# BIRD OBSERVER OF EASTERN MASSACHUSETTS

# OCTOBER, 1979 /OL. 7 NO. 5



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#### EDITOR'S PAGE

On September 13, 1979, Richard M. Butler of Norfolk, Massachusetts, died of as-yet-undetermined natural causes. An active and very careful birdwatcher, Dick will be missed by his many birding friends and acquaintances. Condolences can be sent to his mother, Mrs. John J. Butler, with whom he lived at 7 Everett Street, Norfolk, Massachusetts 02056.

#### CHRISTMAS BIRD COUNT

The Annual Greater Boston Christmas Bird Count will take place on Sunday, December 16, 1979. Interested birders should contact Bob Stymeist at (617) 734-1289 for further information. Many localities within Rte. 128 need coverage; if you could give even a few hours canvassing your own neighborhood it would better reflect the bird populations within Greater Boston.

#### TAKE A SECOND LOOK

On November 11, John Andrews will lead the last "Take A Second Look" field trip of the season. Under the rubric, "A Field Full of Sparrows," the trip will focus on the utilization of natural foods by birds in winter, devoting special attention to sparrows. Telephone John at 862-6498 for further information.

#### MASSACHUSETTS BIRD LIST

The new revised edition of the Massachusetts Division of Fisheries and Wildlife List of the Birds of Massachusetts is now available from the Division.

Compiled by Bradford G. Blodget, State Ornithologist, the list contains a total or 416 species accepted as Massachusetts birds.

To receive a copy send \$0.41 postage and a self-addressed label to:

Massachusetts Division of Fisheries and Wildlife c/o Field Headquarters Westborough, Massachusetts 01581

#### BERKSHIRE JAYS

Remember last winter? The Blue Jay counts were way down and their scarcity was attributed to the acorn crop failure. In the July-August 1979 issue of <u>Bird News of Western Massachusetts</u> it was reported that Constance Replenski of Plainfield regularly fed between 75-90 Blue Jays all winter. Plainfield is located in the Berkshires, above the dominant oak forest where beech, birch and maples predominate. The Blue Jays there are not dependent upon acorns and thus were not affected by the failure of the acorn crop.



# by Robert Prescott, Orleans

# ORLEANS

Orleans, "gateway to the lower Cape," has become a very busy spot, but it still offers some little-trampled areas for good fall, winter, and spring birding. Because of its location on the Sandwich Moraine (the "backbone" of the Cape), Orleans is characterized by knob and kettle topography including kettle ponds, upland woods, and salt marshes.

#### The Outer Beach

The focal point in Orleans is Nauset Beach, a public beach on the Atlantic Ocean. Exit 12 from Rte. 6 will take you to Orleans; turn right at the first traffic light and follow the signs to Nauset. A hike south from the parking lot will take you to Pochet Island and a hike north to Nauset Inlet.

Access to Pochet Island is limited to those with 4-wheel drive vehicles or the desire to hike a mile down the beach. This has kept the island a virtual sanctuary. A well-kept system of trails covers the island, which include two swampy areas and one pond. If there is a rare bird around, chances are good that it will show up at Pochet. In the past, a Gyrfalcon, an immature Bald Eagle, and Long-eared, Short-eared, Great Horned, Barn, and Snowy Owls have been seen around the island. Some of the more common birds seen here, in season, are Marsh Hawk, American Kestrel, Sharp-shinned Hawk, Great Blue and Green Heron, Mockingbird, Cardinal, Yellow-rumped Warbler, Ruffed Grouse, and Bobwhite. In the spring and fall, migrating hawks and warblers pass through here. During the winter, the bluff at the south end of the island gives the quiet birder a close look at many kinds of waterfowl feeding in the marsh below.

Pochet Island is deserted most of the year. The island's residents, who arrive in late May and stay until October, are very accommodating and welcome most visitors, but <u>please</u> respect their privacy. Even if there are no rare birds to be found, a hike to Pochet Island is well worth the effort. The beach buggy trail north from the Nauset Beach parking lot will take you through the back dunes and marshy area behind Nauset Beach and eventually to Nauset Inlet. In this area there is a variety of birdlife which goes all but unnoticed by the average beachgoer. Migrating warblers are attracted to the bayberry thickets; several species of spar rows are year-round residents. Marsh Hawks, Merlins, and American Kestrels might be seen hunting for food. The brackish pond is good for waterfowl. Blue-winged and Green-winged Teal, Hooded Mergansers, Black Ducks, and American Coot have all been seen here. Occasionally a Common Gallinule can be found feeding along the marshy pond edge.

Farther out on Nauset Spit you will find the usual complement of dune birds: Horned Larks and Snow Buntings in fall and winter, Piping Plover and Least Terns in spring and summer. There is also a chance that a Snowy Owl will take up winter residence here, as one did three years ago The inlet offers some excellent views of waterfowl, especially sea ducks

#### feeding in the mussel beds.

The best spot on the outer beach for birding is the rocky area just north of the bathing beach. (The only problem is that at high tide the rocks are underwater, making it difficult to find this spot.) Beside the usual contingent of sea ducks, Oldsquaw, Red-necked Grebes and loons can be seen feeding around the rocks. The real treat, though, are the Harlequin Ducks, which appear regularly. In 1977 there were five; in 1978, six. If any King Eiders are around they can usually be seen at this location. In 1978 an immature was in among the Common Eider.

If you have access to a canoe, a trip through Nauset Marsh can be one of the most rewarding shorebird trips this side of Monomoy Island. The marsh is dotted with pools and pans where shorebirds, herons, and ducks feed.

#### Town Landings

Orleans has set aside many areas for conservation, but often the best birding is from the public town landings. The Orleans Yacht Club landing on Cove Road can be very good. In the fall herons usually gather in the trees on the southwest side. Rare waterfowl are sometimes attracted by the resident group of feral ducks and geese. Two years ago there was a Richardson's Canada Goose; last year a Snow Goose. During February and March, Killdeer regularly show up along the shore, and there is always the possibility that a resident snipe will make an appearance.

If it's shorebirding you are after, then a stop at Mill Pond/Roberts Cove landing is a must. At low tide the mussel flats are exposed, attracting many shorebirds, including yellowlegs, dowitchers, plovers, and peep. Occasionally a Snowy Egret will fly in to chase minnows. This area is best birded in the afternoon because of the position of the sun. Avoid Wednesday and Sunday, which are the days when the flats are open for clamming.

Two other locations for good shorebirding are Asa's Landing off Gibson Road and Snow Shore Landing off Champlain Road. Oystercatchers often come up into Town Cove as far as Asa's Landing whenever they leave the confines of Monomoy Island. In the winter, Snow Shore Landing is an excellent place to see the huge rafts of eider that come into Nauset Marsh to feed on the mussel flats.

Barley Neck in East Orleans is also worth a visit. This landing which overlooks a small cove separating it from Pochet Island, is a good spot for waterfowl. Baldpate and teal, in particular, frequent this area.

The best known pond in Orleans is probably Crystal Lake, two miles south of Main Street off Rte. 28. A beautiful kettle pond deep in a hollow, its semi-feral Mallard population is frequently joined by other dabbling and (sometimes) diving ducks.

The upland spots in Orleans are either private or not very productive. When looking for upland birds I head for Eastham.

#### EASTHAM

The topography of Eastham is different from that of Orleans. The low rolling hills of south Eastham give way to the higher Eastham plains area around Nauset Light. Here many acres of prime habitat have been preserved by the Cape Cod National Seashore.

#### Fort Hill Area

Eastham has a host of good upland spots, the most prominent of which is Fort Hill, just off Rte.6, overlooking Nauset Harbor. Around the base of the hill are several low wet spots used as nesting sites by teal and Black Ducks. Also check the pans on the upper marsh for waterfowl. The many thickets in the area provide cover for a variety of songbirds, including: Grasshopper, Savannah, and Song Sparrow; Cardinal; Gray Catbird; Mockingbird; and an occasional shrike. Down the back side of the hill is a spring-fed pool well-known as a heron rosting spot. Rails and bitterns have also been seen and heard here. In winter the spring keeps the pool ice-free, attracting crowds of waterfowl. A Wood Duck is regularly found here during February and March.

As long as you are in the Fort Hill area, visit the adjacent Red Maple Swamp. An elaborate boardwalk constructed by the National Seashore winds through this dark swampy woods where sphagnum moss and catbrier drape over large twisted maples and tupelos. Often warblers and occasionally Veeries, take refuge in this hollow, which hosts a variety of breeding birds, especially cavity nesters.

Just to the north of the Red Maple Swamp is Hemenway Landing, one of the best heron spots on Nauset Marsh. Tucked in behind the parking lot is a small pond where Black-crowned and Yellow-crowned Night Herons gather. Great Blues can also be seen perched in the trees surrounding the small marshy cove next to the parking lot.

#### Coast Guard Beach to Nauset Light

Coast Guard Beach has a lot more to offer since the Great Blizzard of '78 rearranged it. In addition to an increase in the number of nesting Least Terns, Piping Plover also appear to have benefitted from the overwash sand. The marsh just under the Coast Guard Station is also filled with more sand; during the fall of 1978 groups of Marbled and Hudsonian Godwits and Willets were regularly seen feeding here. The usual fine selection of yellowlegs, plovers and peep was also present. The best time for observation here is morning low tide. A walk down the spit may reveal Lapland Longspurs or Whimbrels; a Wheatear was found in the upper marsh grass in October, 1976. The pond in front of the Rescue Museum is good for nesting redwings, several species of sparrows, and three species of swallows. Occasionally Indigo Buntings, shrikes, and warblers are found here.

North of Coast Guard Beach is Nauset Light, a high vantage point good for viewing pelagic birds. In the spring and fall, Gannets soar along not far from shore; during the winter, alcids can often be seen from this spot. If you are lucky you may see a Finback or Humpback Whale spouting offshore.



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#### The Western Ponds

During winter, the Eastham ponds to the west of Rte. 6 provide some of the best waterfowling on the Cape. Depot Pond on Samoset Road is marked private but birders are usually tolerated. You can park behind the Eastham Public Library for a better view. Usually there are several species bf ducks on this pond and there is always the chance that you will see something uncommon. Continue down Samoset Road to Jemimah Pond on the left. If there are any Hooded Mergansers in the area, they are sure to be found on this small pond. Herring Pond on Herringbrook Road is good late in the day with the sun over your shoulder. This pond seems to be preferred by Canvasbacks, Redheads, ringnecks, Pied-billed Grebes, and coot.

