Cardinal:			
25	P.I.(Hellcat)	1	R.Stymeist
Rose-breaste	d Grosbeak:		
thr.	W.Roxbury	15-20	F.Atwood.v.o.
Indigo Bunti	ng:		
thr.	Manomet	2(banded)	M.B.O.Staff
House Finch:			
thr.,26	Wollaston, P.I.	11,1	R.Emery, BBC(H.Weissberg)
Red Crossbil	1:		
23	Chilmark(M.V.)	2+	E.Chalif
Rufous-sided	Towhee:		
thr.	Manomet, Plymouth	19(banded),7(banded)	M.B.O.Staff
Grasshopper	Sparrow:		
8	Falmouth(CWA)	13	R.Pease
Henslow's Sp	arrow:		
1-15	Leicester(Worc.Airport	) 1-5(max.4th)	R.Stymeist#,v.o.
Sharp-tailed			
25	Newburyport, Westport	20+,3	J.Berry, BBC(S.Grinley)
Seaside Spar	row:		•
thr.	Manomet	l(banded)	M.B.O.Staff
4,7	Chatham, S. Dartmouth	1,7	H.D'Entremont, R.Emery#
Vesper Sparr			
18,24	P.I.,Wellfleet	1,6	BBC(I.Giriunas), W.Petersen#
Lark Sparrow	:		
27	Monomoy	1	J.Harris, v.o.
Dark-eyed Ju	nco:		
22	Weston	1	L.Robinson
Clay-colored	Sparrow:		
31	Monomoy	1	W.Bailey, R.Pease
Song Sparrow	•		
thr.	Manomet	22(banded)	M.B.O.Staff

S.P.G.

## THAYER'S GULL (Larus thayeri)

## J. T. Leverich, Cambridge

Now that Thayer's Gull has been officially added to the A. O. U. <u>Check-list</u>, Massachusetts birders will have even more incentive to watch for it. Most Thayer's Gulls winter on the Pacific coast. The species is thus decidedly rare in this state, but it may prove to be of regular occurrence. However, field identification is definitely difficult! Only those birders completely familiar with our more common winter gulls should attempt to call it. Field reports submitted to BIRD OBSERVER should be fully documented, detailing exactly which field-marks were seen, what the visibility conditions were, whether comparison birds from closely related species were present, etc.

Diagnostic field marks of the adult Thayer's Gull are as follows:

1. GENERAL PATTERN: a white-bodied gray-winged gull, rather like an intermediate between a Herring Gull and the darker race of the Iceland Gull (i.e., the subspecies referred to as Kumlien's Gull).

2. SIZE: slightly larger than Kumlien's Gull, slightly smaller than the Herring Gull.

3. EYE-RING: reddish-purple, as in all races of the Iceland Gull.

4. EYE (IRIS): dark brown, usually mottled in appearance.

5. MANTLE: light gray -- the same shade as in the Herring Gull, that is, definitely darker than the pearly gray of the Iceland and Glaucous Gulls.

6. WING-TIPS: black with white spots ("mirrors"). Compared with the Herring Gull, Thayer's usually shows less black in the wing-tips, and its mirrors are correspondingly larger. WARNING! There is much individual and geographic variation in both Thayer's Gull and Kumlien's Gull. Many Kumlien's Gulls and all individuals of the eastern (Greenland) subspecies of the Iceland Gull have clear yellow irises. Other Kumlien's, however, have considerable brown mottling of the iris. These same individuals have the darkest wingtips (very dark gray, but never black). Such birds are <u>identical</u> to the lightest individuals of <u>Larus thayeri</u>, except for mantle coloration. Personally, I would not want to identify a "confusing" individual, displaying the above pattern, unless the bird were in hand, so that various confirmatory quantitative measurements could be made. As a rule of thumb, Thayer's Gull should not be called UNLESS THERE IS BLACK IN THE WING-TIPS.

Past reports of Thayer's Gull in Massachusetts are concentrated in or near the month of February, when the population of white-winged gulls reaches its peak. The specific localities mentioned were: the north end of Plum Island; Gloucester Harbor, especially near the sea wall at Eastern Point; and Brace's Cove, Gloucester. REFERENCE: Neal G. Smith, <u>Evolution of Some Arctic Gulls (Larus)</u>: <u>An Experimental Study of Isolating Mechanisms</u>, Ornithological Monographs No. 4, 1966, which is available from the A. O. U. for \$2.50.

