TRAVELS OF HERRING GULLS

Presented at Annual Meeting of EBBA, April 22, 1961,
By Mabel Gillespie

My original idea in planning to present a paper on Herring Gulls was to compare the results my husband and I realized in the nineteen-thirties with the results I obtained in the past four years. In the years 1929 to 1936 we banded a total of 269 Herring Gulls, and were notified of fifteen recoveries or 5.5 percent of the total banded. In the years 1957, 58, and 59 I banded a total of 950, and have been notified of fourteen recoveries or 1.47 percent.

A study of these data led me to ask fellow banders how their totals of Herring Gulls banded compared with numbers of recoveries. William Pepper and Grace Meleney responded with detailed lists and information, and urged me to make any use of their data I wished. I am very much indebted to them for the whole-hearted cooperation that has made this study possible.

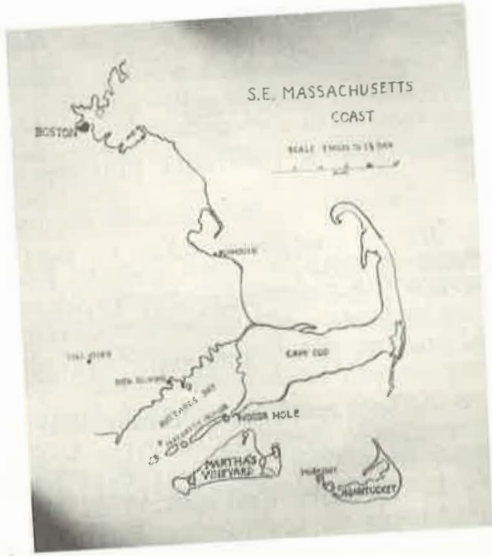


Chart 1. Places of banding.

The first chart shows a map of the island areas south of Cape Cod where all the banding was done. In the nineteen-thirties Herring Gulls were just beginning to nest in the Muskeget area. Muskeget is almost exactly eighty miles in a southerly direction from Logan Airport in Boston. As far as I can determine, this island was originally little more than a sand bar occupied by nesting terns.

As the growing fertility from tern droppings encouraged vegetation, Laughing Gulls were attracted. They nested in the poison ivy jungles while several species of terns occupied the more sandy wastes. Laughing Gulls, in the past, had nesting colonies along the New Jersey, Long Island, and New England coasts, as reported by Bent in Life Histories. By the time Bent published the volume on gulls and terns in 1921, most of these colonies had disappeared. This was before Herring Gulls began their southward population explosion, so they cannot be blamed. The culprits might well have been plume hunters. The latter nearly wiped out the Muskeget colony in the eighteen-eighties.

On Muskeget, however, thanks to the determined efforts of a conservation-minded individual, Laughing Gulls increased from a few pairs to an immense colony. Today, terns have practically vanished from Muskeget, Laughing Gulls are crowded into limited areas, and Herring Gulls are nesting by thousands. A few Great Black-backed Gulls now nest there, with numbers increasing each season.

At present Herring Gulls are nesting on Nantucket, on Tuckernuck, throughout an extensive area of sand dunes at Lobsterville on the Vineyard, and in several areas on Chappaquiddick Island. In this study the whole island area is considered as a unit.

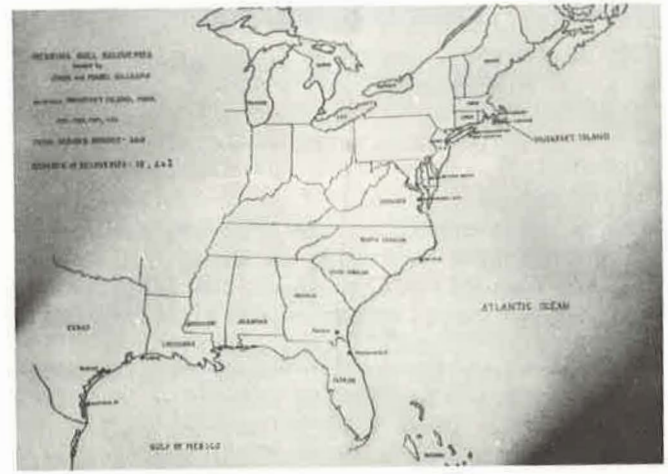


Chart 2.

Dispersal.

The second chart has been made from a map I prepared years ago when I presented a paper on Herring Gull recoveries to this very association. It shows the dispersal of Herring Gulls which were banded for the most part on a barrier beach extension of Muskeget. The recovery points along the Atlantic and Gulf coasts suggested a possible migration route that cuts across the Florida peninsula. It was partly through an attempt to see if other banders had results that would suggest a similar route, that I embarked on this study.