If you go north on Herringbrook Road for about a mile and enter Wiley Park on the right, you will be on the west side of Great Pond. From noon on, this is the best side for birding. The row of cedars acts as a blind and is the perfect place for scoping the Ruddy Ducks, Common Mergansers, coots, and Pied-billed Grebes which frequent this pond.

## First Encounter Beach

Whenever a cold front follows a nor'easter, hardy birders head to First Encounter Beach for close encounters with pelagic birds. In the spring and fall you might find Gannets, kittiwakes, Sabine's and Bonaparte's Gulls, petrels, jaegers and shearwaters. In the winter the cast changes to Razorbills, murres, Dovekies and Black Guillemot.

The areas I have described are the cream of the many birding spots in Orleans and Eastham. I make no guarantee that you will see any of the rare birds mentioned, but you will most likely see plenty of other birds. As all of us know, birding is not an exact science. It is a combination of luck, patience, and knowing where to look.



#### ALCID IDENTIFICATION IN MASSACHUSETTS

#### by Richard R. Veit, Tuckernuck

The <u>alcidae</u>, a northern circumpolar family of seabirds, are members of the order <u>Charadriiformes</u> and thus most closely related to the gulls, skuas, and shorebirds. All alcids have approximately elliptical bodies and much reduced appendages, adaptations for insulation as well as a streamlined trajectory under water. Their narrow flipperlike wings are modified to reduce drag during underwater propulsion, and are, therefore, comparatively inefficient for flight.

Razorbills, murres, and puffins feed predominately on fish, such as the sand launce, capelin, Arctic cod, herring, and mackerel. The Dovekie, by far the smallest Atlantic alcid, eats zooplankton exclusively, such as the superabundant "krill." The Black Guillemot, unique.in its confinement to the shallow littoral zone, feeds largely on rock eels or gunnel.

As with many pelagic birds, the alcids' dependence on abundant marine food restricts them to the productive waters of the high latitudes. Biological productivity of the oceans increases markedly towards the poles, largely because the low surface temperatures there maintain convection currents which serve to raise large quantities of dissolved mineral nutrients to the surface. The resultant high concentration of nutrients near the surface of polar seas supports enormous populations of plankton and, ultimately, the fish upon which the larger alcids feed.

Alcids are comparatively weak flyers and are not regularly migratory, but rather disperse from their breeding range only when forced to do so by freezing waters or food scarcity. Massachusetts lies at the periphery of the ranges of these birds, with the exception of the Razorbill. It is only under exceptional circumstances, such as southward irruptions coupled with strong northeasterly storms that substantial numbers of alcids are observed along the Massachusetts coastline.

# Razorbill, or Razorbilled Auk (Alca terda):

The Razorbill is the least numerous of the Atlantic alcids and is restricted as a breeding bird in North America from Labrador south to Matinicus Rock, Maine. During the winter, a substantial but yet undetermined percentage of the western Atlantic Razorbills feed on the sand shoals south and east of Nantucket Island and on Georges Bank. In any case, Nantucket is the best locality in North America to see Razorbills from shore during winter. At that season they show a greater preference for shallower water than either the murres or the puffins.

In flight, the laterally compressed, bulbous bill of the adults gives the head a strikingly large, rectangular appearance. The bill of the immature bird is considerably smaller than that of the adult but still differs from that of the Thick-billed Murre in being deeper perpendicular to the angle of the gonys and being rounded at the tip. The tip of the bill of Thick-billed Murres is distinctly pointed. In the winter plumage of Razorbills of all ages, the white on the side of the face extends appreciably above an imaginary line running from the gape through the eye to the nape. This is never the case with Thick-billed Murre, in which the white of the underparts is restricted to the throat, cheeks and sides of the neck. The rectrices of the Razorbill are comparatively long and strikingly wedge-shaped, such that the tail is longer than in any other alcid. The tail covers the trailing feet in flight and is frequently cocked upwards while the bird sits on the water. The feathers of the upperparts are always coal black.

## Common Murre (Uria aalge):

The murres are colonial cliff-nesting seabirds, breeding largely in the arctic regions but ranging south to eastern Newfoundland. The modifier "common" is unfortunately inappropriate: the Thick-billed Murre is some 4-5 times as numerous as the Common Murre on a global scale and is far and away the more abundant species in the Gulf of Maine during the winter. However, the Common Murre is the more abundant nesting species at the southern limit of the breeding range. Of the subspecies occurring locally, the Common Murre has a noticeably longer and slimmer bill than the Thick-billed Murre, although this is not universally the case.

The Common Murre is quite readily identified in winter plumage by the warm chocolate brown (instead of black) feathering of the upper parts, which is striking when direct comparison with Thick-billed Murre is possible; the extent of white into the facial region in conjunction with the pencil-thin eye-line extending posteriorly from the eye; and, at close range, the longer slimmer bill. For distinguishing the two murres in breeding plumage, one must rely upon back color, bill structure and the sharper "peak" of white feathering extending into the black upper breast of the Thick-billed Murre.

Recent observations suggest that the Common Murre is a regular wintering species in small numbers on the Nantucket Shoals and western Georges Bank.

#### Thick-billed Murre (Uria lomvia):

This is the nesting murre of the high arctic, breeding sparsely with Common Murres south to eastern Newfoundland. Although it is clearly the most frequently observed alcid in the northern Gulf of Maine, it is typically outnumbered in Massachusetts waters by the Razorbill.

The Thick-billed Murre may be distinguished from the Razorbill (particularly immature birds, which it resembles closely) by the lack of white extending from the cheek above the eye (see Razorbill), the smallerheaded appearance, and, at very close range, the distinctly pointed, rather than rounded, bill. The timing of the molt of the body plumage is exceptionally variable, such that it is not unusual to see individuals in full breeding plumage between December and March, the period when they are most frequently observed in Massachusetts. Therefore, Thick-billed Murre will more often than not show black feathering profusely scattered about the throat, cheeks and upper breast during the winter; many individuals possess a complete black collar that delineates a pronounced white throat patch. In this author's experience, Razorbill does not exhibit this degree of variation in molting and is virtually always in complete winter plumage from November to April. The short (1/2") tail of Thick-billed Murre may be of use as a field mark if the birds are flushed ahead of a ship, in that the trailing feet project beyond the tail. In the hand, the rectrices are never wedge-shaped as in Razorbill.

# Dovekie (Alle alle):

This diminutive seabird is a strictly arctic nester and is particularly sporadic in its occurrence in New England waters. Like other alcids, it is not a strong flyer and is particularly susceptible to major displacement by strong winds. Unable to make headway against gale-force winds, large numbers of Dovekies are occasionally blown ashore, frequently far inland. In Massachusetts, Dovekies occur principally in November and December and are surprisingly scarce thereafter.

Dovekies are unique and unlikely to be confused with any other seabird, with the exception of Common Puffin. They are Starling-sized and appear tiny at any distance over the water. Their whirring flight carries them erratically about; gusts of wind quickly divert their course. At close range, the bill is characteristically short and conical, and each set of secondary coverts is tipped with white, giving the bird three white wingbars.

# Common Puffin (Fratercula arctica):

Puffins are unique among Atlantic alcids in their selection of excavated burrows for nest sites. They breed from Labrador south to Matinicus Rock in Maine and in winter apparently disperse widely over continental-shelf waters. Other than a concentration of sightings along the continental slope from Nova Scotia to Delaware, their winter distribution is very poorly known.

Puffins are less frequently observed on the wing than other alcids and are usually encountered alighted on the water. Seated, they appear large-headed and low-sterned (as if partially submerged) and are dark to the waterline on the sides. The brightly-colored sheath of the bill is lost in the winter, but the dusky-cheeked adults and juveniles are still easily recognizable by shape, even though the bill of the juvenile is only somewhat suggestive of the adult.

In flight, the small size (2/3-size of murre), large head and bill, chunky body, the lack of a light trailing edge to the wing, and rounded instead of pointed wings all lend a unique appearance to this bird. Confusion with Dovekie in flight is surprisingly easy because of shape, but the dusky head and larger size should be evident even from a distance.

#### Black Guillemot (Cepphus grylle):

The Black Guillemot is restricted to the immediate proximity of the shoreline, as they feed in shallow water and are rarely seen more than a mile from land. They have an extremely broad nesting range, extending from the high arctic south to the Isles of Shoals, Maine. They are a fairly common wintering bird around rocky shores in Massachusetts and an uncommon, although regular in recent years, wintering bird in tidal rips over sand shoals of Cape Cod and Nantucket. Black Guillemots are the most readily identifiable of all the alcids. In the breeding plumage, the black body with striking white wing patches could hardly lead to confusion with any other bird. The white secondary coverts are retained in the winter plumage, although most of the black body feathering is replaced by gray and white. They never show the contrast between upperparts and underparts characteristic of the other species.

Other unrelated seabirds are frequently mistaken for alcids. In particular, Oldsquaws are misidentified as puffins (or even large alcids) but have longer necks, broader wings, and are differently patterned. It is well worth studying flying Oldsquaws to learn the shape. Horned Grebes, with their whirring flight and white wing patches, are occasionally mistaken for Black Guillemots.

Many of the diagnostic features mentioned here are comparative, and thus less helpful to observers entirely unfamiliar with albids.



Immature Razorbill Thick-billed Murre (non-breeding) Common Murre (non-breeding)

> Photographs by Scheil Zendeh Courtesy of the Museum of Comparative Zoology

## RE-ESTABLISHMENT OF THE COMMON PUFFIN, Fratercula arctica,

IN A FORMER BREEDING AREA IN MUSCONGUS BAY, MAINE

by S. D. J. Franzeen, Cambridge

The world population of the Common Puffin, <u>Fratercula arctica</u>, is estimated at fifteen million birds, thirteen million of which breed on islands off the coast of Iceland. In the eastern north Atlantic, some Common Puffins have been found nesting in a few areas as far south as the coast of France, but a large oil spill in that area in March 1978 has rendered the status of these colonies questionable. Most of the remaining two million are distributed in the western north Atlantic around Labrador and Newfoundland. Two islands in the waters of northern Maine are the current southern limit of their range.

