

TRAVELS OF COMMON TERNS

By Mabel Gillespie

In the process of organizing and attempting to analyze records of Common Terns (*Sterna hirundo hirundo*) it has become more than ever obvious that much more data is needed to substantiate any theories that may be suggested. May I remind banders who read this that our group has a motto: Let Us Band Together. Those of us who are amateurs need to pool our findings in the attempt to interpret them acceptably. I offer these meager results in the hope that they may contribute to a more definitive survey.

Between the years 1923 and 1941 my husband, the late John A. Gillespie, assisted by various friends and by myself, banded 2258 fledgling Common Terns. Thirty-four of these were banded on or near Martha's Vineyard, Massachusetts, none of which was ever heard from again. Incidentally, William Pepper reports that he has had no recoveries from several hundred Common Terns banded in the Martha's Vineyard - Nantucket region. Grace Meleney, on the other hand, has had significant recoveries from fledgling and adult terns banded in the same region.

One hundred and sixty-one of our terns were banded by Frederick C. Schmid at or near Cape Porpoise, Maine. Four of these were recovered later, three of which - 1.86 percent - were true recoveries.

The remaining 2063 terns were banded on the southern New Jersey coast from Brant Beach to Anglesea. There were thirty-one reports from these terns. Nine of these were birds found dead within two months of banding and within a few miles of the sites of banding. They contribute nothing of interest to this inquiry. The twenty-two real recoveries constituted barely one percent of the total number banded. Together with the three Maine recoveries there are twenty-five to be considered.

These recoveries may be divided into three groups. First there are the individuals that were taken less than three months after banding at some distance from their nest sites but before migrating south. There were nine of these and without exception they all went north, the distances ranging from forty to seventy-five miles. The first map (fig. 1) shows the locations of banding areas - Brant Beach to Anglesea, and the locations where these banded locals were found, usually within a single month's time.

Banders are familiar with the tendency of local Night Herons to wander in all directions before turning south for real migration. Evidently there is a similar tendency in at least several species of terns: in their cases most often a northward, coastal wandering. The Royal Tern nests from Texas to Virginia, but is apt to be seen along the New Jersey coast in September. Bent says of the Least Tern that it is given to wandering during the fall and winter. Black Terns which nest in the interior

Fig. 1. Common Terns - Northward Post-Breeding Wandering.



MIGRATION DESTINATIONS OF COMMON TERNS

Fig. 2. Migration Destinations of Common Terns.

Banded		Recovered		Elapsed Time
NEW JERSEY	8-5-23	CAMPECHE, MEXICO.	1-?-24	5 MONTHS
"	"	8-23-25	TRINIDAD	5-16-26
"	"	7-14-29	"	2-19-32
"	"	6-29-30	"	3-26-31
"	"	7-12-31	"	6-29-32
"	"	6-25-33	JAMAICA, B.W.I.	9-2-33
"	"	7-11-37	BRITISH GUIANA	1-22-38
"	"	7-27-41	TRINIDAD	7-?-43
MAINE	7-30-41	BRITISH GUIANA	2-28-47	5 1/2 YEARS
"	7-30-41	BRAZIL	12-21-42	1 1/2 YEARS

of the continent are usually seen on the Atlantic coast in fall. A Roseate Tern which Grace Meleney banded on Muskeget Island south of Cape Cod, Massachusetts, on July 7, 1934, was found dead at Beachwood, Maine, August 4, slightly less than a month later. On the west coast the Elegant Tern nests only in Baja California, but may be seen as far north as San Francisco Bay in autumn.

There is no data here indicating whether or not adults as well as locals indulge in post breeding wandering. Austin, however, suggests that they do.

The next group of recovered terns includes those taken in the south after fall migration. The chart (fig. 2, p. 161) shows the sites of such recoveries, centering around Trinidad and British Guiana. The tern reported from Brazil, one from British Guiana, and one of those from Trinidad were banded in Maine. Grace Meleney had three southern recoveries banded on or near Martha's Vineyard but not shown on this map. Hers were taken in British Guiana, Trinidad, and Grenada, the southernmost of the Lesser Antilles. This limited data suggests that Common Terns from the New England and New Jersey coasts generally winter in the region of Trinidad and British Guiana. The Austin records substantiate this theory.

