

## MONOMOY

## by Blair Nikula, Chatham

- ... A young Peregrine Falcon appears from nowhere to pluck a migrating Red Eat in midair with awesome grace.
- ... The full moon illuminates myriads of chattering shorebirds feeding on an ebbing tide as veils of fog waft across the flats on an eerie late summer's evening.
- ...Preparatory to their owl-induced night desertion of the colony, thousands of nesting terns begin the seemingly orchestrated, incredibly silent dusk "panic" flights. Upon return to the colony at dawn, these same terns raise a deafening chorus as they reassert their territories and scream defiance at all who pass.
- ... Monomoy images. Anyone who has visited this pristine area brings back images; the above are but a few of mine.



Located in the town of Chatham, at the elbow of Cape Cod, Monomoy is the northeasterly-most of a series of islands that

fringe New England's south shore. Unlike the other islands, which are glacial formations resulting from the Pleistocene ice sheet, Monomoy is entirely a creation of the sea - composed of sand washed southward from Cape Cod's eroding eastern shore. As such, it is a classic barrier beach, comprised on its eastern shore of surf-battered dunes that gradually flatten out to saltmarsh, and mud flats on its western shore. The ocean is continually reshaping Monomoy's approximately 2,500 acres, and at various points in its history it has been a peninsula, an island, or a series of islands. For the first half of this century, Monomoy was a peninsula connected to the Chatham mainland at Morris Island and was accessible by beach-buggy, a circumstance that Ludlow Griscom frequently took advantage of. In 1958, an April storm "islandized" the peninsula by breaching the beach just below Morris Island and creating the cut-through that still exists today. Local rumor has it that this April storm was aided and abetted by a few shovel-wielding local fishermen eager for a quicker route from Nantucket Sound to the ocean! Twenty years later, in February of 1978, a severe northeaster combined with an extreme tide, "bi-islandized" Monomoy, creating a second cutthrough just north of Inward Point, about 12 miles south of the first cut. As a result, Monomoy now (March 1981) consists of two islands: a shrinking, unstable north island of approximately 14 miles length, and a more stable and enlarging south island of approximately 6 miles length. (Distances and measurements have little meaning out here as they can, and do, change literally overnight.)

For most of the eighteenth and nineteenth centuries, Monomoy was inhabited by the citizens of a small but active fishing village located along the perimeter of what is now called the Powder Hole - then a rather sizable harbor. During the last part of the nineteenth century, the harbor began to sand in, and by the turn of the century few year-round inhabitants remained. In 1944 Monomoy became a National Wildlife Refuge, and in 1970 was afforded even more extensive protection with its designation as a National Wilderness Area. Since the government gained control of the island, it has slowly but steadily been dismantling the old buildings so that now only the lighthouse and three or four dilapidated shacks remain standing.

Monomoy's ornithological history began during the era of the "sportsman-naturalists" in the late 1800s. The hordes of migrating waterfowl and shorebirds attracted many of these gentlemen gunners which resulted in the formation of the Monomoy Brant Club in 1862. Though most of these men were primarily interested in hunting, there were some fine naturalists among them, and their records as well as the many specimens secured during this period have provided us with considerable information on at least a portion of the birdlife at that time.

Much more complete information on the area's kirdlife resulted

from Ludlow Griscom's interest in the area. Griscom was the first to exploit Monomoy's potential as one of the most exciting birding locations on the east coast and during his lifetime made over 300 trips down the (then) peninsula. It seems a strange twist of fate that Monomoy became separated from the mainland just a few months before Griscom's death in 1959.

It was during the 1960's that the ornithological coverage of Monomoy reached its pinnacle. In 1960 the Massachusetts Audubon Society, under the cooperative agreement with the U. S. Department of Fish and Wildlife, began conducting beach-buggy wildlife tours of the island. Led by a series of guides with insatiable avian appetites, these tours quickly became very popular and at times were being run almost daily during the peak summer season. During the last few years of the sixties, a banding operation under the direction of James Baird was conducted on the south end, based in the old lighthouse, which had been purchased by Massachusetts Audubon in 1964. Consequently, for a few years, Monomoy was subject to a level of coverage that is not likely ever to be matched again. The designation of Monomoy as a National Wilderness Area limited vehicle access, and, combined with changes in the physical structure of the island as well as the surrounding waters, made the tours increasingly difficult to operate, and they were eventually terminated after the 1975 season. Although the north island is still reasonably accessible and remains a popular birding spot, the south island is now visited only irregularly by a fortunate few, and undoubtedly many an avian stray passes through undetected. (For a more detailed history of Monomoy, refer to Monomoy Wilderness (1972), a delightful booklet published by Massachusetts Audubon, unfortunately now out-of-print.)