Puffins are known to have nested on at least seven islands off the coast of Maine during the nineteenth century. Due primarily to pressure from hunters, they had disappeared from five of these nesting areas by 1895, surviving on Machias Seal Island and Matinicus Rock. Although the world population is in decline, the protected Maine colonies have grown to approximately 1500 pairs on Machias Seal and 170 pairs on Matinicus.

In the summer of 1974, 54 two-week old puffin chicks were collected on Great Island in Witless Bay, Newfoundland, and transported one thousand miles to Eastern Egg Rock, an island in Muscongus Bay, Maine. This was the beginning of the Puffin Re-establishment Project, which is under the direction of Stephen W. Kress, an ornithologist at Cornell University and a staff member of the National Audubon Society. The main objective of the project is to investigate procedures for re-establishment of the Common Puffin in a former breeding area at the southern limits of its range.

Eastern Egg Rock, a seven-acre island situated six miles east of New Harbor, Maine, was chosen as the study site because it had supported a breeding colony prior to 1900. Located only eight miles from Hog Island, site of the Audubon Camp in Maine and the base of operations for the project, Eastern Egg Rock offers ideal nesting habitat unmarred by the presence of terrestrial predators. With a shoreline of large granitic boulders, the island's maximum elevation above high tide is 23 feet. There are no trees, but 58 species of vascular plants are present. The summer climate is cool and dry, with a mean daily range in temperature of 13- $24^{\circ}$ C. Resident birds include: Leach's Storm Petrel, Common Eider, Spotted Sandpipers, Black Guillemot, Tree Swallow, Common Yellowthroat, Red-winged Blackbird, and Song Sparrow. In 1978, 139 species of birds were seen on or near the island.

Since the project began, 438 puffins have fledged, an overall success rate of 97 percent. These chicks, raised in sod burrows especially constructed to simulate their natural environment, were fed two meals per day, consisting of smelt and vitamin supplements. The fish were placed in the entries of the burrows so that there would be minimal contact between the birds and the team of three research assistants.

The team also studied plumage changes and development processes involving

growth and behavior. Observations were conducted from a blind constructed over four burrows which had been roofed with clear plexiglass panels.

Until recently, the puffin chicks were banded just prior to fledging with a U.S. Fish and Wildlife Service monel band and one colored plastic band designating the year. In 1978, however, the chicks were banded with a series of color bands in various combinations with the FWS band and a bicolored band which marks them as Eastern Egg Rock puffins. These combinations allow individual birds to be identified.

Puffins, like other alcids, live at sea, feeding on the abundance of fish found in the cold northern waters. Although they are social birds, they come ashore only during the breeding season. Returning to the island colony from which they have fledged, puffins begin to breed at approximately five years of age. One egg is laid, usually in a burrow dug into the earth or appropriated from another species. Both parents participate in caring for the chick, which fledges at approximately six weeks. By late August, the birds have deserted the breeding area for the sea. It is not known where puffins go in winter, but as they are seldom seen in any great number, it has been postulated that they disperse over the Atlantic.

A number of puffins fledged from Egg Rock in past years have been seen visiting the island and sitting in the water offshore. In 1977, there were eighteen sightings, 28 percent of which involved birds landing on the island. This increased to thirty sightings in 1978, 50 percent of which involved landings on the island. Puffins were seen on one island for a total of four hours, ten minutes, in 1977; thirty-five hours, forty minutes, in 1978. In the latter years, most identified birds were wearing white bands, indicating they were three years old, but one bird wearing a black band, was a two-year-old. At least one year-old puffin, with no band discernible, was seen in the company of a three-year-old bird. There have been two sightings of unbanded puffins, which may indicate that birds of other colonies are interested in the island. Perhaps they are drawn to it by the wooden decoys mounted at various positions along the southern end of the island. Most of the landings on Eastern Egg Rock have occurred among the six puffin decoys situated on a large boulder on the southeastern shore. A number of the birds have been seen rubbing bills with the decoys and sitting among them for hours at a time.



In conjunction with the re-establishment of the puffin, an experiment was begun in 1978 to encourage Arctic Terns, <u>Sterna paradisaea</u>, to nest on Eastern Egg Rock. Arctic Terns are known for their aggressive defense of their nesting sites against predators, including gulls. It is hoped that such a colony will prevent re-colonization of the island by gulls, which might prey upon the chicks of the re-established puffins.

Arctic Terns are known to have nested on the outer islands of Muscongus Bay in the 19th century. Like puffins, they were hunted for their skins, which were at a premium during the height of the milinery trade. As recently as 1936, a few pairs still nested on Eastern Egg Rock, but eventually their nesting sites were taken over by Great Black-backed Gulls, Larus marinus, and Herring Gulls, Larus argentatus, which were in the throes of a population explosion.

To attract Arctic Terns to the island, thirty-eight wooden Arctic Tern decoys were placed in a typical nesting habitat and a taped recording of flocking sounds was played. Both Arctic and Common Terns, <u>Sterna hirundo</u>, visited the island, landing among the decoys in the mock tern colony. Courtship displays, feedings, and matings were observed, along with some nest building activity, but no eggs were laid. At least three pairs of Arctic Terns were seen visiting this "colony" throughout the summer and were very active in chasing gulls away from their territories.

The success of the Puffin Re-establishment Project to date, based on the return of transplanted chicks from different age-groups, is very encouraging. Breeding birds are not expected to colonize the island before 1980 because puffins do not usually breed before their fifth year. Although there will be no more chick transplants, observation of the island will continue. If this re-establishment project is successful, it will set a precedent for wildlife management, establishing procedures for the re-introduction of puffins and perhaps other locally-extirpated seabirds to their former ranges.



#### References

- Kress, S. W. 1974. Report on the re-establishment of the Common Puffin, Fratercula arctica, to its former breeding habitat in Muscongus Bay, Maine. Unpublished Progress Report.
  - 1975. Unpublished Progress Report.
- 1978. "Establishing Atlantic Puffins at a former breeding site." In S. A. Temple (ed. <u>Endangered Birds: Management Tech-</u> niques for Threatened Species. U. of Wisconsin Press, Madison, pp. 373-378.
- Lockley, R. M. 1953. Puffins. New York: Devon-Adair Co.
- Nettelship, D. "Breeding Success of the Common Puffin, <u>Fratercula arc-</u> <u>tica</u>, on Different Habitats at Great Island, Newfoundland." <u>Ecolog-</u> <u>ical Monographs</u> 42, no. 2, pp. 239-268.
- Norton, A. H. 1923. "Notes on Birds of the Knox County Region," (Parts 1 and 2). Maine Naturalist 3:31-35.
- Petersen, A. 1976a. "Age of First Breeding in the Puffin, <u>Fratercula</u> <u>arctica.</u>" <u>Astarte</u> 9:43-50.

1976a. "Size Variables in Puffins, Fratercula arctica, from Iceland, and Bill Features as Criteria of Age." <u>Ornis Scand</u>. 7:185-192.

#### ARCHAEOPTERYX - NOT ALONE?

A single fossil feather inpression, the discovery of which established the existence of <u>Archaeopteryx</u>, has now been augmented by partial or entire skeletons of a further four specimens. Since 1861, <u>Archaeopteryx</u> has held the distinction of being the most ancient known bird at about 135 million years old.

Dr. James Jenson, a palaeontologist at Brigham Young University, has unearthed two femurs from rock formed 130 million years ago, about the time <u>Archaeopteryx</u> was living. The new fossil femurs appear to belong to two different species. The femur of <u>Archaeopteryx</u> has a large well-developed knob that fits into a socket in the pelvis, which is typical of animals that run well on the ground; the newly discovered femurs, however, are small, a characteristic shared with birds that are good flyers.

<u>Archaeopteryx</u> has generally been regarded as a direct link between birds and reptiles; however, if Dr. Jenson's theory proves that <u>Archaeopteryx</u> shared the same period in time with other birds that were more adept at flying, its singular status may now be challenged.

R.H.S.

# IDENTIFICATION OF ARCTIC LOONS

by J. T. Leverich, Boston

Common Loons (<u>Gavia immer</u>) are familiar winter visitors throughout Massachusetts, but especially along the coast. Numerous sightings of the Arctic Loon (<u>Gavia arctica</u>) in winter plumage have also been reported, but these identifications have almost always been based on bill characteristics, a miserable field mark at best. Such reports must necessarily remain in question.

There are, however, valid field characters for the Arctic Loon in Basic plumage, and a few of these winter sightings are certainly correct. Moreover, Arctic Loons have occasionally been observed in summer plumage, and specimens have been obtained from neighboring states. Hence, it is likely that this species will eventually prove to be a very rare but regular winter visitor to our shores.

The diagnostic characters for the two species are actually rather clearcut and easy to see. The problem has been that they are almost entirely unknown to Eastern birders. Painted illustrations in the field guides are misleading, and textual descriptions are often wrong. European field guides are not much better, but the new <u>Handbook of the Birds of Europe</u>, the <u>Middle East and North Africa</u> (see C below) is, as always, a treasury of valuable information.

Most field problems are very painful to the average birder, but I think that you will enjoy learning about this one. There are many more field marks to be seen on a Common Loon than one might have suspected. Practice seeing them all. If you are accustomed to seeing everything on this familiar species, and if you should be lucky enough to encounter a wintering Arctic Loon, you will almost certainly recognize it.

As each field mark is discussed below, a coded reference is given to the illustrations in currently available field guides and certain other books

- P = Richard H. Pough, 1951. Audubon Water Bird Guide, Garden City. Illustrations by Don Eckelberry. Plate 1, after p. 162.
- F = Roger Tory Peterson, 1947. A Field Guide to the Birds, Boston. Plate 1.
- R = Chandler S. Robbins, 1966. A Guide to Field Identification Birds of North America, New York. Illustrations by Arthur Singer, p. 19.
   E = John Bull and John Farrand, Jr., 1978. The Audubon Society Field
- E = John Bull and John Farrand, Jr., 1978. The Audubon Society Field Guide to North American Birds, Eastern Region, New York. Photographs 190 (and 187 and 188 for summer plumage).
- W = Miklos D. F. Udvardy, 1978. The Audubon Society Field Guide to North American Birds, Western Region, New York. Photographs 170 and 173.

p. 157 of Pacific Loon (Arctic Loon) and p. 164 of Common Loon.