The New Jersey coast lies along the 74th meridian which just misses the eastern tip of Cuba and runs west of Lake Maracaibo. Martha's Vineyard lies near the 71st meridian, and the Maine coast along the 70th. The 61st runs through Trinidad, the 58th through British Guiana, and the 48th through Marajo Island at the eastern mouth of the Amazon River. The question arises: do Common Terns take overseas flights in the manner of Arctic Terns, thus going slightly east of due south, or do they follow the coast line?

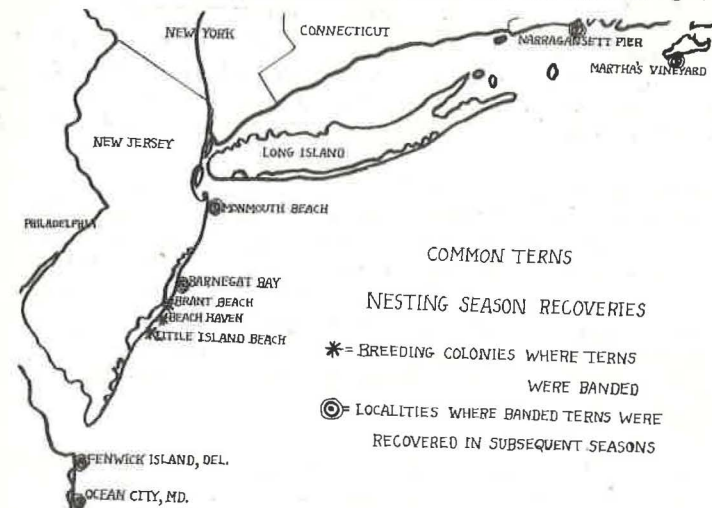
James Bond tells me that during migration periods Common Terns are frequently seen throughout the West Indies, but only at such times. The Austins had numerous recoveries of birds taken in the islands during migration intervals. This would explain the presence of our tern taken on Jamaica. But though Common Terns are known to pass through the Indies, they do not seem to follow the continental coast of North America to any extent.

Finally, there is the Common Tern taken in Campeche, Mexico, at the northern bend of the Yucatan Peninsula. This bird was stuffed and placed in a private museum, suggesting that possibly it was rare in the region. Paynter claims that only three individuals of the species are known to him to have been taken in the peninsula, two of which had been banded by the Austins. He didn't know about the Gillespie tern. This is a good example to back my contention that we lesser banders should make our records more readily available.

Attention must now be given to the fact that three Gillespie banded Common Terns, as well as one Meleney banded individual, were still in the coastal, near-equatorial region of South America well after the mass of their species had returned to northern breeding colony areas. Two of the Gillespie terns lingered in Trinidad to be taken on May 24 and June 29 respectively. The Meleney bird was shot in Trinidad on May 24 following the date of banding. A two-year old bird was taken in Trinidad in July.

Austin reports that very few terns reach nesting maturity in a year's time, and not many more achieve sexual maturity in two years. While he claims that not much is known of the whereabouts and status of non-breeding Common Terns, it is known that some remain on their wintering grounds.

The third group of recovered Common Terns includes those taken in the north during summer seasons following the year of banding. There were six such individuals, all banded on the New Jersey coast. The points at which they were retaken a year or more later are shown below (fig. 3) — one in Maryland; one in Delaware; one at Monmouth Beach, New Jersey; one at Narragansett Pier, Rhode Island; and one on Martha's Vineyard.



BANDED	RECOVERED	ELAPSED TIME
BRANT BEACH, N.J. 7-12-31	BARNEGAT BAY, N.J. 9-19-32	1 YEAR
BRANT BEACH 7-15-34	MONMOUTH BEACH, N.J. 8-2-36	2 YEARS
BRANT BEACH 7-10-38	MARTHA'S VINEYARD, MASS. Fall - 40	2 YEARS
BRANT BEACH 7-22-38	OCEAN CITY, MD 7-27-39	3 YEARS
LITTLE BEACH I., N.J. 7-11-37	NARRAGANSETT PIER, R.I. 6-18-46	9 YEARS
BRANT BEACH 7-1-39	FENWICK I., DEL. 8-5-48	9 YEARS

Fig. 3. Common Terns - Nesting Season Recoveries.