Birding on Monomoy differs considerably depending upon which of the two islands you visit. The north island is best visited from May through September when large numbers of shorebirds and terns are present, while the south island is better from August through November when migrant landbirds, raptors, and waterfowl as well as some of the scarcer shorebird species can be found.

North island: The north island is comprised entirely of dunes, saltmarsh, and mud flats, and attracts hordes of migrating and nesting terms, gulls, and shorebirds. The largest concentrations of birds are generally found at high tide along the edge of the flats and marsh in a 4-mile stretch extending from the extreme north end south to Godwit Bar (see map). However, during periods of extreme high tides, the birds are often forced farther down the island as well as to the outer beach.

Common, Roseate, Artic, and Least Terms all nest in varying numbers, and the largest term colony in the state is located among the northernmost ½ mile of dunes. However, this area is currently undergoing severe erosion along its eastern side and seems doomed - along with the term colony - to become yet

another victim of the sea in the very near future (one of the striking examples of the fast-paced dynamics of the barrier beach ecosystem). An additional six species of terms occur more or less regularly, and Black Skimmers are often seen in the late summer and have nested on occasion.

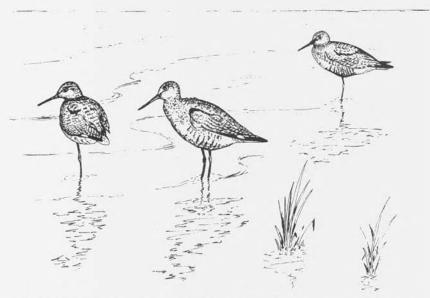
The only Laughing Gull colony in the state is located among and adjacent to the tern colony and has been thriving recently with a population that is rapidly approaching 1,000 pairs. Nesting Great Black-backed and Herring Gulls have overrun the remainder of the north island as well as most of the south island; in 1980 the total gull population was estimated at 18,000-20,000 pairs. Although the tern and Laughing Gull colony is strictly off limits, the observer is free to explore the gull colony, and this can be an interesting diversion when the birding is slow.

Among the shorebirds, Spotted Sandpiper and Piping Plover are fairly common nesters, and in the 1970's both American Oyster-catcher and Willet established themselves as nesters and are currently thriving with 4-5 pairs of each present on the north island. Two recent, unexpected nesting occurrences involved the discovery of a dead Least Sandpiper chick in the summer of 1979 and the discovery of a Wilson's Phalarope nest with eggs in 1980. Although Wilson's Phalaropes have been expanding eastward in recent years and their nesting on Monomoy is perhaps not too surprising, the nesting of Least Sandpiper is best treated as an "accident." However, the odd and unforeseen are routine on Monomoy.

Certainly the most spectacular avian event of the area is the shorebird migration which peaks in late May and again in August, during which 15,000-20,000 birds may be present. Even more impressive than the numbers is the variety, which is greatest from late August to mid-September. An incredible 46 species of shorebirds, from every corner of the globe, have been recorded on Monomoy, including such spicy specialties as Eurasian Curlew (2nd North American record), Little Stint (6th North American record), Wandering Tattler (1st east coast record), Rufous-necked Sandpiper (1st state record), Long-billed Curlew, and Bar-tailed Godwit, along with the more routine Avocet, Wilson's Plover, Curlew Sandpiper, and Ruff - truly a shorebirders' paradise! The very local Hudsonian Godwit is another shorebird feature, and in recent years high counts during the August peak have averaged 125-150 individuals. Buff-breasted and Baird's Sandpipers can also be found on occasion, though they are more regular on the south island.

Herons are commonly seen in the marsh, and although Snowy Egrets and Black-crowned Night Herons predominate, all of the regularly occurring northeast herons are seen from time to time. The only Massachusetts record for Reddish Egret was from here in May, 1958.