Each illustration or photograph is evaluated according to the following

code:

- ++ Excellent portrayal of the field mark
- + Good portrayal
- 0 Field mark not visible (because of lighting, position of the bird, etc.)
- Field mark is only suggested, or poorly shown
- -- The painting is quite incorrect and misleading.

# Field Marks

#### 1. Bill shape and color

The bills of both species are fairly dark and straight. That of the Common Loon is usually larger and heavier than that of the Arctic Loon. Young birds have lighter bills (in both species).

At times, because of the lighting, even the darkest bills may appear white or yellow. The bill may also appear upturned. Some bills appear strongly angled, as in the Red-throated and Yellow-billed Loons. All in all, bill shape and color is surely one of the worst field marks for distinguishing these two species. Much of the confused identification in the past can be traced to over-reliance on this field mark.

#### 2. Forehead structure

Common Loons have a decided angle to the forehead, almost a "bump." The forehead of the Arctic Loon is lower and rounder, smoother. (Curiously, this mark is much less observable in the summer plumages of the two species.)

P++;F+;R++;E++;W++;C++;S -(Arctic), ++(Common).

#### 3. Eye-ring

Almost all Common Loons in winter plumage show a white eye-ring; Arctic Loons never do. The eye-ring, when present, is readily observable even at a distance. P++;F+;R++;E++;W+;C++;S+ (NOTE: The Common Loon illustrated in E has so much white on the face that the eye-ring dissolves into the generally white lower face region, i.e., the entire eye lies in the white facial region. In the Arctic Loon, the white of the face never extends this high.)

# 4. Pre-ocular patch

On an Arctic Loon, the region immediately in front of the eye is usually the darkest and blackest part of the entire head. P--;F--;R-;W++;C-;S+

#### 5. Bulk of the neck

The neck of the Common Loon is noticeably bulkier than that of the Arctic Loon. It appears fatter, less willowy. Unfortunately, this apparent bulk is due to the shape and length of the neck feathers, not to any physiological difference. Apparently, a Common Loon can sleek down the neck feathers, and it therefore may not display this mark at all times. Furthermore, all too often the loon's neck will be retracted, and the relative bulkiness will be difficult to judge. P 0;F++;R++;E++;W-;C+;S+

5. <u>Neck markings</u> (Very diagnostic) The neck of the Common Loon is definitely two-toned, white in front and brownish in back. The boundary curve between these two areas is characteristic. In the Common Loon this is a <u>curve</u>, with a slight indentation behind the eye and a large and very obvious white patch halfway down the neck. This latter occurs at the same point as the large striped area in the summer plumage. In life, this indentation is usually quite obvious. P 0; F--;R-;E++;W++;C++;S++

The neck of the Arctic Loon is actually three-toned; white in front, a light grayish brown in back, with a thin darkish stripe between these two colors on the upper half of the side of the neck. The grayish color of the hindneck contrasts noticeably with the exceptionally dark back in the Arctic Loon, the neck appearing much paler than the back. The reverse of this pattern is true of the Common Loon (the hindneck is darker than the back). The hindneck-back contrast is an excellent field mark for the Arctic Loon. P-;F-;R-;W+;C++;S++

The dark line on the side of the neck is much harder to see, although it is clear enough in the proper light. It is perhaps easier to note that the rear border of the white area on the neck of the Arctic Loon is essentially a straight line, with no indented half-collar and no extension of white onto the face. P 0;F-;R+;W++;C++;S++

# 7. Chinstrap

On some Arctic Loons, there are a few brown spots across the throat at the very top of the neck, rather like a chin-strap. Apparently the Common Loon never shows this mark. P 0;F--;R--;W+;C-;S++

#### 8. Mantle Color

In winter the plumage of the Arctic Loon darkens more than that of any other diver, becoming decidedly darker than the color of the crown and hindneck. All loons appear to sit low in the water, but the very dark brown back on this bird gives the impression of an unusually low carriage. In juvenile birds the mantle color is less uniform, appearing somewhat scaly in good light because of gray feather margins. P--;F-;R-;W++;C++;S++

# 9. Thigh patch

Arctic Loons often show a distinctive white thigh patch which is observable at great distances. None of the field guides show this mark. It is (poorly) visible in the photograph (p. 157) of Small's book.

Apparently, this patch is also present on the summer plumage of the bird. On Plate 4 of Cramp and Simmons, the patch is clearly visible on the summer plumage, but it is not shown on the winter plumage. The mark was first reported in the Letters column of British Birds, Vol. 71, No. 5, pp. 225-226. It is apparently a valid field mark and yet not a genuine plumage characteristic. The white blaze is nothing more than a continuation of the white underparts. Ordinarily, these underparts show as white sides, white all along the entire length of the body, but sometimes Arctic Loons sit so low in the water that only these rear flanks flash white. P-;F--;R-;W-;C++;S++

10. Diving style (from a letter by Stephen Jackson in British Birds,  $\frac{71(7)}{9}$ , p. 317)

"On inland waters, I have noticed that Great Northern Divers Gavia immer

always slither under slowly when diving, whereas Black-throated <u>G</u>. <u>arctica</u> jump upwards slightly before they dive. Depth of water appears to be irrelevant: in February 1978, I watched a Black-throated Diver and a Great Northern Diver swimming and feeding together on Foremark Reservoir, Derbyshire; several times they surfaced within a metre or so of each other, yet their diving actions remained distinct enough to enable them to be distinguished even at a distance such that they appeared mere blobs on the water."

I hope that the above material will convince the reader that field identification of the Arctic Loon in winter plumage is certainly not impossible. In some senses, it is not even difficult. Close observation is required, as well as careful attention to a combination of marks rather than one single identifying feature. Reports of wintering Arctic Loons must continue to be carefully scrutinized. Submitted reports should contain comments on all of these features mentioned above, as well as other descriptive remarks concerning color, size, etc.

#### WHERE TO FIND BIRDS IN EASTERN MASSACHUSETTS

Compiled, revised, and edited by Leif J. Robinson and Robert H. Stymeist. Published by Bird Observer of Eastern Massachusetts, 1978.

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#### by Richard S. Heil and Robert H. Stymeist

June was ideal; the temperature averaged 68.2°; a remarkable 4-day heat wave struck on the 15th, bringing daily readings into the 90's, and the month's high of 95° on the 16th, 1° shy of the day's record. The month's low was 50° on the 13th. Rain totaled only 0.86 inch, 2.33 inches under normal; this was the 11th driest June in 162 years, but the driest only since 0.58 inch in 1976. While June was also dry in most of Greater Boston, a severe thundersquall brought torrential flooding rain to some northern suburbs the evening of the 18th. A southwest wind on the 4th brought in some late migrants - noticeably Acadian Flycatchers.

10

3

July was warm and humid; the temperature averaged  $7^{4}.5^{\circ}$ . The month's high was  $94^{\circ}$  on the 13th; the low was  $55^{\circ}$  on the 5th. Rain totaled 2.36 inches, though some suburbs reported torrential thunderstorms. The devpoint was oppressive and was above  $72^{\circ}$  or higher during the final 8 days of the month.

#### LOONS THROUGH HERONS

Sixty Common Loons present during July along Sandy Neck, Barnstable, were most unusual and represent the highest number reported during the summer months. Northern Fulmars were reported in good numbers in early June with 30+ seen off Monomoy, and 40 noted off Gloucester; last year during the same period only 5 and 2 were observed in the above areas. The count of 25+ Sooty Shearwaters off Chatham on the BBC trip was far below the 1,450 seen on that trip last year. The report of 30+ pairs of Leach's Storm-Petrels at Penikese Island is interesting and encouraging. As many as 5 summering Great Cormorants were reported and all were carefully identified; this represents a record number reported for the summer months.

Heron success was down on Clark's Island, Duxbury; a full report will be published in BOEM in a future issue. As many as 5 Little Blue Herons, 6 Great Egrets, 300 Snowy Egrets, 2 Louisiana Herons, 2 Yellow-crowned Night Herons, 4 Least Bitterns, and 50 Glossy Ibis were found throughout the summer on 'Plum Island. A <u>White Ibis</u> was reported off and on in the Plum Island - Newburyport area during late June and again in July.

Common Loon:			
6/3,9	Framingham, S.Hanson	1,1(breed.plum., found dead)	R.Forster,W.Petersen
thr.July	Barnstable(SN)	max 60	R.Pease
Pied-billed G	rebe:		
6/30	P.I.	6	R.Stymeist#
Northern Fulm	ar:		
6/3,9	off Monomoy, off Glouc.	30+,40	BBC(H.D'Entremont).S.Garrett#
7/29	off Gloucester	8	S.Garrett, E. Pyburn
Cory's Shearw	ater:		
7/25,29	SN,off Gloucester	8+,1	R.Pease,S.Garrett#
7/30	Nantucket(Madaket)	15-25	M.Litchfield
Greater Shear	water:	1. A A.	
6/3,17	off Monomoy, off Glouc.	10,1	BBC(H.D'Entremont),S.Garrett#
6/24,7/24	Cape Cod Bay, 15m.E. of		
	Chatham	17,200	J.Grugan, P. Trull
Sooty Shearway			
	off Monomoy, off Ipswich	25+,1	BBC(H.D'Entremont), M.Barnett#
6/17,24	off Gloucester, Cape Cod		
	Bay	19,8	S.Garrett#,J.Grugan
7/2,17		15,1	B.Nikula#,R.Heil
7/24,29	15m.E.of Chatham, off		
	Gloucester	80,1	P.Trull,S.Garrett#
Manx Shearwate			-
6/24,7/1	Cape Cod Bay, Magnolia	1,1	J.Grugan, J.Nove
7/6,25	P'town,S.N.	2,11+	R.Heil, R. Pease
Leach's Storm-	-Petrel:		
7/22	Penikese I.	30+ pairs	fide W.Petersen
7/24	15m.E.of Chatham	10+	P.Trull
Wilson's Storn	n-Petrel:		
	off Monomoy	2+	BBC(H. D'Entremont)
7/24,29	15m.E.of Chatham, off		
	Gloucester	1,000;200	P.Trull,S.Garrett#

