

# Thayer's Gulls from western Christmas Bird Counts: a cautionary note

David M. Mark

ONE OF THE CHIEF justifications for the annual Christmas Bird Counts is to provide a data base for studies of population trends. The data, however, are subject to a number of variables, one of which is the field identification expertise of the observers.

Since Thayer's Gull (*Larus thayeri*) was officially reinstated as a full species distinct from the Herring Gull (*L. argentatus*) in 1973 (A.O.U., 1973), this gull has been counted as a separate species in Christmas Bird Counts (hereafter CBCs). Analysis of data for all CBCs from 1973 to 1978 in Alaska, British Columbia, Washington, Oregon, California, Idaho, Nevada, and Arizona clearly shows that these two species have not been properly distinguished, in at least some of these counts. The CBCs do not appear to contain sufficiently reliable information to provide a good statement concerning the relative abundance and distribution of Thayer's Gull on its principal wintering area in western North America.

## FIELD IDENTIFICATION OF THAYER'S GULL

THIS IS NOT an identification paper, and only brief remarks will be included here. While Thayer's Gull may indeed be "as easily distinguishable in the field as some of the other species" (Wahl and Paulson, 1974, p. 16), this does not mean that it is easy in an absolute sense. The problem is intensified by the fact that Thayer's Gull was not illustrated in the then current editions of the widely used field guides (Peterson, 1969; Robbins *et al.*, 1966), since it was not considered to be a full species when those guides were published. (In Peterson, 1980, the portrait is of an adult head). In eastern North America, the principal source of confu-

sion is with the Herring Gull (*L. argentatus*); Gosselin and David (1975) present a good discussion of points of distinction between these. In the west, however, the Glaucous-winged Gull (*L. glaucescens*) may resemble Thayer's Gull in darkness of wing-tips, since some Thayer's Gulls show almost no black there. The Western Gull (*L. occidentalis*; particularly lighter northern birds), and certain hybrid gulls, especially Herring x Glaucous-winged from Alaska (Williamson and Peyton, 1963) and Glaucous-winged x Western from the outer coasts of Washington and British Columbia (see Wahl and Paulson, 1974, p. 88) add to the confusion. Observers in areas where any gulls may be counted should make an effort to familiarize themselves with all the plumages of all the possible gulls in their area before the count, by both reading and field studies. Useful identification information for Thayer's Gull can be found in Godfrey (1966), Wahl and Paulson (1974), Gosselin and David (1975) and Kautesk (1976).

## THAYER'S GULL AND CHRISTMAS BIRD COUNTS

CONSIDERING THAT even experts are cautious about identifying some in-

dividual gulls in the field, it is not surprising that many counters, party leaders, or even compilers may have difficulty distinguishing Thayer's Gulls from their congeners (or, as may be more to the point in some areas, identifying Herring Gulls!). Many compilers have probably tended to practice "rule-of-thumb" ornithology by making assumptions about supposed relative frequencies of gulls in their areas. Unfortunately, though, it would appear that some counts have used wrong "rules-of-thumb".

## ANALYSIS

NO ATTEMPT HAS been made to "standardize" figures by dividing by party-hours or other measures of count effort. Such a division is generally mathematically unsound, and furthermore, Raynor's results (1975) suggest that different effort measures may be optimal for different species. Rather, Thayer's Gull totals were expressed as percentages of Thayer's plus Herring Gull totals. This is, in effect, a variation on the "reference species" approach (Raynor, *op. cit.*): here, the reference "species" is all dark wing-tipped, light-mantled, pink-legged larger gulls.

Table 1: Percentage of Thayer's Gulls among "Thayer's-plus-Herring" Gulls in western CBCs, 1973-1978

	1973	1974	1975	1976	1977	1978
Alaska	26.7	0.4	0.4	2.5	7.4	3.6
British Columbia	27.7	21.9	57.5	70.3	82.0	34.6
Washington	12.0	16.1	22.6	31.8	41.2	41.5
Oregon	16.6	13.3	5.8	9.0	5.6	7.6
California	1.1	1.2	1.5	5.4	8.9	6.9
Inland States	0.0	33.3	0.0	0.0	12.0	0.0
Western Region, Total	5.2	9.5	15.3	20.8	20.3	11.9
Number of Thayer's Gulls	640	1050	2846	2642	3326	2411

