Adult Thayer's Gull
St. John's, Newfoundland - March 12th, 2006

On the morning of March 12, 2006 an adult Thayer's Gull (*Larus thayeri*) was observed at the local landfill in St. John's, Newfoundland (47'34" N, 52'43" W; *J Clarke & B Mactavish*). The bird was observed and extensively photographed over the course of approximately 45 minutes, in excellent light.

The description provided below is based on a combination of field observations and photos.

Description

Initial impressions. When originally spotted, the gull was feeding amongst the garbage with Herring (*L. argentatus smithsonianus*), Glaucous (*L. hyperboreus*) and Great Black-backed Gulls (*L. marinus*). Despite appearing structurally most like an adult Herring Gull, it immediately stood out as different due to the combination of cloudy head streaking (more typical of local Kumlien's Gull [*L. glaucoides kumlieni*]), solidly black primaries, and dark eye. The bird immediately changed position in the garbage, allowing observation of the legs, which appeared deep pink-purple.

Structure. In overall size and structure, the individual most resembled an adult Herring Gull. In direct comparison with nearby individuals of that species, it appeared only slightly smaller and shorter legged. The head shape, especially when alert, was also reminiscent of Herring Gull – relatively large with a squared-off nape and a low, sloping forehead (see Photos 1 & 2). It appeared relatively long billed, with a slight but notable hook at the tip. The neck, which was thick and broad in alert posture, added to the overall bulky appearance and Herring Gull like structure.

Mantle. In the field, the mantle was a medium grey and appeared to be just slightly darker than adult *smithsonianus* Herring Gulls in direct, side-by-side comparison. There were no dark markings on the upperparts (or tail), supporting the identity of this individual as an adult (4th winter or older).

Head streaking. The individual exhibited a relatively dark brown, smudgy streaking that encompassed the entire head and neck, and extended onto the breast. The markings were darkest and most concentrated on the nape. While most of the markings were smudgy in quality, those on the crown were notably thinner, like pencil streaking, and those on the breast patterned, like thumbprints (see Photo 3).

Eye colour. The dark eye was one of the first and most notable field marks, making the bird stand out. Using both field observations and photos, the eye was found to be completely dark, and the iris discernable from the pupil only in direct light. Using the same eye colour scoring as Howell and Elliot [*1*], this individual would easily be assigned a score of 0 – 0.5 ("Iris uniformly dark brown").

Bare parts. The bill (Photo 3) appeared relatively long, with the length from gape to tip nearly equal to the distance from the gape to back of the head. The basal portions of the upper and lower mandibles were seemingly parallel, with a pronounced gonydeal angle and a slight but notable hooked tip. The upper mandible was uniformly dull yellow, while the base and tip of the lower mandible exhibited a pale greenish colouration. The gony spot was deep red, and while appearing relatively large was confined to the lower mandible. Except for a small black mark basal to the gony spot, there were no other dark markings on the bill.

The orbital ring, while too dark to be reliably observed in the field, was subsequently noted to be deep purple in the photographs.

The legs stood out in the field as deep pink-purple – unlike any Herring Gull or typical Kumlien's Gull routinely observed in the area. This can be noted in Photo 1 above.

Wingtip. At rest, the folded primaries (Photo 1, above) appeared black (Estimated Kodak Grey = 16-17) with relatively large, white apical spots that were evenly spaced but slightly decreasing in size towards the wingtip. The black on P10 extended along the entire outside edge to meet the primary coverts. Overall, the bird had a relatively long-winged look, with P10 being

slightly longer than P9, and the tip of the tail even with the tip of P7.

In flight, it was noted in the field that there was limited black in the wingtips – significantly less than Herring Gull but more (and darker) than any *average* Kumlien's Gull. The darkness of the primaries was noted to be uniform across both webs. Subsequent analysis of the wingtip from photos showed a pattern typical of Thayer's Gull (Photos 4 and 5). As can be seen, P10 is white to the tip, with a small, broken subterminal band and a moderate but incomplete medial band spanning only the outer web. Using the convention described in Howell and Elliot [*1*], this would receive a P10 Score = 5. Notably, there is a complete subterminal band on P6, being slightly wider than the white tip. A small black mark can also be seen on the outer web of P5 (Score = 1).