'Gannet: 6/3 off Monomoy 3 BBC(H.D'Entremont) Great Cormorant: Boston Harbor, N.Scituate 1 imm., 2 imm. 6/8-9,9 J.Grugan, W.Petersen# 7/8 Plymouth 2 sub-ad. W.Petersen, B.Harrington carefully identified in all cases Double-crested Cormorant: 6/16,24 Wakefield, Boston Harbor 1;2500 R.Forster.J.Grugan 7/14,22 P.I.(Stage I.), Weepecket I.(Buzz.Bay) 70+,300+ R.Heil,W.Petersen Great Blue Heron: 6/17+30 W.Newbury 1+2 O.Komar, R.Stymeist# 6/18,19. Cambridge, Carver 1,1 S.Sanders, W.Petersen 7/9,21 P.I.,S.Hanson 10.7 BBC.W.Petersen Green Heron: 6/14,25 MBO, P.I. nesting 5 yg., 12 K.Anderson, BBC 7/15,16 Ipswich, P.I. ad.on nest,15 J.Berry,BBC Little Blue Heron: 6/10-7/30 P.I. max.3 ad.,2 imm. v.o. 6/2,7/11 Plymouth, Wianno .1,1 imm. BBC.G.Wilson Cattle Egret: 6/2,19 Marshfield, Ipswich 1,5 BBC, J. Berry 7/8,30 Hamilton, Ipswich 1-3,3 J.Berry Great Egret: max. 6(7/13) 6/10-7/31 P.I. v.o. Boston Harbor, Dartmouth 1,1 6/24,7/6 J.Grugan, D.Crompton# 7/7,21 E.Boston, Nauset 1,1 S.Zendeh, S.Surner Snowy Egret: max 300+(7/16) thr. P.T. L.Jodrey# + v.o. 85 7/31 Saugus J.Berry Louisiana Heron: 6/20-7/31 P.I. max.2 v.o. Black-crowned Night Heron: max. 42 thr. Cambridge-Watertown 6/4,6/8 Nantucket,Lovells I. R.Stymeist 20,15 D.Alexander.J.Grugan max.20+,24 thr.July,9 Somerville,P.I. S.Zendeh,BBC Yellow-crowned Night Heron: 6/21,24 Centerville,Annisquam 1,lad. R.Forster,H.Wiggin 7/9;29 1 ad.,1 imm.;1 P.I. O.Komar#,BBC Least Bittern: P.I. 1-4 thr. v.o. American Bittern: 1,2-3 6/11,17 P.I.,Milton P.Arrigo#, D.Skeels# 1,1 6/19,30 Carver, W. Newbury W.Petersen, R.Stymeist# 7/8,9 Newburyport, P.I. 1,1 F.Bouchard, N.King# Glossy Ibis: P.I.-Newburyport area max.50+ thr. v.o. 6/9,7/4-31 S.Hanson, Monomoy W.Petersen, v.o. 5,max.3 White Ibis: 6/29-7/28 P.I.-Newburyport area 1 v.o. seen on only 3 days - 6/29,7/15,7/28 - never well-described

#### WATERFOWL THROUGH COOT

A Brant was found in early June in Duxbury; other lingering ducks included Common Goldeneye, Bufflehead, and Surf Scoter. The introduction of nesting boxes on Flum Island has been successful there for Wood Ducks,with several families reported, Common Eiders were found nesting on Penikese Island and young were noted from Naushon Island.

2	v.o.
481	GBBBC
eh 1	R.Forster
220+	R.Heil
	481 ch 1

Mate C.

P.I.	2	BBC(P.Arrigo)
manufactory on the state		
IRWS, G. Boston	22,7	R.Heil,GBBBC
P.I.	2 ad.,8 yg.,18	H.Weissberg#,R.Heil
GMNWR	50	BBC(R.Clayton)
e:		
N.Scituate	1 f.	W.Petersen
Monomoy	l m.	C.Goodrich
Duxbury	60,50	R.Forster, W.Petersen
Penikese I.	4 nests	fide W.Petersen
Gloucester, Naushon	3,2 f5 yg.	J.Berry,K.Anderson#
oter:		
Revere, Gloucester	2,3	S.Zendeh#,J.Berry
N.Scituate,Gloucester	1,1	W.Petersen, J.Berry
P.I.	max.10	v.o.
rganser:		
Monomoy, Duxbury	50+,3	SSBC, R. Forster
Manomet,Higham	1,2	W.Petersen
	GMNWR e: N.Scituate Monomoy Duxbury Penikese I. Gloucester,Naushon oter: Revere,Gloucester N.Scituate,Gloucester P.I. rganser: Monomoy,Duxbury	GMNWR     50       e:     1 f.       N.Scituate     1 f.       Monomoy     1 m.       Duxbury     60,50       Penikese I.     4 nests       Gloucester, Naushon     3,2 f5 yg.       oter:     2,3       N.Scituate, Gloucester     1,1       P.I.     max.10       rganser:     Monomoy, Duxbury       Monomoy, Duxbury     50+,3

A <u>Mississippi Kite</u> was found in Chatham on June 1; this was the third record this spring. A total of 15 Red-shouldered Hawks was reported, certainly an encouraging sign over the past few years. A sub-adult <u>Golder Eagle</u> was present in the Wellfleet area for a week and was observed by many while it was perched and in flight. Bald Eagles were reported from P.I., Monomoy, Plymouth, South Carver, and Martha's Vineyard.

Turkey Vultu	re:		
6/7,19	Hingham, Petersham	1,3	R.Campbell, R.Forster#
6/30	E.Harwich	1	W.Harrington
Mississippi 1	Kite:		
6/1	Chatham(Morris I.)	l sub-ad.	I.Nisbet
Sharp-shinne	d Hawk:		
7/9	Northfield	1 "display flight	t" R.Forster
Red-shoulder	ed Hawk:		
6/1,2	Mt.A.,Lynn	1,2	R.Stymeist#,S.Roberts#
6/7,11	Hingham, Manchester	1,1	R.Campbell, H.Wiggin
6/16	Groveland, Georgetown	1,1	R.Stymeist, V.Albee, O.Komar
6/17,19	Forest Hills, Petersham	-Barre	
		1,4	H.D'Entremont#, R.Forster#
6/20,26	Wareham, Norwell	1 ad.,1 ad.	W.Petersen
7/7	Middleboro	1	W.Petersen
Broad-winged	Hawk:		
6/2	P'town(Race Pt.)	50 migrants	J.Lipke
Golden Eagle			
6/14-21	Wellfleet	1 sub-ad.	R.Portnoy# + v.o.
care	fully identified and good	description submit	
Bald Eagle:			
6/7,16	Plymouth, P.I.	1 sub-ad.,1 imm.	(photo)
			J.Nichols.H.Weissberg# + v.o.
6/21,22	Monomoy, Essex	l imm.,l imm.	v.o.fide B.Nikula,fide J.Berry
7/1,4	S.Carver, Monomoy	1,1 imm.	J&B.Logan, R.Clem#
7/21.24	Essex, M.V.	l imm.,l imm.	H.Weissberg#,V.Laux
Marsh Hawk:			
7/24	Naushon I.	1 pr.ad. w/2 yg.	K.Anderson#
Osprey:	HORDER ST.		
6/2.12	P'town, Mashpee	2,1	J.Lipke, W.Petersen
6/17	Lexington, Wareham	1,1 nest w/l yg.	
7/23,28	Newburyport, GMNWR	1,1	M.Noland#,R.Campbell#
Ruffed Grous		-1-	the states for supprise to
6/24	Ipswich	f.w/8-10 yg.	J.Berry
King Rail:	1904101		0.000115
6/4	P.I.	1 calling "hip,h	ip hoorah" R.Heil
7/25	WBWS		R.Heil
Virginia Rai		- wareh Darr	
7/8	Monomoy, GMNWR	1 v/va 1 v/4 va	. J.Harris, M.Lynch
179	Pononoy , oranna	- "136.3+ "/" 36	· · · · · · · · · · · · · · · · · · ·



#### Immature Bald Eagle, Plum Island, 23 June 1979

Photographed by James Boyle

Sora: 6/2,7/8 Lynnfield,GMNWR 7,2 S.Roberts#,M.Lynch Common Gallinule: thr. adults w/yg. in Concord,P.I., and Peabody American Coot: 7/16 P.I. 7 BBC(L.Jodrey)

#### SHOREBIRDS

At least 5 pairs of Willets nested on Monomoy, with 2 young observed as early as July 28. Four migrants of the larger and grayer western race <u>inornatus</u> had arrived on Monomoy by July 28. Elsehwere, Willets were again on territory at Plum Bush, Newburyport where they have probably bred since 1977. A second pair exhibiting defensive behavior on Plum Island in early June is perhaps matured offspring from the original Plum Bush pair. A Baird's Sandpiper at Scituate July 25 was early, although not a record date.

The event of the nesting season occurred when a freshly dead unidentified shorebird chick was found near the edge of the Monomoy salt marsh. Initial suspicion that the 1-3-day-old, reddish-brown chick was a <u>Least Sandpiper</u> was soon confirmed by J. Jehl, who is familiar with the species on the breeding grounds. A <u>first breeding record for the conterminous</u> <u>U.S.</u>, this represents a range expansion over 500 miles to the southwest of Sable I.,N.S., the species' nearest breeding outpost. The specimen will rest at the Museum of Comparative Zoology, Harvard University.

The Marbled Godwit found on Monomoy June 24 was very unseasonal. A basic-plumaged <u>Bartailed Godwit</u> on Monomoy July 4 on was not, surprisingly, determined to be of the <u>L.l.</u> <u>lapponica</u> race of Scandinavia, W.USSR, on the basis of its whitish axillaries, clear white rump, and narrowly barred white tail.