This volume, by the way, is surely one of the finest speciation studies ever written. The monograph may be viewed as a proof that Thayer's Gull forms a separate and distinct species. In support of this thesis, Smith spent three summers in the Canadian Arctic studying a complex of four closely related gull species (Herring, Kumlien's, Thayer's and Gleucous). He marshalls an imposing array of ecological, morphological and behavioral differences, each of which may (and probably does) serve as a mechanism for insuring the reproductive isolation of these four species.

The most celebrated section of the monograph reports a fascinating series of experiments in which the eye-ring color of various birds was altered to that of a different species. (Smith also "altered" the iris color of certain dark-eyed birds by painting huge new "eye-rings" on the head, so that part of the white head-feathering might serve as a (fake) light iris.) The experiments were performed on both sexes separately and were repeated at different stages of the reproductive cycle. Smith's conclusions are most interesting:

1. It is the female gull that initiates the pair-bond, and she invariably chooses a mate with an eye-head pattern identical to her own. In this first stage of the breeding cycle, if the males are "altered," then the female wil pair-bond with the wrong species. An "altered" female, however, will correctly identify (unaltered) conspecific males. This and other evidence suggests to Smith that the female is fixated on the eye-head pattern of her own parents, rather than being in any sense "conscious" of her own appearance. Males consent to any pair-bond situation, whether appropriate or not.

2. Once the pair-bond is formed, no alteration of the male's appearance will cause the female to reject him.

However, if the male is bonded to a female with an (apparently) incorrect eye-head pattern, then he will fail to reach breeding readiness. His gonads will not develop, and he will remain unable to copulate. Such a male, persistently unresponsive to the female's mating overtures, will after a few days be discarded, and the pair-bond will be ruptured.

3. Alteration of either sex when performed after the pair-bond has been cemented by several successful copulations has no effect on the pair.

Smith's monograph is a strictly scientific contribution to the professional literature. The author is careful, however, to explain all technical jargon as it is introduced. Statistical tables and charts abound, and mathematical uninitiates can easily subsist on very thorough verbal explanations. This study contains <u>the only reliable set of</u> <u>illustrations of Thayer's Gull</u> that I have been able to locate.<sup>#</sup>

If you have never tried reading any technical ornithological literature, Smith's monograph is a fine piece to start with.

\* There is also a drawing of <u>Larus thayeri</u> on page 95 of Fisher, James, and Roger Tory Peterson, <u>World</u> of <u>Birds</u>, Crescent Books, revised edition. - Ed.

## Abbreviations

ad.	adult		
imm.	immature		
m.	male		
f.	female		
max.	maximum		
thr.	throughout		
v.o.	various observers		
#	additional observers		
ABC	Allen Bird Club		
BBC	Brookline Bird Club		
CCBC	Cape Cod Bird Club		
FBC	Forbush Bird Club		
FCBC	Felix Cutler Bird Club		
NVBC	Nashoba Valley Bird Club		
PBC.	Paskamansett Bird Club		
SSBC	South Shore Bird Club		
CWA	Crane Wildlife Area		
GMNWB	Great Meadows Nat'l. Wilflife Refuge		
IRWS	Ipswich River Wildlife Sanctuary		
MBO	Manomet Bird Observatory		
MNWS	Marblehead Neck Wildlife Sanctuary		
WBWS	Wellfleet Bay Wildlife Sanctuary		
A.A.	Arnold Arboretum		
A.P.	Andrews Point		
E.P.	Eastern Point		
F.H.	Fort Hill, Eastham		
F.M.	Fowl Meadow, Milton		
Mt.A	Mt. Auburn Cemetery		
M.V.	Martha's Vineyard		
P.I.	Plum Island		

THE 74TH CHRISTMAS COUNT

Interest in the annual bird census (this year scheduled nationally for dates between Saturday, December 15th and Tuesday, January 1st) continues to grow each year. To many birders the Christmas Count is as traditional as the Christmas Tree or Plum Pudding.

Last year's census was no exception, and a total of 1,013 counts were published in <u>American Birds</u>. All but seven were from the United States and Canada, the others being from Mexico (2), Guatemala, British Honduras, El Salvador, Puerto Rico, and the U.S. Virgin Islands. In all, over 15,000 participants recorded 71,183,807 individuals representing 911 species!

In Massachusetts there were counts in Athol, Buzzards Bay, Cape Cod, Central Berkshire, Concord, Marshfield, Martha's Vineyard, Millis, Nantucket, New Bedford, Newburyport, Northampton, Northern Berkshire, Quincy, Springfield, Taunton, Westminster and Worcester. For the second year, the new Greater Boston Count will replace the Belmont and Jamaica Plain counts of previous years.

If you would like to join the Boston Count (Sunday, December 16th) or any other one, contact the undersigned at 54 Banks St., Cambridge, Mass. 02138.

Robert H. Stymeist



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