HERRING GULL RECOVERIES

BY LOCATION

	MELENEY			GILLESPIE		PEPPER
MICHIGAN		1				
CANADA	1		2			
N.H.					1	
MAINE			5			1
MASS.	1	2	10	2	2	21
R.I.		4	7			5
CONN.			2	1	1	3
N.Y. [illegible] L.I.	2	4	8	3	4	9
N.J.	2	4	3	1	3	6
DEL.	3			1		1
MD.			2		1	
VA.		1	2	1		5
NC.		3	1	1	1	3
S.C.						2
GA.	1	1				1
FLA.	3	2	3	1	1	2
ALA.						
MISS.			2	1		1
LA.	3					
TEXAS	3	2		3		3
MEXICO	1					
CUBA						1
BAHAMAS						1

Chart 3. Recoveries by location.

The third chart tabulates the recovery data of Pepper, Meleney and Gillespie. I have been arbitrary in using the strict definition of "recovery". The banding office sends the identical form to the bander whether the bird in question was reported at the nesting site a few days after banding, or was reported from a foreign country ten years later. Obviously, among a species as notoriously fratricidal as the Herring Gull, there will be a considerable number of casualties among newly fledged individuals. These have no bearing on the dataof migration or longevity. Therefore I have omitted all recovery reports of birds found dead at or near their nest sites in less than two months after banding. The recovery percentages are based on banded gulls which (1) left the

islands even if they travelled as short a distance as to the Massachusetts mainland, (2) which were reported in the nesting vicinity after an interval of two months, and (3) which returned after a migration interval.

For instance, of Pepper's Massachusetts recoveries, twenty-eight were reported dead near their nesting area in less than two months after being banded, and are not included in reckoning percentages. Six were shot or found dead on Martha's Vineyard two months or more after banding. Fifteen were reported from the Massachusetts mainland, and twenty-six others travelled greater distances.

I have also arbitrarily divided the banding done by Pepper, Meleney, and Gillespie into three time intervals. My husband and I collected data between 1929 and 1936. Miss Meleney collected data between 1930 and 1937. These overlapping dates constitute the first period - the time when Herring Gulls were first establishing nesting colonies on Muskeget. By 1949 when Miss Meleney resumed gull banding, Herring Gulls were also nesting on Martha's Vineyard. For four years she was the only bander I know of working with gulls on the Vineyard. This is the second interval. In 1954 Mr. and Mrs. William Pepper started banding on the Vineyard and continued through 1958. In 1959 and 1960 they banded on Nantucket and Muskeget. I resumed gull banding in 1957 and have continued each year since. The third period includes all gull banding activities from 1954 through 1959. It seems better to omit the banding statistics of gulls banded in 1960. In the first place there has not been time for a significant number of recoveries to have been reported. In the second place, statistics of the 1792 Herring Gulls that the Peppers banded that year, most of them on Muskeget, may be distorted by the poison experiments on the island.

All three sets of data show a slight tendency toward northward movement of gulls of the year in late summer or early fall. The Michigan recovery can be dismissed as probably aberrant. There are three records from Canada, six from Maine, one from New Hampshire, and thirty-eight from Massachusetts. However, since Herring Gulls are not generally oceanic birds, the obvious migration route would be from the islands to the mainland before taking off to the south, and such a route first takes the gulls at least slightly to the north. The fact that recoveries are reported continuously along the coast indicates that such a route is followed.

John Dennis, reporting on data from the Nantucket banders, states that "Young of the year move north first, then south." W. John Smith in "Movements of Michigan Herring Gulls (Bird-Banding, April 1959) states: "There is some evidence of a northward tendency in the early autumn, but recoveries from sparsely settled northern Ontario and Quebec are too few to characterize it properly." Since birds banded on the southern Massachusetts islands seem to move along the coast when trending north, there

would be more likelihood of recoveries than in the sparsely settled areas north of Michigan, but the percentages from the two areas do not vary appreciably. Therefore, there seems to be only a slight tendency toward late summer dispersal northward.

From Massachusetts south there is a decided coastal migration route indicated, with numbers of recoveries gradually tapering off. From Florida, however, there are twelve reports. Five are from Jacksonville; one each from Smyrna Beach, Coronado Beach, and Daytona Beach; all of which are just a bit further south than Jacksonville on the Atlantic coast. One is from Tarpon Springs just opposite on the Gulf coast, and two from Pensacola. The twelfth was reported from Key West, but was also reported as a Laughing Gull. Since we were banding both Herring and Laughing Gulls at the same time, our report may be in error, and I hesitate to accept the record. Yet, in so doing, I run the risk of manipulating the records to fit the theory that the migratory route of Herring Gulls is across the northern end of the Florida peninsula to the Gulf coast.