Using the wingtip scoring convention described by Howell and Mactavish [*2*], this individual would be considered as having a Stage 6 pattern (P5-10 scores = 2-4-5-5-5-3).

Discussion

Thayer's Gull is an enigma of the birding world, and has stirred up nothing but controversy since it was first described by W.S. Brooks in 1915 [*3*]. Since then, with the passage of time and developing knowledge, it has been arbitrarily considered a subspecies of Herring Gull (*L.argentatus*; [*4*]), Iceland Gull (*L. glaucoides*; [*5*]), or currently as a full species (*L. thayeri*; [*6,7*]). While Thayer's Gull may superficially resemble Herring Gull in some aspects, the real identification dilemma has been in separating it from the much more similar Kumlien's Gull (typically considered a subspecies of Iceland Gull, *L.g. kumlieni*), which comes in a mind-boggling variation spanning from the white-winged appearance of nominate Iceland Gull to the nearly black-tipped wings of Thayer's Gull. This is especially true in the North Atlantic, where Kumlien's Gulls overwinter in large numbers, and would typically be considered well out-of-range for Thayer's Gull.

And this individual is no exception. While there is little doubt, or disagreement, that this particular bird would pass easily as a Thayer's Gull on the west coast of the continent, the stumbling block in Newfoundland is reliably eliminating the possibility that it is an extreme variation of Kumlien's Gull. The following discussion is meant to shed some light on this contentious subject, in the context of some recent research and growing knowledge about these taxa. (*Note – The issue is also somewhat complicated by the possible hybridization of Thayer's and Kumlien's Gulls. Does it occur, how*

frequently, and which phenotype would the resulting offspring exhibit? Until more is known to help answer these questions, it is beyond the scope of this discussion.)

For avid winter gull-watchers in St. John's, it is not unusual to see an individual from time to time that, at least initially, appears to be a candidate for Thayer's Gull. The majority of these birds are first winter types, which arguably are more difficult to "pin down", and often show at least one inconsistent field mark. Interestingly, potential adult Thayer's Gulls are few and far between, with solid candidates occurring less than annually [*B Mactavish, pers. comm.*]. Very few have exhibited all field marks currently considered necessary to distinguish between Thayer's Gull and extreme dark-winged examples of Kumlien's Gull.

The individual described above is possibly the best candidate for an adult Thayer's Gull observed in this province in recent years, showing all characteristics consistent with that species, and many which are considered out-of-range, or at least extremely atypical, for Kumlien's Gull. Structurally, this bird resembled Herring Gull in many aspects – including overall bulk, head and bill shape, and wing length. While a minority of Kumlien's Gulls will tend towards some of these features, it is certainly not usual [*pers. obs.*], with most appearing relatively petite, with a rounder head shape and steeper forehead [*2*], and shorter primary projection [*pers. obs,, 7*]. While the majority of adult Kumlien's Gulls have mantles that are notably paler grey than *smithsonianus* Herring Gulls, this individual appeared to be just slightly darker than nearby adults of that species in the field.

While there is some overlap in bare part colouration between these two species, Kumlien's Gulls rarely exhibit the deep pink-purple legs observed on the bird in question – a field mark considered typical of Thayer's Gull. Similarly, this individual showed a pale greenish base to the bill, and a notably hooked tip – again features consistent with Thayer's Gull but quite unusual for Kumlien's Gull [*pers. obs., 1*].

Despite this already interesting set of characteristics suggesting Thayer's Gull, it is often thought that wingtip pattern and eye colour are among the best features in distinguishing between these two species. A recent set of extensive studies carried out on presumed adult Thayers Gulls (California, [*1*]) and presumed adult Kumlien's Gulls (Newfoundland, [*2*]) have provided some very useful data on these issues.

