

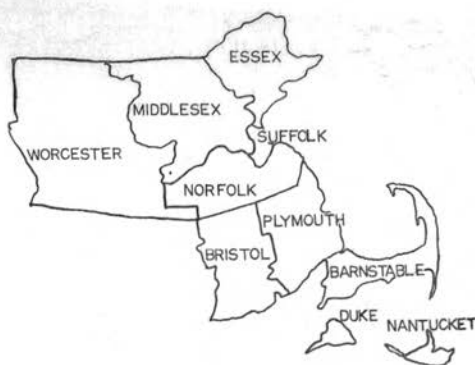
BIRD OBSERVER

OF EASTERN MASSACHUSETTS



VOL. 5 NO. 3
MAY-JUNE 1977

MUD HEN



EDITOR-IN-CHIEF	PAULA R. BUTLER
EDITORIAL BOARD	JOSEPH T. LEVERICH WAYNE R. PETERSEN PAUL M. ROBERTS LEIF J. ROBINSON ROBERT H. STYMEIST
REGIONAL STATISTICAL EDITOR	RUTH P. EMERY
COMPILERS	ROBERT H. STYMEIST RICHARD R. VEIT
PRODUCTION	PERRY CHANG LOUISE DEGIACOMO MARCIA LITCHFIELD GAYLE MILLER ETHEL C. PEARSON
SUBSCRIPTION MANAGER	THEODORE H. ATKINSON

TABLE OF CONTENTS

MACHIAS SEAL ISLAND.....	PAULA R. BUTLER 73
THE WILD TURKEY IN MASSACHUSETTS.....	JAMES E. CARDOZA 76
THE STELLER'S EIDER.....	ROBERT C. VERNON 85
THE BIRD OBSERVER SUMMARY FOR MARCH, 1977.....	88
THE BIRD OBSERVER SUMMARY FOR APRIL, 1977.....	94

Bird Observer of Eastern Massachusetts
 May-June 1977
 A Bi-monthly Publication
 Volume 5, no. 3
 6.50 per calendar year, January-December
 All correspondence should be sent to:

Bird Observer
 462 Trapelo Road
 Belmont, Massachusetts 02178

Application to mail at second-class postage rates is pending at Boston, Massachusetts.

Subscription to BIRD OBSERVER is based on a calendar year, from January to December, at \$6.50 per year. Back issues to new subscribers will be supplied as available.

Advertising space is available on the following schedule: full page, \$40.00; half page, \$20.00; quarter page, \$10.00. Subscribers only may advertise one-of-a-kind birding items free of charge on a space available basis. Such announcements must be limited to 25 words. All advertising copy is subject to approval by the staff.

Bird Observer of Eastern Massachusetts has been declared a non-profit tax exempt organization by the Internal Revenue Service. Any gifts to Bird Observer will be greatly appreciated and will be tax deductible to the full extent of the law.



EDITOR'S PAGE

HAWK MOUNTAIN RESEARCH AWARD

The Board of Directors of the Hawk Mountain Sanctuary in Pennsylvania take pleasure in announcing an annual award of \$250 for support of raptor research. The Hawk Mountain research award will be granted annually to a student engaged in research on Falconiformes.

Only students enrolled in a degree-granting institution are eligible. Both undergraduate and graduate students are invited to apply. Prospects will be judged competitively on the basis of their potential contribution to improved understanding of raptor biology and its ultimate relevance to conservation of North American hawk populations.

To apply, students should submit a description of their research project, and two letters of recommendation, by October 31, 1977, to Mr. Alex Nagy, Curator, Hawk Mountain Sanctuary Association, Route 2, Kempton, Pennsylvania 19529.

EASTERN BIRD BANDING ASSOCIATION AWARD

The Eastern Bird Banding Association is sponsoring a \$250 grant for an undergraduate or graduate student in a recognized college or university for research in ornithology involving bird banding. Applicants should submit a resume of their planned project to: Dr. Bertram G. Murray, Jr., 249 Berger Street, Somerset, New Jersey 08873.