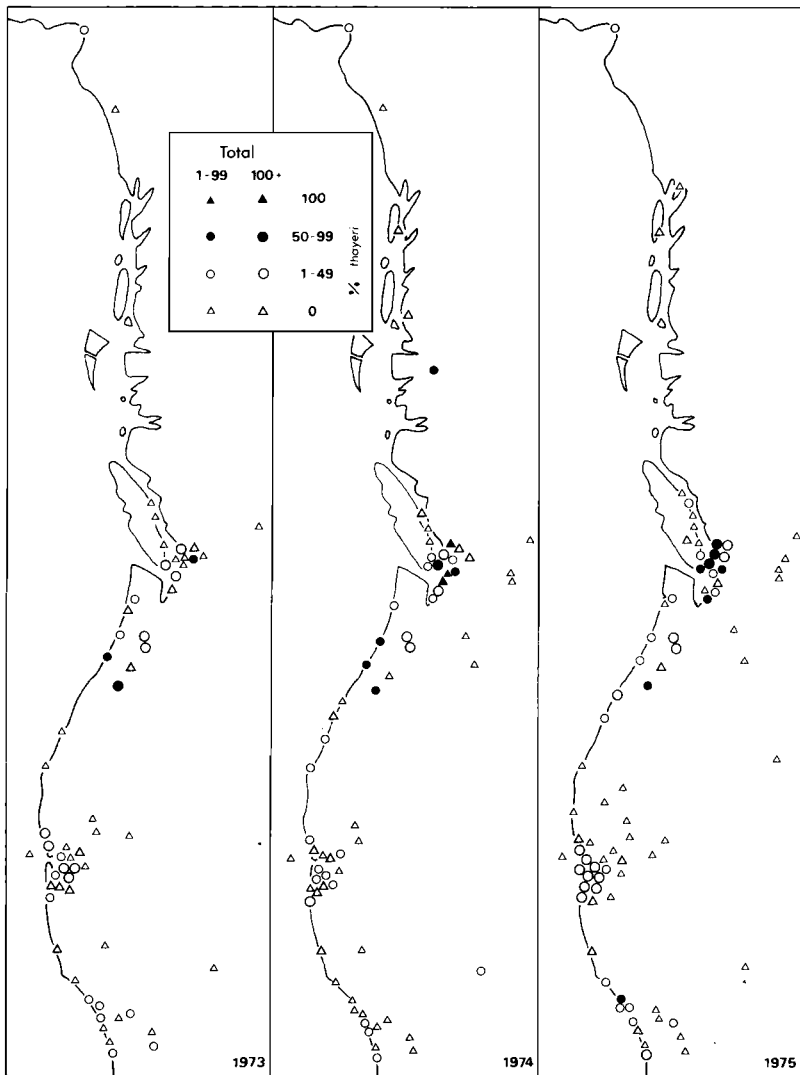


Figure 1. Relative abundance of Thayer's and Herring gulls on western Christmas Bird Counts, 1973-1975.

Results of western CBCs for Thayer's Gull are shown in Table 1 and Figure 1. The apparent dramatic increase in Thayer's Gull is not considered to represent any population trend, but more likely reflects changing perceptions of western birders and a growing awareness of this "new" species. The fact that the 1976 and 1977 percentages were similar, and that the 1978 percentage was lower, suggest that an overall "equilibrium" may have been reached. However, a close examination of some areas appears to show an improbable degree of local variation in the relative frequencies of Thayer's and Herring gulls. It seems that much of this variation should be attributed to the observers and/or compilers, rather than to the birds themselves.

The problem is well illustrated by an examination of CBCs from northwestern Washington and southwestern Brit-

ish Columbia (Figure 2), the presumed center of abundance of Thayer's Gull in winter (Bent, 1921; Munro and Cowan, 1947). My personal observations and independent data indicate that Thayer's Gull is far more common in at least the Vancouver area (Campbell *et al.*, 1972, 1974; Kautesk, 1976) and the Qualicum area of eastern Vancouver Island (N. K. Dawe, *pers. comm.* 1976). In fact, Kautesk (1976) suggests that the ratio favors the Thayer's Gull by 200 to 1 in the city of Vancouver itself. In light of this, the 551:1 ratio favoring the Herring Gull on the nearby Pitt Meadows count in 1975 (Figure 2) seems very unlikely. Similarly in 1975, three of the four more northerly counts on the east coast of Vancouver Island report no Thayer's Gulls at all, and the fourth places the species in bold-faced type. This is in direct contrast with Dawe's extensive and my own more limited observations

in this area. The 1978 Figures (Table 2) show a similar pattern of variation.

Table 2: Numbers of Thayer's and Herring Gulls in Christmas Bird Counts in the Puget Lowland-Georgia Strait Area, 1978-1979.