The extremely dark eyes of the bird in question were one of the first and most striking field marks observed, and it would be considered to have an eye score of 0 – 0.5 (see description above). While some similarly dark-eyed Kumlien's Gulls do occur infrequently [*pers. obs.*], the relative rarity of this is clear in the fact that out of 393 adults studied, no individuals received a score of 0.5 or less, and only 6% were found to have score ≤1.5 (1.5 = "Greenish or yellowish, extensively mottled brown"). On the other hand, 14% of Thayer's Gulls in California ($N = 283$) had an eye score of 0.5 or less, and a further 48% scored 1.0 or 1.5 [*2*].

At rest, and in good light, this bird displayed dark blackish-grey primaries (Estimated Kodak Grey = 16-17), which were evenly dark across both webs in flight. This wingtip colour is typical for Thayer's [*1*], while only 5% of 185 Kumlien's Gulls observed in Newfoundland exhibited primary darkness in this range (Estimated Kodak Grey = 14.5 – 17) [*2*]. Even in many of the Kumlien's Gulls that do show blackish-grey wingtips, the darkness is not uniform and fades to paler on the inner webs [*B Mactavish, pers. comm.*]. Remarkably, Howell & Mactavish [*2*] report that, based on this factor alone, 98% of adult Thayer's Gulls were separable from 95% of adult Kumlien's Gulls.

The observed wingtip pattern (see Photos 4 & 5 above) is typical of Thayer's Gull, and generally considered out-of-range for Kumlien's Gull (see *Plates 13-18 pg. 29, Plates 1-3 pg 30* [*7*]; *Plate 2* [*2*]). As described above, the bird showed a small, broken subterminal band on P10, complete subterminal bands on P6-P9, and a small black mark on P5 – a combination resulting in a Stage 6 primary pattern. Only 5% of 345 Kumlien's Gulls observed exhibited a similar stage primary pattern [*2*]. Notably, the mirror on P9 did not extend fully across both webs – a feature considered typical of Thayer's but not of Kumlien's Gull [*7*].

This extreme wingtip pattern, blackish-grey primaries, and dark eye are well out-of-range for typical Kumlien's Gull. Combined with the overall bulkiness, head and bill shape, mantle colour and bare parts colouration, all field marks point strongly to Thayer's Gull versus Kumlien's Gull. However, gulls are a frustratingly variable group, with these taxa being especially problematic, and some would contend that it is not possible to "absolutely" rule out an extremely atypical form of Kumlien's Gull as a possibility, given the location.

Clearly, there remains much to be learned about the variation both within and between these taxa, and the identification of Thayer's Gull type individuals on the east coast will continue to be a contentious topic for some time. Nevertheless, the individual discussed above is among the best, and most well documented, records for Thayer's Gull in Canada's most easterly province to date.

References

[1] Howell SNG, and Elliot MT (2001). Identification and variation of winter adult Thayer's Gulls, with comments on taxonomy. *Alula* 7: 130-144.

[2] Howell SNG, and Mactavish B (2003). Identification and variation of winter adult Kumlien's Gulls. *Alula* 9: 2-15.

[3] Brooks WS. Notes on the birds of East Siberia and Arctic Alaska. *Bull. Mus. Comp. Zoology* 59: 261- 413

[4] Dwight J (1925). The gulls (Laridae) of the world: their plumage, moults, variations, relationships, and distribution. *Bull. Amer. Mus. Nat. Hist.* 52: 63-402.

[5] Godfrey WE (1986). *The Birds of Canada*, revised ed. National Museums of Canada, Ottawa.

[6] American Ornithologists' Union (1998). *Checklist of North American Birds*, 7th ed. AOU, Washington DC.

[7] Olsen KM (2004). *Gulls of North America, Europe and Asia.* Princeton University Press. New Jersey.

[8] Pittaway R (1999) Taxonomic history of Thayer's Gull. *Ontario Birds* 17: 2-13.