

This Is The Place

RED RIVER MOTEL



We Love Birders  
This is the spot to use  
as home base for birding on CAPE COD

Marge & Ed Laux (Parents of Vernon)  
1011 Main St.  
S. Harwich, MA 02661  
432-9300



Bathers                      Hikers  
                                    Birdwatchers  
Photographers              Fishermen

See Monomoy Island  
and North Beach via

ART GOULD'S FERRY

Andrew Harding Lane, Chatham, Mass.  
(Near Chatham Light)

Reservations: Call (617)945-2443  
or Write - Box 3, W.Chatham, MA 02669

Send \$1.00 for a list of bird sightings  
on (3) separate trips to Monomoy  
in August and September, 1978.

## MASSACHUSETTS' NON-RESIDENT TERNS

by Blair Nikula, Chatham

Of the 14 species of terns that have been confirmed as having occurred in Massachusetts, 4 species - the Common (*Sterna hirundo*), Roseate (*Sterna dougallii*), Arctic (*Sterna paradisaea*), and Least (*Sterna albifrons*) - nest in a number of locations along the Massachusetts coast and have been the subject of much attention over the years. Indeed, few Massachusetts birds are as well known and certainly none have been as intensively studied as these resident terns. Much published material has resulted from this interest; the reader is referred elsewhere for information on the status of these species (see Nisbet, 1973).

The intention of this article is to summarize and update the status of the 10 species of non-resident terns that occur or have occurred in the state. These can be divided into three general categories based on their presumed origins:

1. The Black Tern (*Chlidonias niger*), Forster's Tern (*Sterna forsteri*), and Caspian Tern (*Sterna caspia*) are regular migrants primarily from interior breeding locations to the north and west of Massachusetts.
2. The Gull-billed Tern (*Sterna nilotica*), Sandwich Tern (*Sterna sandvicensis*), Royal Tern (*Sterna maxima*), Sooty Tern (*Sterna fuscata*), Bridled Tern (*Sterna anaethetus*), and Brown Noddy (*Anous stolidus*) are vagrants originating from coastal breeding colonies south of New England. Probably a few individuals of Forster's and Caspian Terns belong in this category as well.
3. One species, the White-winged Black Tern (*Chlidonias leucopterus*), is a vagrant from Europe.

The breeding ranges described for each species below include only those areas which are in eastern North America and consequently of significance when speculating on the origins of a particular species seen in Massachusetts.

### Migrant Terns

The Black Tern nests on marshy freshwater ponds and lakes from southern Canada into the north-central United States, eastward to northwestern Pennsylvania, northwestern New York, northern Vermont and northern Maine. It is a regular migrant through Massachusetts, occurring primarily in coastal localities. Spring migrants tend to be rather scarce, although most inland reports seem to be during this season. The second week of May generally marks the arrival of this species in our area, with the migration continuing into early June. The earliest date for the state is 4/27/56 and the spring maximum of 13 comes from Newburyport on 5/19/73. Occasional individuals are reported in late June and early July, but it is normally mid-July before any pronounced southbound influx is detected. Migrants are far more numerous in the fall, with peak counts in late August and early September. Numbers vary considerably from year to year, with highest daily counts ranging from only a few in some years to an impressive 500 on Monomoy on 9/1/48. Numbers decline rapidly through September, and October records are rare with the latest being 10/21/76. Astonishing is an individual reported from Wellfleet Harbor on the incredible date of 12/11/66 (W. Bailey, et. al.).

The Caspian Tern nests in widely disjunct locations in North America and in two distinct habitat types: (1) inland freshwater lakes of central Canada east to southeastern Ontario, and (2) saltwater coastlines of southeastern Quebec and coastal South Carolina and Virginia. It is a rare spring migrant, very rare summer visitor and a rare to uncommon fall migrant in Massachusetts. Reports are concentrated along the coast but inland records, although scarce, are not unknown and are about evenly divided between spring and fall. The earliest spring dates are of single birds in Sagamore on 4/19/38 and Plum Island on 4/19/58, with most sightings occurring in May, including the high count of six in Marshfield on 5/1/76. Infrequent summer reports may, on occasion, involve wanderers from the Virginia population. A good illustration of the enigmas one encounters when speculating on the origins of certain individuals of this species (as well as Forster's Terns) is a total of 10 statewide immediately following the 100 mph southerly winds generated by Hurricane Carol's inland passage on 8/31/54. Were these grounded southbound migrants from Canada or storm-blown vagrants from the mid-Atlantic?