	<i>thayeri</i>	<i>argentatus</i>
<b>British Columbia Counts</b>		
118. <sup>1</sup> Campbell River	35	27
120. Comox	0	178
121. Deep Bay	1	76
122. Duncan	6	59
125. Ladner	183	1016
126. Nanaimo	1	14
127. Pender Islands	517	21
129. Pitt Meadows	10	344
130. Sayward	0	1
134. Vancouver	239	64
137. Victoria	24	17
138. White Rock	4	78
<b>Washington Counts</b>		
1111. Bellingham	109	8
1114. Everett	0	0
1116. Kitsap	0	15
1118. Olympia	1	4
1119. Port Townsend	0	45
1120. San Juan Islands	11	0
1121. Seattle	28	8
1122. Sequim-Dungeness	11	10
1124. Tacoma	86	139

<sup>1</sup>Numbers are Count numbers in *Am. Birds*, 33(4) 1979.

## CONCLUSIONS

IN VIEW OF THE inconsistencies of reporting of Thayer's and Herring gulls in an area where both are known to occur with regularity, I have little confidence in data for these species in western North America. At the very least, compilers should make a serious effort to examine critically the relative early-winter frequencies of large gulls in their regions, in order to establish "baselines" for evaluating and perhaps adjusting count figures. Perhaps at best, observers and compilers should be more willing to record doubtful or difficult birds as "gull sp." (as recommended by Kautesk, 1976). In any event, it is strongly recommended that no quantitative interpretations of data for Thayer's or Herring gulls in the West should be based on the 1973-1975 counts in particular, nor on any later count years until the apparent inconsistencies noted above are either corrected or confirmed.

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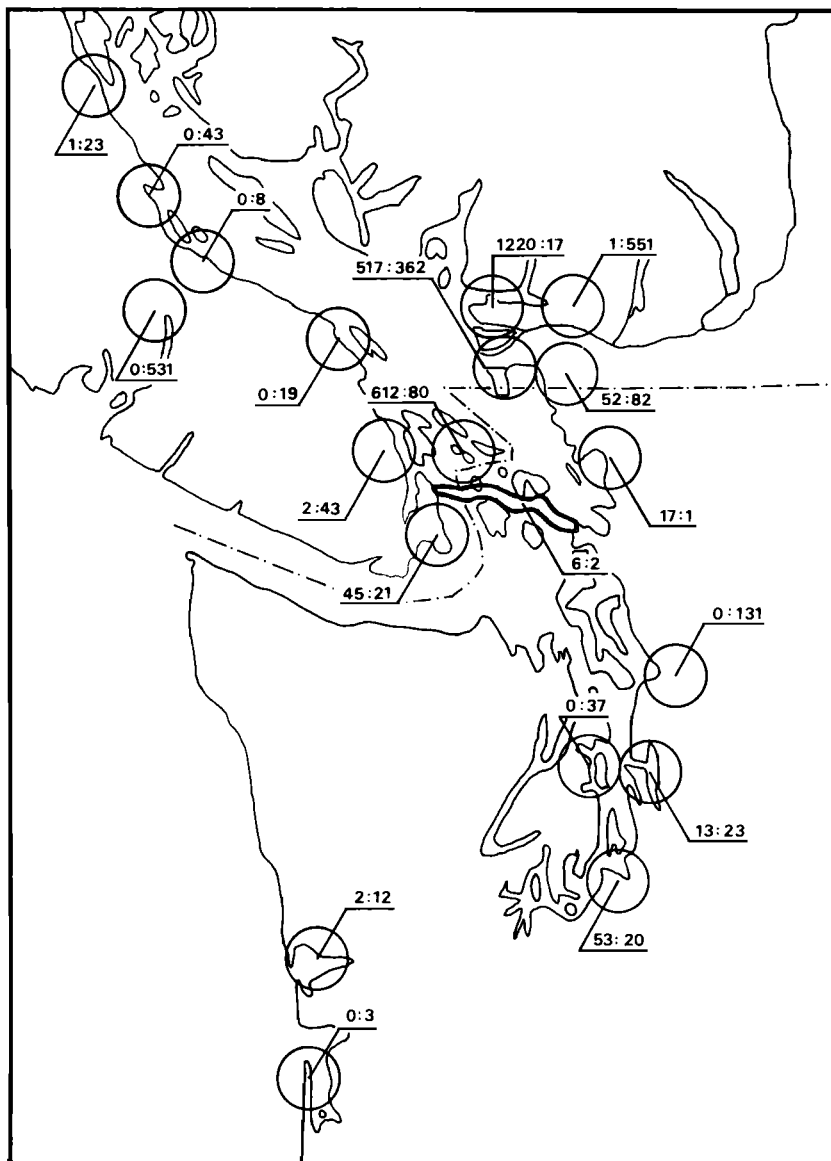


Figure 2. Relative abundance of Thayer's and Herring gulls in southwestern British Columbia and northwestern Washington, 1975. (Number of Thayer's/number of Herrings).

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—Department of Geography,  
The University of Western Ontario,  
London, Ontario, Canada, N6A 5C2