(Since the reading of the paper I have received further information that discredits the above theory. John Dennis, after reading a copy of the paper, writes: "I have spent three fall seasons, while attending the University of Florida, at or near Gainesville in north-central Florida. We were located on a large lake part of the time. I do not recall seeing any Herring Gulls although I do believe Laughing Gulls were plentiful at times. This would seem to argue against a north Florida crossing. At the same time, I know from experience at Miami that Herring Gulls are very plentiful there, but, of course, do not know their origin."

(I have also received from Mr. Pepper further data on travels of his banded Herring Gulls. Even though this includes reports on some gulls banded in 1960, they are here mentioned. There were one each from coastal Massachusetts, Connecticut, Long Island, and Mobile, Alabama. There were five from Florida: one each from New Smyrna Beach, Ponte Vedra Beach, Daytona Beach, N. Miami Beach, and Saratoga. The two latter sites are, of course, well down the peninsula, one on each coast. One banded gull was reported from Anahuac, Texas, on Galveston Bay; and one from near Acapulco, Mexico. The latter gull certainly crossed a peninsula, and moreover a peninsula without the numerous bodies of inland water that Florida possesses.)

Texas appears to be the goal of migration for many of our Herring Gulls. There were eleven recoveries in that state. The one from Mexico was reported from Vera Cruz which is practically Texas.

Pepper had one recovery from Havana, Cuba; and one from Androstown, Bahamas. Bent in Life Histories states that Florida, Texas, and Yucatan on the Gulf coast are the ultimate goals of most migrating Herring Gulls, though some have been reported from Cuba, Jamaica and Bermuda. I have

seen them in Bermuda, but not in large numbers. Herring Gulls do not usually venture far from land. Bent's volume was published in 1921, but the picture does not seem to have changed in regard to southern migration destinations.

Chart 4. Longevity.

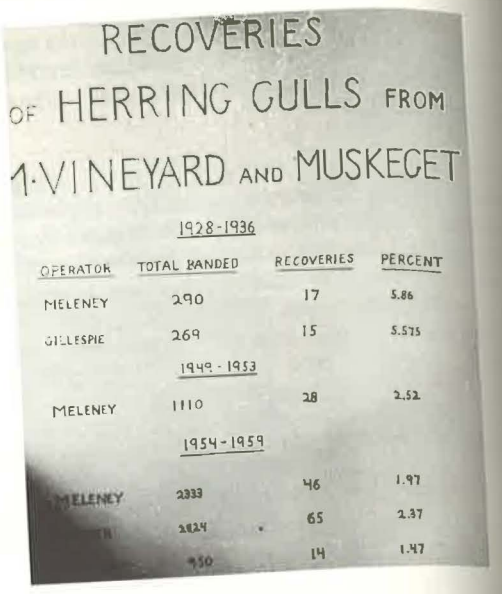
The fourth chart shows a longevity tabulation. Again I have observed the three time intervals, particularly because the recoveries from gulls banded since 1950 are presumably not all yet reported. Out of a total of seventeen recoveries for the 1930-1937 period, Meleney reports four that lived a year or more. Out of fifteen recoveries reported by Gillespie, seven lived more than one year.

Out of forty-three recoveries in the period from 1949 to 1953, Meleney had only six that lived a year or more, including one eleven-year old gull.

Out of the period 1954 to 1959, Pepper reports ten gulls out of sixty-five recoveries living a year or more. Meleney reports twelve out of forty-six recoveries; and Gillespie three out of fourteen. There will presumably be further reports.

This shows that by far the greater number of recoveries occurs before a bird reaches the age of one year. Smith reports that 63.34 percent of recoveries were of birds less than a year old, and two-thirds of these reports were of birds found dead (or otherwise) before December 31 of the year of banding. It seems, also, that in the first period a greater percentage of gulls lived more than one year.

Chart 5. Percentage of recoveries.



RECOVERIES OF HERRING GULLS FROM VINEYARD AND MUSKEGET

OPERATOR	TOTAL BANDED	RECOVERIES	PERCENT
1928-1936			
MELENEY	290	17	5.86
GILLESPIE	269	15	5.575
1949-1953			
MELENEY	1110	28	2.52
1954-1959			
MELENEY	2333	46	1.97
[illegible]	2824	65	2.37
[illegible]	950	14	1.47

The last chart shows the percentage of recoveries. During eight years in the nineteen-thirties Meleney banded a total of 290 Herring Gulls from which there were seventeen recoveries - a percentage of 5.86. Gillespie banded 269 with fifteen recoveries - a percentage of 5.58.