Although the waterbirds provide the main attraction on the north island, there are a few other species worth looking for. Sharp-tailed Sparrows are common nesters throughout the marsh, and in recent years Seaside Sparrows have established a small colony of 3-4 pairs along the outer (western) edge of the marsh inside Godwit Bar and have been quite easily found. Horned Larks and Savannah Sparrows are common nesters in the dunes, and also among the dunes the observer might flush a Short-eared Owl at any season, although the fall is the most likely time. Also in the fall, one should constantly be on the lookout for passing falcons and accipiters, and occasion-ally a few landbird migrants can be kicked up out of the grass.



South island: Most of the south island is comprised of scantily vegetated dunes, and the birdlife, with the exception of nesting gulls, Horned Larks, a small colony of Black-crowned Night Herons and Song and Savannah Sparrows, is sparse indeed. Toward its northern terminus there is a small area of saltmarsh, the so-called "Hospital Ponds," just inside of Inward Point, which has nesting Sharp-tailed Sparrows and possibly Willets. At least 2-3 pairs of Cystercatchers are nesting along the edge of the beach here. Formerly one of the finest landbird thickets on the island, "Wildcat Swamp," was located on what is now the northeast corner of the south island, but this wet swale, which provided the only cover for a couple of miles in any direction, has now been claimed by the sea, leaving only a few dead and dying shrubs and pines.

The south end of the south island with its freshwater ponds and marshes and dense, wet thickets of bayberry, beach plum, and poison ivy (everywhere!), provides the primary attraction

to those with ornithological inclinations. During the fall migration when conditions are right, this area offers some of the most exciting (and challenging!) birding on the east coast. The hub of the avian activity here is the station ponds that lie approximately 1-mile south and southwest of the lighthouse: Big Station Pond to the west and the smaller, more marshy Little Station Pond to the east. Numbers of ducks, herons, and shorebirds frequent these ponds, and the numerous dense thickets ringing their perimeters attract hordes of migrant passerines on good days. Just to the west of the lighthouse is the "Lighthouse marsh," actually a group of very small, shallow ponds interspersed among more dense thickets and a few scrub pines - the only "trees" on the south end. These ponds are also good for ducks and herons and the thickets for migrant landbirds. To the north of the lighthouse are extensive Hudsonia moors that in early fall are worth checking for Buff-breasted and Baird's Sandpipers. Southwest of the lighthouse lies the "Powder Hole," which usually has a few shorebirds, particularly in years, when there is some tidal flow. Adjacent to the Powder Hole on the southwest corner of the island is "Camper Cove," a good spot for terns and shorebirds. This cove has been tidal, but sand washing around the point is on the verge of closing it off, if indeed it has not already done so at the time of this writing. The station ponds were formed by this same process. South and southwest of Big Station Pond are a series of thickets, many of which border small, damp sedge flats.

An attempt to list all of the species that one can expect on the south end on a good day would be tedious and serve little purpose; suffice it to say that most of the typical northeast fall migrants can be found, and on a good day a list of 100+ species is quite possible. A few species, however, which are regular or even common as close as Stage and Morris Islands are scarce or absent from Monomoy. This group consists primarily of those species that are very reluctant to cross water and are rather sedentary or both. Black-capped Chickadee, Blue Jay, Cardinal, House Finch, White-breasted Nuthatch, Hairy Woodpecker, and the buteos are all very rare at best, and Tufted Titmouse has yet to be recorded. English Sparrows are, happily, absent as well:

It is, of course, the rare and unexpected - the vagrants - that excite most birders, and the south end of Monomoy has a vagrant track record that is unsurpassed, despite very limited coverage. Among the more spectacular have been the following: Whistling Swan, Purple Gallinule, Wandering Tattler, Lesser Black-backed Gull, Sooty Tern, Bridled Tern, Burrowing Owl, Cassin's Kingbird, Say's Phoebe, Western Wood Pewee, Bewick's Wren, Sedge Wren, Painted Bunting, Lark Bunting, LeConte's Sparrow, and Henslow's Sparrow. Some of the more typical fall vagrants: Red-headed Woodpecker, Western Kingbird, Loggerhead Shrike, Yellow-headed Blackbird, Blue Grosbeak, Lark Sparrow, and Clay-colored Sparrow are all more or less regular.