The first southbound individuals apparently show up in late August, with most reports falling from mid-September to early October. Seldom is the species seen after mid-October, with the latest noted from Plum Island on 11/5/77. High counts of 16 have occurred in Ipswich on 10/3/55 and at Monomoy on 10/12/76. Caspian Terns pass through our area very rapidly. Most sightings are of singles or small groups flying straight through without lingering. Seeing this "king of the sterninae" is often simply a matter of fortuity.

The Forster's Tern nests in three widely disjunct areas in North America: marshy freshwater ponds in the western and north-central United States and south-central Canada (presumably most Massachusetts records originate from this population); the mid-Atlantic coast of Virginia, Maryland, and southern New Jersey; and the western Gulf coast. This tern occurs in our area primarily as a regular fall migrant in varying numbers. Spring occurrences are very rare with only three satisfactory reports, the earliest of which is of a basic-plumaged bird in Chatham on the surprising date of 3/30/78. There is one record each from April and May, both from the Newburyport-Plum Island area and both also in basic plumage. Although breeding-plumaged birds have been reported at this season and certainly are not unlikely, identification can be very difficult. This plumage has yet to be substantiated in our area. June and early July sightings are also rare with the first southbound (?) individuals not normally appearing until the very end of July. From early August through October, singles and small groups can usually be found wherever terns congregate, although numbers fluctuate from year to year. Highest concentrations have consistently been noted along the southeastern coast, with Nauset being a particularly favored locality. Prior to 1979 the best flight years were in 1945 and 1973, with high counts of 24 (9/23/45) and 52 (10/12/73), both from Nauset. 1979 saw an unprecedented number of this handsome, black-eyed sternid passing through the state with a number of counts in the 30-50 range during August and September. This flight culminated in a startling assemblage of approximately 200 birds in Wellfleet on 10/29, far eclipsing all previous maxima for the state. This species is apparently quite hardy and regularly lingers well into November. There is now a total of six December records. One particularly hearty individual was found on Martha's Vineyard on the incredible date of 1/21/79. This tern has now been recorded in every month except February!

As with the Caspian Tern, it is assumed that the vast majority of these birds is from the inland populations. Several inland appearances in this state, occasionally in numbers, would tend to support this supposition. Most notable are counts of 34 in Longmeadow on 10/4/64 and up to 20 in the same location on 8/31/53 to 10/31/53. On the other hand, a dead immature picked up on the coast of New Hampshire on 7/20/68 was found to have been banded in Maryland the previous May, confirming that at least an occasional bird wanders northward from the mid-Atlantic coast. Unlike the Caspian, I can find no evidence of any pronounced influxes related to the passage of tropical disturbances, although such occurrences have been noted on Long Island (Bull, 1978).

### Southern Terns

This group includes the six species whose North American breeding ranges lie entirely to the south of New England. All are rarely found away from marine habitats and only the Sooty Tern has occurred inland in Massachusetts, and then only following hurricanes. Their occurrences in this area fit into four very general categories:

1. Spring "Overshoots" - To date, only a handful of records can be ascribed to this phenomenon, involving primarily Royal and Gull-billed Terns. However, sightings at this season have been noted with a sharply increasing frequency in recent years, apparently in conjunction with very modest northward range expansions by these two species. Which, if any, of the spring Forster's and Caspian Terns belong in this category is problematical.
2. Non-Breeding Wanderers - Most June and early July records would seem to fit here. What percentage of these birds is sub-adult is unknown, although it is probably high. It may be that many of the spring overshoots are non-breeders as well.
3. Post-Breeding Dispersal - The greatest number of records - though not of individuals - belong in this category. Many terns are known to disperse northward upon completion of their nesting cycle or if nesting is disrupted. Most Royal, Sandwich, Gull-billed, and probably some Forster's and Caspian Tern sightings in Massachusetts are the result of these wanderings.
4. Tropical Storms - Hurricanes are responsible for the largest numbers of individuals of the southern species in our area. Most of the Sooty and Bridled Tern records, and the highest counts for Royal and Gull-billed Terns, can be attributed to disturbances of tropical origins which pass to the west of coastal Massachusetts. That these southern terns (as well as other tropical waterbirds) are carried northward by the strong southerly winds on the east side of a hurricane is readily apparent when you correlate avian and meteorological records. A classic illustration of this occurred in the back-to-back hurricanes of 1954. On 8/31/54, powerful Hurricane Carol moved across Long Island, through central Connecticut and Massachusetts, and into New Hampshire. Among the terns noted during and following Carol were: 1 Noddy, 12 Sooty, 12 Gull-billed and 2 Sandwich. Twelve days later, on 9/11/54, equally powerful Hurricane Edna moved northeastward over Martha's

Vineyard and Cape Cod. No notable tern records resulted from this storm - although an impressive list of southern warblers was noted in Chatham the following day.