Not quite as startling as the Least Sandpiper was the discovery of a <u>nest with three eggs</u> of <u>Wilson's Phalarope</u> on Plum I., Juné 29. Two pairs of phalaropes lingered throughout May and June, and perhaps both nested, since antagonistic behavior in the form of distraction displays, circling flight, and calling were performed by two separate males. A check of the nest July 14 yielded no eggs, though the nest appeared undisturbed. The success of the clutch remains undetermined, although no chicks or young juvenals were found in the subsequent period. The phalaropes'choice of habitat was surprising: <u>Spartina</u> salt marsh rather than the typical fresh water slough or impoundment. The nearest breeding colony is on I.St.-Jean, 50 mi. NE of Montreal, Quebec, where 7 nesting pairs were discovered in 1978. Wilson's Phalaropes are clearly undergoing an eastward range expansion with increasing spring records and suspected (but not proven) nestings in New Brunswick, upstate New York, and Virginia during the last few breeding seasons. American Oystercatcher: 6/thr. Monomoy, Nantucket 7/18 Monomoy, N.Scituate Semipalmated Plover: 7/29,31 Duxbury, New I.-Nauset Piping Plover: 6/2 Plymouth, Monomoy 6/17,7/4 Ipswich, Winthrop New I.-Nauset, Monomoy 7/7,21 Killdeer: 7/4,16 Winthrop.P.I. Black-bellied Plover: 6/2,17 Monomoy, Ipswich 7/4,6 Duxbury, Monomoy Ruddy Turnstone: 6/2,6 Monomoy, Duxbury 7/4,6 Winthrop, Monomoy American Woodcock: 6/4,6/16-7/16 Ipswich, 5 localities Common Snipe: GMNWR, Newburyport 7/1,9 Whimbrel: 7/16,25 P.I.,Scituate 7/18 Monomoy Upland Sandpiper: 6/16-30,30 W. Newbury, Newburyport 4 localities 7/thr. Spotted Sandpiper: 6/8-9 Lovell's I. 7/4.9 Winthrop, P.I. Solitary Sandpiper: 7/21-28,25 GMNWR, F.M. Willet: 6/thr. Monomoy, Newburyport P.I. 6/2-5 7/thr., 18-21 Monomoy Greater Yellowlegs: 6/9,11 N.Scituate, P.I. 7/17,28 E.Boston, Monomoy Lesser Yellowlegs: 7/4-17,16 E.Boston,P.I. Red Knot: 6/2,6 Monomoy, Duxbury 7/18,21 Monomoy 7/29,31 Duxbury, New I.-Nauset Pectoral Sandpiper: 7/8,23-29 CMNWR, P.I. White-rumped Sandpiper: 7/6,16 Monomoy Baird's Sandpiper: 7/25 Scituate Least Sandpiper: 6/6 Duxbury Monomoy 7/12 Dunlin: 6/2,25 Monomoy, P.I. 7/6 Monomoy Short-billed Dowitcher: 6/25,7/16 P.I.,Plymouth 7/13,18-21 Newburyport, Monomoy Long-billed Dowitcher: 7/14,19 P.I.

Stilt Sandpiper:

7/3.30

6/25,7/22 P.I., Nantucket

P.I.

v.o.,C.Jackson# max.15,4 B.Nikula, J.Mulroy ... 20,3 125,200 R.Forster,R.Heil# 7,12 BBC,SSBC 5,12(8juvs.) BBC,S.Zendeh# 25(6juvs.),15 R.Heil# S.Zendeh#,BBC 8,10 700,36 W.Petersen#,BBC 20,60 W.Petersen.R.Stymeist# 250,30 W.Petersen, R.Forster 4,2 S.Zendeh#,R.Stymeist# 3, singles J.Berry, v.o. 2,1 R.Walton, V.Albee# 3,5 BBC,W.Petersen 165 R.Heil & B.Nikula max.2ads.,ljuv., R.Stymeist# 5 individuals v.o. 6 J.Grugan 4,3 S.Zendeh,BBC BBC, G. D'Entremont# 1-2,1 10+,pr. B.Nikula#,v.o. pr. R.Forster 5-7prs.,2-4 western race R.Heil# W.Petersen,BBC 1,7 20,100+ S.Zendeh, W.Petersen# S.Zendeh#,BBC 14-15,60 50,5 W.Petersen, R.Forster 175,350 R.Heil# R.Forster#,R.Heil# 600,650 2,3 M.Lynch, BBC R.Heil#.BBC 5,1 W.Petersen 1 6 R.Forster 370+ plus a 1-3-day-old chick found freshly dead-first breeding record for conterminous U.S. K.Anderson# W.Petersen, R.Heil 1,2 R.Stymeist# 5 50;700 R.Heil, B.Harrington 1300;2300 R.Heil R.Campbell,H.Wiggin# 1,1 1,1 R.Heil.E.&C.Andrews 4,12 R.Forster,BBC

Semipalmated	l Sandpiper:		
6/2,25	Monomoy, P.I.	1800,30	W.Petersen, R.Heil
7/25,28	Scituate, Monomoy	1100,1100+	W.Petersen#
Western Sand	lpiper:		
7/21	Scituate	1 ad.	W.Petersen
Marbled Godw	rit:		
6/24,7/21	Monomoy	1,1	I.Nisbet,B.Nikula#
Hudsonian Go	odwit:		
7/thr.	Monomoy	max.80(8/29)	B.Nikula#
7/13,15	Newburyport, Winthrop	7,7	R.Heil,S.Zendeh#
Bar-tailed (	Bodwit:		
7/4-on	Monomoy	l basic plumage	R.Clem, et al.
7/thr. 7/13,15 Bar-tailed (	Monomoy Newburyport,Winthrop Godwit:		



Bar-tailed Godwit with Hudsonian Godwits and Dowitchers

Monomoy, 6 July 1979

Photograph by Blair Nikula

Ruff:			
6/1,6/20-3	22 Monomoy	lm.,1f.	B.Nikula, J. MacLean#
7/1-2,5		lm.black,lf.wl	nite BBC, P. Parsons
Sanderling:			
6/2,7/28	Monomoy	250,400+	SSBC,W.Petersen#
American Av	ocet:		
6/30,7/4	N.end Monomoy	1	W.Harrington, R.Clem
Red Phalaro	pe:		
6/10,24	Monomoy	1,1	W.Harrington#, C.Goodrich
Wilson's Ph	alarope:		
6/thr.	P.I.	max.2m.,2f.	v.o.
6/29	P.I.	2m.on territo:	ry-nest w/3 eggs found
	first confirme	ed breeding record for	r northeastern U.S.
	and the second		R.Heil
7/16,31	New INauset, Monomoy	1,1	P.Trull,W.Drummond#
7/1-14	P.I.	lf.	G.Soucy#
Northern Phi	alarope:		
7/24	15mi.E.of Chatham	1	P.Trull

#### JAEGERS THROUGH SKIMMER

Laughing Gulls continue successfully on Monomoy with 500 breeding pairs reported there this year. In Newburyport Harbor 2 adult and an immature Little Gull were present from late July; Rick Heil reported that the immature closely associated with one of the adults, almost appeared to be begging food. The immature had a slaty cap, but very little dusky on the upper wing surface and black sub-terminal tail band. An adult Sabine's Gull on Monomoy was the highlight of the month.

For the first time in several years the breeding success of terns has improved. Peter Trull, tern warden, reports that Common Terns increased 33%; Roseate Terns, 20%; and Least Terns, 17%, from the previous breeding year. Arctic Terns were down 15%; however, No Man's Island was not censused this year, which usually has a number of breeding Arctics. The count of 3341 breeding pairs of Common Terns on Monomoy is accurate to nearly 100% since tongue depressors were used to count active nests. The increase in tern success is due primarily to more active searching techniques, and little Red Fox predation this year as compared with previous years. The Great Horned Owl continues to be a big factor in success, as does human disturbance. Most astounding was the count of 8004 "portlandica" Arctic Terns on Monomoy; this represents a high count for Massachusetts. The previous high of 5504 was also from Monomoy. Other tern highlights include two reports of Sandwich Terns, 64 Royal Terns, and a Gull-billed Tern at Plum Island. Black Skimmers were noticeably absent this year with only 4 reported all summer.

Jaegar, sp. :			
7/24	15m.E.of Chatham	5	P.Trull
Iceland Gull:			
6/2	Newburyport harbor	1	R.Forster
Ring-billed G			
6/2,17	Newburyport, Revere-Wint		
		560;175	R.Forster,GBBBC
Black-headed			Labora a marconord
6/6	Plymouth Beach	1 sub-ad.	R.Heil & M.Kasprzyk
Bonaparte's G		0.5	
6/17	Revere-Winthrop	80	GBBBC
	8 Revere,Concord	max.85(7/14),1	S.Zendeh#,BBC
Laughing Gull			
6/2-7/31	Monomoy	500 nesting pr.	R.Forster & v.o.
6/11,thr.J	uly P.I.,E.Boston	2,max.4	G.Soucy#,S.Zendeh
Little Gull:			
6/10,24	Monomoy	1	W.Harrington#, C.Goodrich#
7/24	Newburyport	2 ads.,1 imm.	R.Heil & v.o.
Black-legged	Kittiwake:		
6/2,9	Monomoy, Nauset	6,6	B.Nikula#,B.Nikula#
7/4,6	P'town, Monomoy	50+sub-ad.,2 sub-	ad.
		and the second	R.Heil, R.Stymeist#
Sabine's Gull			· · · · · · · · · · · · · · · · · · ·
6/1	Monomoy	1 ad.	I.Nisbet
Gull-billed Te			
7/1.4	P.I.	1	S.Zendeh, M.Lynch#
Forster's Tern		-	
7/27,28-31		1,3	R.Heil, B.Nikula# & v.o.
	Nauset	1	B.Nikula,R.Heil
7/31 Common Tern:	nauseo	-	Dinthata, minerr
thr.	Monomoy	3341 breeding pr.	P.Trull
thr.	Yarmouth(Graves Beach)	715 breeding pr.	P.Trull
thr.	Eastham(New J.)	400 breeding pr.	P.Trull
(the )	(armouth colony is up 200		
thr.	E.Boston(Snake I.)	200 breeding pr.	
6/2	Plymouth	500	BBC
Arctic Tern:		,	
thr.	Monomoy	18.breeding pr.	P.Trull
6/2	Monomoy, Plymouth	25"portlandica",4	
6/17,24	Ipswich, Nauset	1,80+	J.Nove#,B.Nikula#
7/6;21	Monomoy	800+;500+	R.Heil, B.Nikula; I.Nisbet#
	above "portlandica" - a		ninerr, binthura, rintsbech
Roseate Tern:	above porerandica = a )	new urkn for Mass.	
thr.	Monomov	220 hanadina	P.Trull
	Monomoy	220 breeding pr.	
6/2,17	Plymouth, Ipswich	6,2	BBC