In any coastal migrant landbird trap, the weather is critical

to any observer's success, and nowhere is this more evident than on the south end of Monomoy. When the weather is favorable - clear skies and light northwest winds - the birding can be unbeatable, but on a poor day it can be as dull as anywhere. Unlike many other coastal traps, there is a distinct lack of landbird habitats here, resulting in a quick exodus of most of the individuals that may be present immediately after the passage of a cold front. Fortunately, the waterbird habitats are more consistently productive, and some decent birding can often be salvaged on even the poorest of days.

If you are fortunate enough to get to the south end on a good day, you'll have no problem occupying an entire day. Check all of the thickets slowly, those around the station ponds, to the east of Little Station Pond, around the Lighthouse Marsh, between the Powder Hole and Big Station Pond and especially those on the extreme southwest corner of the island. It seems that many southbound birds tend to build up in these last thickets before leaving the island, and there is a constant turnover here. Keep one eye on the sky as accipiters, falcons, and harriers pass through in some numbers during the fall, as do many other diurnal migrants. Short-eared Owls are regular throughout the year and might be flushed almost anywhere. The west end of Big Station Pond and the south and east sides of Little Station Pond are the best spots for shorebirds, especially during dry years. Buff-breasted and Baird's Sandpipers can often be found here in season as well as Wilson's Phalaropes and Stilt and Pectoral Sandpipers. Pelagics can occasionally be seen off the south point.

Although the birds are the primary attraction on Monomoy, the observer who visits and sees only birds has experienced no more than a portion of this unique and fascinating natural community. Several species of mammals are present on the islands, most as year-round residents. White-tailed Deer are common and conspicuous on the south end (and, unfortunately, vulnerable to occasional poaching) and seem to be thriving. From November to May Harbor Seals are present, and in recent years the wintering population here has averaged approximately 200 individuals. Muskrats are common around the ponds and are even present on the north island where freshwater is lacking! Meadow Voles are abundant and are usually easily found by turning over pieces of driftwood along the edge of the dunes. Butterflies are conspicuous in the late summer and early fall, and it's possible to record several species in a day. For the botanist, over 160 species of plants have been identified, most around the freshwater habitats on the south end.

Access: Undoubtedly, the greatest obstacle to birding on Monomoy is simply getting there, which is, perhaps, as it should be since this tends to limit access to those with a sincere desire to experience this still remote area.

For those not fortunate enough to own their own boat, Art Gould's ferry service is presently the only means of reaching

the island. Art is turning the business over to his nephew this year, John McGrath of Chatham, who plans on operating much as in the past. 1981 rates to the north end of the north island will be \$14.00 per person from Andrew Hardings Lane (where the boats are moored) or \$13.00/person from the beach at Morris Island. Rates to the south island have not been determined at the time of this writing. John plans on being available at Andrew Hardings Lane from 7 A.M. to 4 P.M., seven days a week throughout the season. To reach Andrew Hardings Lane, follow Main Street through the center of Chatham. At the end of Main Street, turn right and Andrew Hardings Lane will be the second left. Parking is available at the end of the road.

For those with a boat of their own, the nearest public boat ramp is located on the north side of Stage Harbor on Bridge Street, across from the Stage Harbor Marina. From the rotary in the center of Chatham, turn south on Stage Harbor Road for approximately one mile to Bridge Street on the left. Anchoring for the north island is possible at Godwit Bar (high tide only) or in the channel along the east side of the island (any tide). Do not attempt to anchor anywhere along the eastern shore except along the extreme northern-most ½ mile or so where North Beach provides protection from the ocean surf. Anchoring for the south island is best along the beach due west of the Powder Hole. (This information is based on the 1980 conditions and may have changed somewhat in the interim.)

An increasingly popular means of reaching the north island is by canoe from the beach below the public government parking lot on Morris Island. Canoeing can be reasonably safe but should be attempted only by experienced canoeists and only when the weather is very favorable, i.e. little or no wind. When beaching your canoe on the island, be certain that it is well above the high tide line! A floatable, waterproof container for your optics is also advisable.

