister, Whalsay (HU 537623)

Northern Ireland

Co Fermanagh: Enniskillen Dump (H 243435)
Co Down: Ardglass harbour (J 558377)
Co Antrim: Corbally Road Res (J 465388)

Republic of Ireland

Co Kerry: Milltown Estuary (P 825008)
Co Galway: Nimmo's Pier (M 297246)
Co Donegal: Killybegs (G 719761)

Further reading

Gulls of Europe, Asia and North America
This Helm handbook is the definitive guide to Northern Hemisphere gulls, including Iceland and Kumlien's. Available for just £43.99 (inc UK p&p).

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