Several other generalizations can be made about this group. They are highly mobile when in our area - rarely is an individual seen on more than one day in the same location and often they are present for only a matter of hours or even minutes. Also, as would be expected, the preponderance of records comes from southeastern coastal locales (i.e., Cape Cod, Nantucket and Martha's Vineyard).

The Gull-billed Tern nests locally along the Atlantic coast north to Maryland and occasionally Delaware. A few also nest in southern New Jersey. Nesting was confirmed on Long Island in 1975 and 1978, and suspected in other years. This tern is a regular visitor to our coast, there being a total of 41 records involving 53 individuals. Prior to 1973 it was unknown in the spring, but has since been recorded in May with increasing frequency, perhaps as a result of its modest northward range expansion. There are now five May reports (7 individuals), with an early date of 5/1/79. The majority of sightings has been in August and early September. Storm-related influxes were noted following Hurricane Carol in 1954 (12 individuals, including a count of 6 on Nantucket) and 6 following Hurricane Donna in 1960. Unlike most other members of this southern group, the Gull-billed Tern has been fairly regular north of Cape Cod (16 reports). An individual noted in Wollaston on 10/6/56 represents the latest date for the state. In basic plumage this species is rather similar to the much commoner Forster's Tern and should be identified with care.

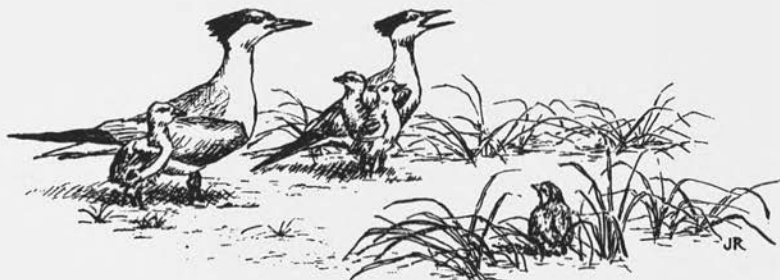
The Sooty Tern breeds on islands in the Caribbean, northward to the Bahamas and Dry Tortugas. This fascinating species is renowned as a wanderer. Its surprisingly frequent occurrence in this area certainly lends credence to this reputation. Indeed, it has been recorded more than any other strictly southern tern except the Royal - a total of 73+ reports totaling 183+ individuals! Not surprisingly, the bulk of these has been connected with tropical storms. Hurricane Carol in 1954 blew up 12 birds. Hurricane Donna in 1960 resulted in 13 reports totaling 46 individuals (including an astonishing flock of 25 in Swansea on 9/12 during the height of the storm!), and Hurricane David in 1979 produced no less than 87 individuals, almost doubling the state total up to that date. In keeping with this species' unique character, it is the only southern tern to be recorded from inland localities in the state - a total of 13 reports, most, if not all, of which were storm-blown. The vast majority of sightings has been in August and September, which correlates with the peak hurricane season. Only eight reports have fallen outside these two months - one in June, five in July and two in October. Although dead birds have been found later than October, they were most likely individuals which had arrived earlier in the season.

The Bridled Tern nests on islands in the Caribbean north to the Bahamas. In late summer some individuals regularly wander northward in the Gulf Stream to waters off the mid-Atlantic coast. There is now a total of eight state records (10 individuals) for this handsome sternid, most, if not all, of which are storm-related, including 5 birds as a result of Hurricane Donna in 1960. All of the records have fallen in a very narrow

range of dates, 8/12 - 9/16, dates which fit in very nicely with the species' occurrence in the Gulf Stream to our south.

The Sandwich Tern breeds on coastal beaches in the Caribbean, the Gulf of Mexico, and along the coast of North and South Carolina, occasionally north to Virginia. It is a rare but fairly regular vagrant in this state, with a total of 24 records involving 27 individuals. All but 5 of the sightings have occurred between the dates of 6/22 and 9/1, with the earliest found in Chatham on 5/31/79 and the latest on Nantucket on 10/2/79. This species shows little proclivity to storm-related wanderings exhibited by other members of this group, 2 reports on 9/1/54 following Hurricane Carol being the only obvious such records. None were noted following the ornithologically infamous Hurricane Donna in 1960, when almost all the other southern terns were found in numbers. The increased detection of southern terns along our coast is well illustrated by the records for this species; prior to 1950 there were but 4 sightings, 3 were seen in the 50's, 5 in the 60's, and 12 in the 70's. This sternid has wandered north of Cape Cod on only three occasions including, oddly, two of the first four state records, both from Ipswich, and more recently a 6/28/72 Newburyport sighting. The latter apparently represents the northernmost occurrence for this species on the Atlantic seaboard of North America.