The sixth tern is the only one of the group found near its natal site and this was a year-old bird. Those at Monmouth Beach and Martha's Vineyard were two years old and may not have reached sexual maturity. But the tern taken at Ocean City, Maryland, was three years old; and the Delaware and Rhode Island terns were each nine years old.

Austin claims that young birds tend to elect their natal colonies for nesting, and that attachment to a site increases with years. His statistics based on many thousand banded birds carries infinitely more weight than the data of a mere six recoveries. It might be that life history patterns vary according to location. Much of the Austin territory contained immense congregations of nesting terns and was kept in the same condition from year to year by annual bull-dozing to prevent the growth of vegetation. Common Tern colonies in the island area south of Cape Cod and along the New Jersey coast have had to contend with increasing vegetation which renders a once popular nesting area unattractive, and with destructive tides and storms.

Grace Meleney has continuously banded terns on Martha's Vineyard since the nineteen-twenties, including adults as well as locals. Superficially her grand total of 697 Common Terns during nearly forty years doesn't sound impressive compared with the astronomical numbers banded by the Austins, but she has attained surprising results. This ought to hearten some of us who tend to be discouraged by a lack of quantity.

I do not wish to steal her thunder by telling in detail of the terns banded by others in other localities which she has captured by trapping adults on nests. I'll mention only that such birds obviously were not breeding in the areas where they were raised. On the other hand, five of her terns banded as locals were taken in the same vicinity in later years. Three trapped as adults were later retaken. So, according to the data on which this paper is based, it seems that locals and adults sometimes do and sometimes do not return to the near vicinity of their birth in later years.

It might be briefly noted that the Gillespie data contain no unusual longevity records. Grace Meleney has two fifteen-year tern records. Austin mentions a seventeen-year record and claims that possibly twenty years is an age limit.

In conclusion, then, the data under consideration suggest:

1. Local Common Terns indulge in a post-breeding, northward wandering.
2. Winter quarters for Common Terns breeding on the New England and New Jersey coasts center in the region of Trinidad and British Guiana; sexually quiescent terns may not leave winter quarters at migration time.
3. Terns sometimes do and sometimes do not return to the exact location of their birth sites.

LITERATURE CITED

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THE CONTINUING ARMISTICE BETWEEN
 ORNITHOLOGY AND MEDICAL RESEARCH
 By C. Brooke Worth

As early as the 1930's it was suggested that birds, especially American Egrets, might play an essential part in basic cycles of some mosquito-borne viruses of human and veterinary importance in New Jersey. Since then suspect species of birds, proved kinds of vector mosquitoes and demonstrated virus-infected areas of the world have achieved global representation. The initial indignant reaction of local groups of ornithologists has lost its echo as powerful agencies such as the U. S. Public Health Service and the World Health Organization have taken the question to their impervious bosoms.

How, then, do matters stand today? A spectacularly detailed and conclusive study of Japanese B encephalitis has shown birds to be probably victims -- rather than reservoirs -- of the virus, paralleling the role of local swine and human beings. In western United States, several species of "blackbirds" probably serve to spread virus during the transmission season late in summer, but it is still to be proved that they carry it through to the following year. Our foreign colleague, Dr. Salim Ali, is engaged in an extensive bird-netting and banding program on the Rann of Kutch in India to determine whether the hordes of birds funneling through this corridor from Europe and the Near East each year may carry viruses with them from one Continent to another.

These are only a few of the active programs currently operating in regard to birds, arthropod-borne viruses, and human and veterinary welfare. However after almost 30 years, it is impossible to point, in a single case anywhere in the world, to any species or group of birds and say: "These are vermin!" Medical Research has a long and seemingly improbable way to go before it can compete with those ancestors of ours who accounted for the decease of the Great Auk and Passenger Pigeon.

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