Monomoy	130 breeding pr.	P.Trull
Plymouth, Ipswich(Crane'	s) 20,30-40	BBC, J. Berry
	65, all nests wash	ned out
		G.Soucy#, fide G.Soucy
E.Boston(Snake I.)	35 breeding pr.	S.Zendeh#
Monomoy	1 ad.,2,1 ad.	W.Petersen#,R.Clem,R.Heil
6 Nauset	2+	B.Nikula# & v.o.
	1,1	S.Zendeh, W.Petersen
Monomoy, Barnstable	1,1	D.Stemple, R.Pease
P.I.	1,1,2	P.Parsons#, J.Murphy#fide G.Soucy
Monomoy	5-7	B.Nikula# & v.o.
Concord(GMNWR)	1-3	G.Gove# & v.o.
P.I., Newbypt., Yarmouth	1,1,2	BBC,S.Garrett#,P.Trull
Nantucket	1	E&C.Andrews
W.Dennis, Bass River	1,1	B.Cassie,C.Goodrich
Monomoy	2	W.Petersen#
	P.I. E.Boston(Snake I.) Monomoy 6 Nauset Revere,Scituate Monomoy,Barnstable P.I. Monomoy Concord(GMNWR) P.I.,Newbypt.,Yarmouth Nantucket W.Dennis,Bass River	Plymouth, Ipswich(Crane's) 20,30-40 P.I. 65,all nests wash E.Boston(Snake I.) 35 breeding pr. Monomoy 1 ad.,2,1 ad. 6 Nauset 2+ Revere, Scituate 1,1 Monomoy, Barnstable 1,1 P.I. 1,1,2 Monomoy 5-7 Concord(CMNWR) 1-3 P.I., Newbypt., Yarmouth 1,1,2 Nantucket 1 W.Dennis, Bass River 1,1

MOURNING DOVE THROUGH WOODPECKERS

Both species of cuckoos were quite generally distributed in areas with a gypsy moth infestation; there were nearly equal numbers of Yellow-billed Cuckoos with Blackbilled Cuckoos. Although the counts of Yellow-billed are higher in the following records, we assume that reports generally favor the rarer species. A family of Screech Owls survived the onslaught of birders at Mount Auburn undetected until May 31; amazingly they nested in one of the best "wave" trees this past spring - this oak was almost always surrounded by birders. A nest of Short-eared Owls with 4 young was found on Monomoy.

Again, Chuck-wills Widows were found in three locations; suspected breeding on Martha's Vineyard has yet to be proven, however. A Red-headed Woodpecker was found nesting in Lynn Woods, and 3 Hairy Woodpecker nests were found on the Greater Boston Breeding Bird Census.

Cuckoo:		
west of Boston	23 individuals	v.o.
north of Boston	20 individuals	v.o.
south of Boston	8 individuals	v.o.
west of Boston	4 individuals	v.o.
north of Boston	5 individuals	v.o.
south of Boston	6 individuals	v.o.
WBWS	max.2	fide R.Heil
uckoo:		
west of Boston	9 individuals	v.o.
north of Boston	14 individuals	v.o.
	14 individuals	v.o.
6 locations	12 individuals	v.o.
Cambridge Mt.A.	ad.,2 yg.	R.Stymeist# & v.o.
Lexington, Middlesex Fe	ells 5,2	L.Taylor#,R.Stymeist#
Northfield	l yg.	R.Forster
1:		
Monomoy	nest w/4 yg.	C.Goodrich#
dow:		
MBO	1 heard & seen	M.Kasprzyk# + v.o.
Middlesex Fells	1 calling	S.Zendeh, P. Roberts#
Martha's Vineyard	1	fide E.Manning Sears
	3-4.6	J.Berry#,R.Stymeist#
	1,1 nest found	H.Wiggin, P. Trull
Cambridge	9-10	R.Stymeist
Brookline(2 locs.)	14,5	R.Stymeist, H.D'Entremont
	north of Boston south of Boston west of Boston north of Boston south of Boston wBWS uckoo: west of Boston north of Boston south of Boston 6 locations Cambridge Mt.A. Lexington,Middlesex Fe Northfield 1: MBO Middlesex Fells Martha's Vineyard : Ipswich,W.Newbury Annisquam, <u>Mashpee</u> wk: Cambridge	<pre>west of Boston 23 individuals north of Boston 20 individuals south of Boston 8 individuals north of Boston 4 individuals north of Boston 5 individuals north of Boston 6 individuals wBWS max.2 uckco: vest of Boston 9 individuals north of Boston 14 individuals south of Boston 14 individuals 6 locations 12 individuals 6 locations 12 individuals Cambridge Mt.A. ad.,2 yg. Lexington,Middlesex Fells 5,2 Northfield 1 yg. 1: MBO 1 heard &amp; seen Middlesex Fells 1 calling Martha's Vineyard 1 : Ipswich,W.Newbury 3-4,6 Annisquam,Mashpee 9-10</pre>

Chimney Swift	H		
7/4	Framingham	104	BBC(E.Taylor)
Ruby-throated	Hummingbird:		
6/6	Duxbury, Marston Mills	1,1 building nest	R.Forster
6/8,24	Boston Harbor, N. Andover	1,1	J.Grugan,BBC
Common Flicke	r:		
6/16,17	Newbypt., G.Boston	59,100	NBBC, GBBC
Pileated Wood	pecker:		
6/16,22	IRWS,Wellesley	2,1	R.Heil, A.Frederick
7/21	Weston	1	A.Pappas
Red-headed Wo	odpecker:		
thr.June	Lynn	2 ads.nesting	R.Heil
7/9,14	Northfield, W. Dennis	1,1 ad.	R.Forster, V&H.Sprong
Hairy Woodpec	ker:		
6/17	G.Boston	17(3 nests found)	GBBBC

#### FLYCATCHERS THROUGH SPARROWS

A nest of Acadian Flycatcher was found in Scituate and persistent singing birds were noted from Dover and Uxbridge. It would appear with 8+ birds reported that it is only a matter of time before the Acadian Flycatcher is firmly established in Massachusetts. A Scissor-tailed Flycatcher was found and photographed at Fort Hill, Eastham on June 16 and appears in this issue. There were more reports of nesting Blue-gray Gnatcatchers this year. A cance trip along the Ipswich River in Topsfield on the Newburyport Breeding Bird Census turned up 13 individuals including 4 nesting pairs. In Lakeville 2-3 pairs of Golden-crowned Kinglets were on territory for the third year in a row, while a nest was also found on Hog Island in Essex.

The "Lawrence's" Warbler was reported feeding young on the ground and moving in the grass on June 19. The highlight of the month was the report of a singing <u>Tennessee</u> <u>Warbler</u> at Wellfleet Bay Wildlife Sanctuary. The bird was observed singing 10+ times before it flew off. A Yellow-throated Warbler on Nantucket in early June was a hold-over from May.



Scissor-tailed Flycatcher, Fort Hill, Eastham, 17 June 1979. Photographed by Blair Nikula.



Great Lakes Herring Gulls have been marked with numbered and lettered green, orange, blue or pink leg ribbon - one on each leg. If you see any Herring Gulls so marked, please note number, letter and colour of each ribbon and date and place of sighting. Contact Dr. D. V. Chip Weseloh or Mr. Pierre Mineau, Canadian Wildlife Service, Box 5050, Burlington, Ontario, Canada, L7R 4A6. Tel. (416) 637-4264.



Eastern Kingbird: 6/16,17 Newbypt., G. Boston 89.70 Scissor-tailed Flycatcher: 6/17 Eastham(Fort Hill) 1 Great-crested Flycatcher: G.Boston 48 6/17 Yellow-bellied Flycatcher: 6/1;14 Mt.A.; MNWS, MBO 1;1,1 Acadian Flycatcher: 6/2,6+7 W.Newbury,Mt.A. 6/7,7-9 MBO, Dover 1,1 6/15-16 Scituate Uxbridge 1+ Willow Flycatcher: 6/2 Lynnfield, P.I. 8,11 6/16 IRWS, W. Newbury 9,4 6/17 G.Boston 6 Alder Flycatcher: 6/2,5,10 P.I. 3,2,1 6/16 W.Newbury 6/18 Newton, Cambridge 1,1 P.I. 7/16,20 1 calling Least Flycatcher: 4 6/17+30 W.Newbury 6/24 N.Andover/Boxford 2 Eastern Wood Pewee: 6/17 G.Boston 15 Olive-sided Flycatcher: 6/5,6 P.I., Plymouth 1,1 Tree Swallow: thr.July P.I. Bank Swallow: thr.June MBO 75+ Rough-winged Swallow: thr.June Ipswich, Middleboro 7/25 Framingham, Scituate 1,1 Barn Swallow: thr.July P.I. Cliff Stallow: thr.July max.10 P.I. Purple Martin: thr.July P.T. max.54 Blue Jay: 6/9 N.Scituate Fish Crow: 6/17 Plymouth State Forest 11+ 7/24 Norwell 2 White-breasted Nuthatch: 6/20 Ipswich Red-breasted Nuthatch: 7/7,8-on Annisquam, Ipswich Brown Creeper: Abington, Wellfleet pr.w/yg.,4 7/1,3 House Wren: 6/17 56 G.Boston Winter Wren: 6/17,19 Manchester, Petersham 1,pr.w/yg. Long-billed Marsh Wren: 7/21 GMNWR 20 Gray Catbird: 6/17 G.Boston 164 thr.July max.40 P.I. Brown Thrasher: 6/17 G.Boston 40 P.I. max.15 thr.July American Robin: 6/17 356 G.Boston Wood Thrush: 6/17 G.Boston 30

NBBC, GBBC Chapin, W.Bailey# + v.o. GBBBC R.Stymeist#;R.Heil,MBO 1,2 diff.birds N.King#,S.Denison,R.Stymeist T.Lloyd-Evans, O.Komar# + v.o. nest w/3 eggs M.&B.Litchfield + v.o. fide R.Forster S.Roberts#,R.Forster R.Heil, R.Stymeist# GBBBC R.Forster, R.Forster, G.Soucy# 2 singing m. R.Stymeist# S. Denison, L. Taylor L.Jodrey#, R.Emery# R.Stymeist# BBC(Henderson) GBBBC R.Forster, R.Heil max.500+(7/16) BBC R.Heil pr.nesting,2 pr. nesting J.Berry, K.Anderson R.Forster, W. Petersen max.60(7/2) BBC V. O. v.o. 50+migrants W.Petersen SSBC(T.Lloyd-Evans) W.Petersen family of 10 J.Berry 1-2, max. 4(nest) H.Wiggin, J.Berry W.Petersen, R.Heil GBBBC H.Weissberg, R.Forster# BBC GBBBC v.o. CRRRC v.o. GBBBC GBBBC