The period from 1949 to 1953 could conceivably yield a further recovery or two. However this would not appreciably affect the percentage result. In this period Meleney banded a total of 1110 gulls from which number twenty-eight recoveries were reported - a percentage of 2.52.

In the period from 1954 to 1959 Meleney banded 2333 gulls of which there were forty-six recoveries - a percentage of 1.97. Gillespie banded 950 gulls which yielded fourteen recoveries - a percentage of 1.47. Pepper banded 2823 gulls, sixty-five of which were recovered - a percentage of 2.30.

Smith reports 1143 recoveries out of a total of 37,414 gulls banded during twenty-seven years - a percentage of 3.06. P.B.Hofslund in Bird-Banding, April 1959 - "Fall Migration of Herring Gulls from Knife Island, Minn." reports eighty-one recoveries out of a total of 3028 gulls banded - a percentage of 2.67. Alfred O. Gross in Bird-Banding 1940 reports 773 recoveries out of 23,434 banded gulls, - 3.29 percent.

Compared with these figures, our recovery percentages for the third period seem a bit low. But what about the percentages of over five which Meleney and Gillespie obtained in the thirties! Could it be that the

first Herring Gulls in the area had pioneer stuff in them which gave their offspring greater immunity from danger? Or is it that there was more room for the newcomers and therefore fewer internecine casualties?

It has been suggested that possibly there was better publicity in the earlier days of banding which elicited better response from the finders of banded birds.

In 1960 the three operators banded a total of 2940 Herring Gulls. Of these the Peppers banded 1792; some on Nantucket and Tuckernuck, but the greater number on Muskeget. During their third visit to this island the poison crew was there, but gave no warning to the banders of their intended poison experiments. The results of these experiments were evident when the banders made a fourth visit to Muskeget. However, Mr. Duvall tries to persuade us that it will be interesting to compare banding results before and after the poison episode.

Dr. Weatherbee, a research biologist for Fish and Wildlife who was present during the Muskeget poison episode, writes: "The only way that the banding situation on Muskeget is abnormal in 1961 is in the extraordinary opportunity for everyone concerned to learn a whole lot more about gull biology." This may be a corroboration of Mr. Duvall's idea, though the meaning seems a bit obscure.

There appeared recently in the Vineyard Gazette a letter from Rodger Darling of Revere, Mass., stating that during the 1961 season the predator control representatives, with the cooperation of the Massachusetts Audubon Society, intend to use as a "contact poison for eggs" an organophosphate called TEPP, "a derivative of a Nazi German war gas that held the Allied High Command in terror, for one drop of it on human skin is fatal. Loosing this stuff around a vacationland like the Vineyard is bad enough but the real viciousness is in that deceptive phrase 'contact poison to eggs', for TEPP is not applied just to destroy the embryo in the egg but to kill the adult bird that bares its breast to set on the egg!"

Please understand that I hold no brief for Herring Gulls per se, although I am convinced that coming generations would regret it for practical rather than sentimental reasons if Herring Gulls should be wiped off the earth. Our Muskeget banding program is not the most important thing in the world. But why has Muskeget been chosen for poison experiments?

After a terrific protest against the poison program was made last fall, the alibi of airport hazard was suddenly produced. But Muskeget is eighty miles from Logan airport, and there are Herring Gull colonies much nearer, even colonies where so-called control could be carried out with much closer secrecy. And as to airport hazards, I have a copy of a letter from the vice president and general manager of American Airlines

from which I quote: "At no time have we contemplated any action which would lead to the killing of birds. All of our efforts have been directed towards finding some way to keep the birds from coming to the airports, and to discourage birds from staying in the vicinity of airports. You may be sure that the entire problem is being approached with the idea that birds are a valuable natural asset and should be protected."

To date, therefore, we are unable to discover any sound reason for the Muskeget poison programs.

Summary

1. There is only a slight tendency toward late summer dispersal northward among birds of the year.

2. Migration destinations in the south appear much the same as noted by Bent forty years ago. With the exception of the gull recovered in Michigan there have been no inland recoveries. There is insufficient support for the theory that the migration route to the Texas coast for those gulls that winter there is across the Florida peninsula.

3. By far the greater number of recoveries occur among birds in their first year.

4. Recovery percentages and longevity records have gradually diminished during the past thirty years. No reasons for this are known.

5. The opportunity to continue this study of Herring Gulls through banding is jeopardized by a poison control program for which no sound reason has been discovered.

CONCLUSION. This one thing is sure: if we let any group unnecessarily jettison our attempts at banding research once, such barriers to banding results will happen much more easily in the future.

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