Anyone attempting to take his own craft to Monomoy should be an experienced boatsman, familiar with the local waters and weather conditions, and constantly alert for changes in the weather. The weather in the area is very unpredictable and can change suddenly and dramatically. Fog is especially prevalent during the warmer months and can develop literally in a matter of minutes. Do not attempt to take a small boat around the south point as there are treacherous rips here. Reaching Monomoy always involves some adventure - occasionally more than one would like - but this only serves to heighten the "wilderness experience"!

Visits to the north island should be scheduled to coincide with high tide when the shorebirds and terms are concentrated. The tide has little effect on the birdlife of the south island.

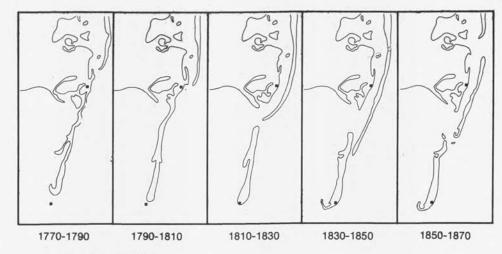
Whichever island you visit, bring something to drink and some sort of protection from the sun, and be prepared to wade to and from the boat. On the south island, poison ivy is virtually everywhere, growing in loose prostrate carpets throughout the dunes to 5-6 foot high bushes in the thickets. It is impossible to effectively bird the area without considerable contact with the sinister weed. Washing exposed portions of the skin with salt water prior to leaving can be an effective preventive measure. Ticks and mosquitos can, on occasion, be a nuisance on the south island also. On the north island, man-eating greenhead flies are a problem in July and August - short pants are not recommended!

If you are fortunate enough to visit Monomoy some day, take a few moments to reflect upon this dynamic, unspoiled natural community. There is much more to be found here than just a few checks on your list. Every trip is a voyage of discovery, for not only the avifauna but the island itself changes continuously. This is a land of many changes and contrasts, whether it be the dramatic creation of a new break through the island or a subtle change in the soft contours of the summer berm, the sudden, energy-packed arrival of thousands of resident terns in the spring or their subdued, almost imperceptible departure in the fall. This is truly a place where "one can stand and put the world behind him," a world where events still follow a natural and rational course. In our increasingly insane, irrational world it is no small comfort to know that a few - precious few - such pristine areas still exist.

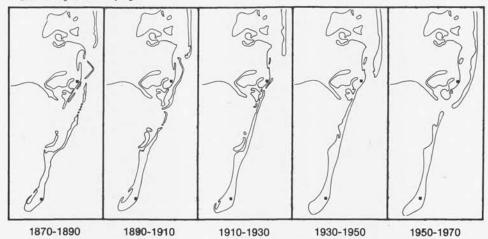
BLAIR NIKULA, lifelong resident of the Cape and Vice President of the Cape Cod Bird Club, is the author of "Checklist of the Birds of Cape Cod," as well as several previous BOEM articles. He is the office manager and technician at Cape Cod Wind and Weather Indicators, Harwich, and formerly led wildlife tours at Mass. Audubon's Wellfleet Bay Wildlife Sanctuary.

WILLIAM E. DAVIS, JR., whose illustrations accompany this article, is an Associate Professor of Science in the College of Basic Studies at Boston University and is a research associate of Manomet Bird Observatory. A resident of Foxborough, Mr. Davis is a frequent contributor of drawings and articles to Bird Observer.

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· Chatham Light; Monomoy Light

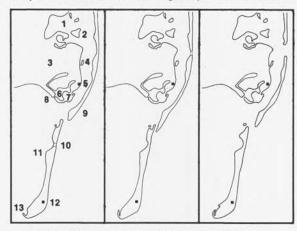


The ten diagrams above illustrate the major shoreline features during the period 1770 to 1970.

- 1. Pleasant Bay
- 2. Strong Island
- 3. Chatham
- 4. Tern Island
- 5. Chatham Light
- 6. Stage Harbor
- 7. Morris Island
- 8. Harding Beach 9. Nauset Beach
- 10. 1978 Break
- 11. Inward Point
- 12. Monomoy Light
- 13. Monomoy Point

## Chatham Barrier Beaches

Maps prepared by Graham Giese.



1975-1985

1985-1995

1995-2005

Predictions of future shoreline development.