Hermit Thrush: 6/17 Ipswich, Middlesex Fells 2,1 J.Berry, P.Roberts# M.Standish St.Forest 6/20 30+ R.Heil thr. July, 7/9 E. Middleboro, Northfield 1 singing.nest K.Anderson, R.Forster Swainson's Thrush: 6/1-7.9 Mt.A., Middlesex Fells 1-5(6/6),1 R.Stymeist#,R.Clayton# Veerv: 6/17,7/8 Topsfield, Dover 27.4 R.Heil, P.Iarrobino Eastern Bluebird: 6/9,13 Lincoln, Rockport 1,1 b. T.Martin#, R.Norris 6/17 Lynn, Plymouth 1,pr.nesting R.Heil, T.Lloyd-Evans# thr.July WBWS pr.nesting v.o. Blue-gray Gnatcatcher: 6/14,16 Wrentham Wrentham, Ipswich River 1 nest building,  $\frac{13/4}{6}$  nests R.Forster, R.Heil 6/17 Middlesex Fells P. Roberts# 7/9 Northfield family of 3 R.Forster Golden-crowned Kinglet: 6/9 Lakeville 2-3 prs.on territory W.Petersen 6/19 Petersham pr.nesting R.Forster, B.Blodgett 6/19.7/4 4, pr. feeding yg. W. Petersen#, K. Anderson# S.Carver 6/30 Essex(Hog Is.) 13+, nesting family 6-8 J.Berry Cedar Waxwing: thr.June,7 Annisquam, Mt.A. 24,40+ H.Wiggin, R.Stymeist White-eyed Vireo: 6/4,17 Lancaster, Medford 1,1 C.Quinlan, J.Roberts# 7/4,6 Hamilton, Westport pr.feeding yg., 1 J.Berry, D. Crompton 7/7,28 Marshfield, Mattapoisett 1,2 W.Petersen, G.Moek Yellow-throated Vireo: 6/9,20 Boxford, N. Andover pr.nesting,1 N.King#,S.Garrett 7/1 W.Newbury G.Soucy, H.Jodrey Solitary Vireo: 6/7 Holliston 1 R.Forster Red-eyed Vireo: 6/17 G.Boston 59 GBBBC Warbling Vireo: 6/17 G.Boston 24 GBBBC Black and White Warbler: 7/8,14 Ipswich 3,1 ad.,1 imm. J.Berry Golden-winged Warbler: thr.June Framingham, Newbury 1,2 R.Forster, R.Heil R.Forster,BBC 6/14,24 Wrentham, N. Andover 1,1 W.Newbury 7/9 1 V.Albee# Blue-winged Warbler: 6/16 W.Newbury-Georgetown 10+(nest found) R.Stymeist# 6/24 N.Andover-Boxford 5 S.Henderson# 7/4,20 Hamilton, Littleton 2-3,1 J.Berry, V.Sprong 7/21 Framingham 1 f.feeding Cowbird R.Forster "Brewster's" Warbler: 6/11 W.Newbury 1 P.Arrigo# "Lawrence's" Warbler: 6/19 W.Newbury 1 feeding yg. D.Oliver# Tennessee Warbler: 7/8 WBWS 1 singing m. R.Heil Nashville Warbler: 6/24 Middleboro pr.w/2 yg. W.Petersen,K.Anderson 7/8,14 Hamilton, Plympton 2-3, pr. agitated J. Berry, K. Anderson Northern Parula: 6/13.20 Mashpee, Middleboro 1 m.on territory,1 W.Petersen,W.Petersen# Yellow Warbler: 6/17 G.Boston 75 GRBBC Magnolia Warbler: 6/6,9 Mt.A., N.Scituate 1,1 S.Denison, W.Petersen 6/19 Petersham 3 singing m. R.Forster, B.Blodgett Yellow-rumped Warbler: 6/13,17 MBO, Ipswich 3,12 MBO staff, J. Nove#

Blackburnian W			
	Mt.A.,MBO	2,1	S.Denison,MBO staff
Yellow-throated			
	Nantucket	1	E.Andrews#
Bay-breasted Wa	arbler:		
6/1	Mt.A.	1	H.D'Entremont#
Blackpoll:			
6/2	Annisquam	3	11 114
	Amitoquan	3	H.Wiggin
Pine Warbler:		-	
6/20	N.Andover	2	S.Garrett, E.Pyburn
Prairie Warble	r:		
6/9,17	Sharon, G. Boston	6,24	R.Butler,GBBBC
Ovenbird:			
6/16,17	Ipswich, G.Boston	15.10	T Deserver CDDDC
		15,13	J.Berry,GBBBC
Northern Water			
	Ipswich, Topsfield	1-2,pr.	J.Berry, R.Heil
7/31	WBWS	5	R.Heil
Louisiana Wate:	rthrush:		
7/9	Northfield	7	R.Forster
Common Yellowth		24	N.I OI SUEL
		97	
	G.Boston	87	GBBBC
Yellow-breaste			
thr.July	Fowl Meadow	pr.nesting	T.Raymond, F.Hamlen
Canada Warbler	:		
6/12,24	Topsfield, Middleboro	3m providence	R.Heil,fide W.Petersen
7/8,14	Hamilton, Ipswich	3m.,pr.w/yg.	R.nell, lide w.retersen
1/0,14	namilicon, ipswich	f.carrying food,	
and the second		1 singing	J.Berry
American Redst			
6/24	Middleboro	pr.nesting	W.Petersen
Bobolink:			
7/2,4	Newbypt.area,Sherborn	50+ 0F	U Usiashana# P Maulan#
		50+,25	H.Weissberg#,E.Taylor#
7/21	Framingham	30	R.Forster
Orchard Oriole			
thr.June	S.Peabody, Woburn, Fram.	5,4,2	R.Heil, G.Gove, R.Forster
6/7,10	Medfield, GMNWR	1,2	R.Forster, M. Duffy#
7/4;14+21	Braintree;Framingham		
		3 imm.;2,1	W.Petersen;R.Forster
7/27	Rowley	2 juv.	R.Heil
Northern Oriol	e:		
6/17	G.Boston	66	GBBBC
6/24	N.Andover-Boxford	18	S.Henderson#
Scarlet Tanage			o mender o ons
		05 6	CDDDC C Handaman H
6/17,24	G.Boston, N. Andover	25,6	GBBBC,S.Henderson#
Rose-breasted			
6/17	G.Boston	16	GBBBC
Indigo Bunting	:		
6/17	G.Boston	37	GBBBC
	0.000000	51	00000
Dickcissel:			
6/28,29	P.I.	1	N.Claflin#,H.Weissberg
Purple Finch:			
7/9	P.I.	12	BBC
House Finch:			
	Anniaguem	25 .	H.Wiggin
thr.July	Annisquam		U. MIRBIN
7/21,27	Framingham, P.I.	170 in 1 flock,	a second and a second as
		60 in 2 flocks	R.Forster, R.Heil
Savannah Sparr	OW:		
thr.July		max.4C(7/16)	v.o.
Grasshopper Sp			
			D D
	Nantucket, Truro	2,2 prs.	R.Emery#,R.Heil#
Sharp-tailed S			
thr.July,7	P.I.area, Monomoy	max.10,17	v.o.,H.D'Entremont#
Seaside Sparro			
6/5,7/2		2,1	R.Forster,H.Weissberg
	P.I., Newburyport		
7/28	Monomoy	2(1 carrying food	, .reverself
Vesper Sparrow			
6/17	Plymouth	9	SSBC(T.Lloyd-Evans)
7/7	Wellfleet	1	R.Stymeist#
White-throated			a managani manana m
		1	R.Forster
thr.June	Framingham	l pr.	
6/23,24	Annisquam, Ipswich	1,1	H.Wiggin, J.Berry
Song Sparrow:			
6/17	G.Boston	180	GBBBC

#### LIST OF ABBREVIATIONS

ad.	adult	GMNWR	Great Meadows National Wildlife Refuge
Ъ.	banded	IRWS	Ipswich River Wildlife Sanctuary
d.	dark phase	MINWS	Marblehead Neck Wildlife Sanctuary
đ. f.	female	WBWS	Wellfleet Bay Wildlife Sanctuary
imm.	immature	WMWS	Wachusett Meadows Wildlife Sanctuary
1.	light phase	GBBBC	Greater Boston Breeding Bird Census
m.	male	NBBC	Newburyport Breeding Bird Census
max.	maximum	AA	Arnold Arboretum
thr.	throughout	A.P.	Andrews Point, Rockport
v.o.	various observers	E.P.	Eastern Point, Gloucester
yg.	young	F.M.	Fowl Meadow, Milton
#	additional observers	M.V.	Martha's Vineyard
BBC	Brookline Bird Club	Mt.A.	Mt. Auburn Cemetery, Cambridge
SSBC	South Shore Bird Club	P.I.	Plum Island
MBO	Manomet Bird Observatory	S.N.	Sandy Neck, Barnstable
		CORRIGENDUM -	WINTER SEASON

Great Gray Owl:

2/24	Brookline (Norf County)	olk l	fide O.Komar#
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Puffin Drawings by JULIE ROBERTS

#### CONTINENTAL\_BIRDLIFE - A REVIEW

<u>Continental Birdlife</u>, a new bimonthly journal of North American field ornithology, could prove very helpful to the serious birdwatcher. Its geographic scope will include Canada, Greenland, the United States, Mexico, and adjacent waters, although the Arizona-based publication deals primarily with the West Coast in Volume 1, Number 1.

The first issue contains a very detailed field identification of the Common Flicker and two articles on unusual occurrences--the Plain-capped Starthroat in the United States and the first Mexican record of a Harlequin Duck. There are also book reviews and a column entitled "Latest Rumors," a brief summary of recent bird finding news. Upcoming issues look promising--included will be articles on field identification, field techniques, endangered birds of the world, and single species life histories.

Subscriptions are \$9.00 for the calendar year. All communications should be addressed to <u>Continental Birdlif</u>e, P.O. Box 43294, Tucson, Arizona **85**733.

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