The Royal Tern nests on sandy beaches along the Gulf coast of Texas and Louisiana, the West Indies and the Atlantic coast from Georgia to Maryland. In 1975 nesting occurred in southern New Jersey and more recently has been suspected, but unconfirmed, on Long Island. This large sternid is a regular visitor to the Massachusetts coast, particularly Cape Cod and the islands, where several or more per year are to be expected, although they are not unusual even north of Cape Cod. Spring occurrences are quite rare but increasing (six reports), with the earliest at Sandwich on 5/3/75. More typically, individuals arrive in Mid-June and are noted throughout the summer into early September, after which they become quite rare. As with most members of this group, greatest concentrations have been noted



Royal Tern pen and ink by Julie S. Roberts

following tropical disturbances. Hurricane Donna in 1960 produced by far the largest totals, with counts of 50 from Nantucket, 22 on Martha's Vineyard and 17 on Monomoy. The highest count unrelated to any storm is nine from Monomoy of 7/11/71. Late lingerers include five November birds, with the latest in Eastham on 11/27/79.

The Brown Noddy nests on islands in the Caribbean and is among the rarest of tropical vagrants in the Northeast. It has graced Massachusetts' shores but twice. The first was a dead bird found on Martha's Vineyard on 9/1/54 following Hurricane Carol. The second bird was discovered on Nantucket where it remained from 8/27/57 until 9/2 and was reportedly photographed.

#### European Vagrants

Although the White-winged Black Tern is the only species definitely of European origin, it is interesting to note that Gull-billed, Caspian and Sandwich Terns all occur along the west coast of Europe in varying numbers. It is not inconceivable that an individual from one of these populations could wander across the Atlantic. However, the paucity of sightings from the Canadian maritimes tends to discourage further speculation in this vein.

The White-winged Black Tern has been confirmed but once in Massachusetts. On 5/25/54, two individuals were found in Scituate, where they lingered until 5/27, giving a number of observers the opportunity to become acquainted with this striking species. Published records from Nauset and Monomoy on 7/18 and 8/4/60, respectively, should be considered hypothetical as some uncertainty has been expressed by the observers (pers. comm.).

Although this species' occurrence in North America is difficult to explain - it nests in extreme eastern Europe and is very scarce as far west as the west coast of Europe - it has been recorded with some regularity on the eastern seaboard in recent years. Future state records seem likely.

---

My thanks to Richard Forster and Richard Veit, both of whom supplied records at their disposal as well as many valuable comments, and to Seth Kellogg for providing records from western and central Massachusetts.

#### References:

- American Birds, Vols. 23 - 32, National Audubon Society  
Bailey, Wallace, Birds in Massachusetts, 1955  
Bailey, Wallace, Birds of the Cape Cod National Seashore, 1965  
Bird Observer of Eastern Massachusetts, Vols. 1 - 7  
Blodget, Bradford G., Massachusetts Bird List, 1978  
Bull, John, Birds of New York State, 1974  
Forbush, Edward Howe, Birds of Massachusetts and other New England States, Vol. 1, 1927  
Godfrey, Earl, The Birds of Canada, 1966  
Griscom, Ludlow, Birds of Massachusetts, 1955  
Hill, Norman, The Birds of Cape Cod, Massachusetts, 1965  
Keith, Alan R. and Edward L. Chalif, A Supplemental List of Martha's Vineyard's Birds, 1968  
The Kingbird, Vols. 27 - 29, Federation of New York State Bird Clubs  
Ludlum, David, The Country Journal New England Weather Book, 1976

Nisbet, Ian C. T., 1973, "Terns in Massachusetts: Present Numbers and Historical Changes," Bird-banding; Vol. 44, no. 1  
Records of New England Birds, Vols. 11 - 23, Massachusetts Audubon Society  
Tufts, Robie, The Birds of Nova Scotia, 1973



**For a gift that is thoughtfully perfect** for bird watching friends (or for yourself!), consider a year's subscription to the exciting new national bi-monthly magazine, **Bird Watcher's Digest**. It features the best in contemporary birding literature.

One can subscribe for a year (6 issues) by sending \$7.50 to **Bird Watcher's Digest, Box 110-M, Marietta, OH 45750** (add \$2.00 for Canada and foreign).

Patricia Ledlie -bookseller Box 46 Buckfield, Maine 04220  
(207) 336-2969



Out of Print, Rare, & New

## Bird Books

Annotated Catalogues: \$1.50

By Appointment