BEACHED BIRD SURVEY PROJECT

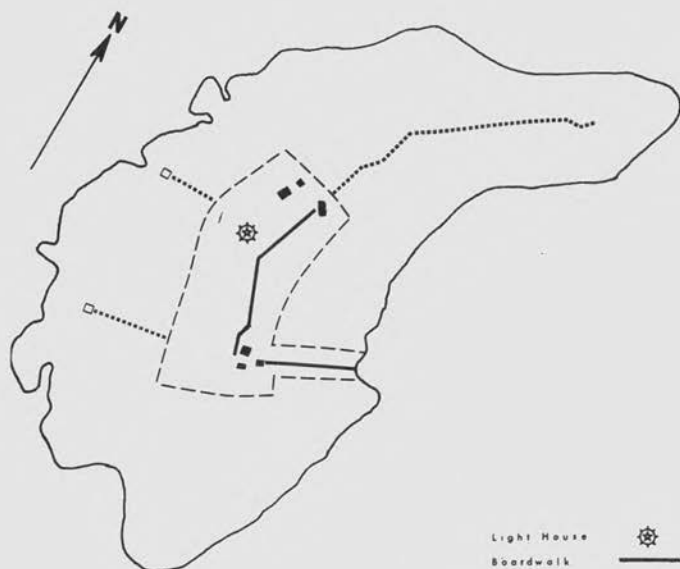
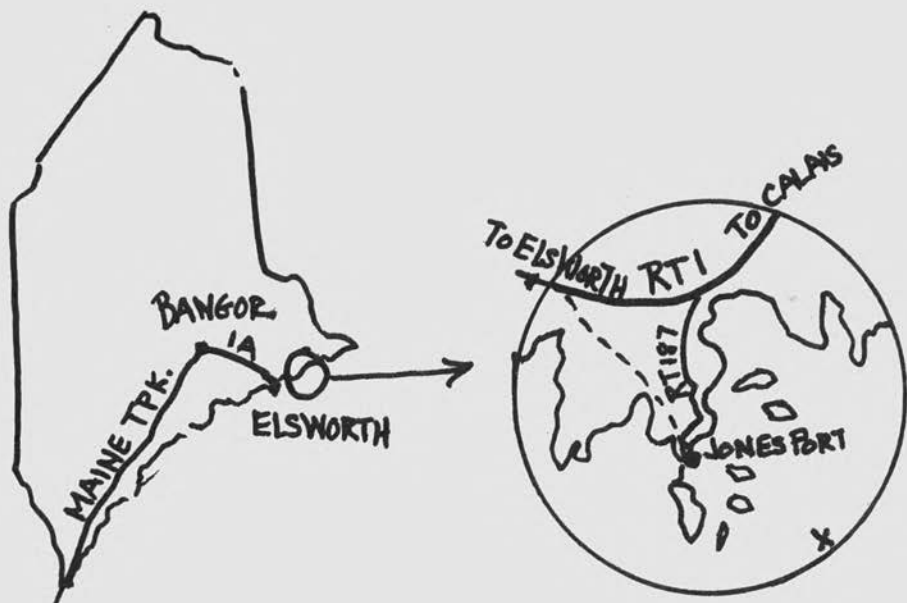
Malcolm M. Simons, Director of the Atlantic and Gulf Coast Beached Bird Survey Project, is seeking additional cooperating observers to periodically census East Coast beaches in an attempt to establish base line data on sea bird mortality as indicated by dead (beached) birds, against which measures of change can be made. Any birders interested in such a project should contact Mr. Simons at 1701 East Harbor View Road, Box 52, Charlotte Harbor, Florida 33950.

HELP A PEREGRINE

An effort by the State Division of Fisheries and Wildlife and the Massachusetts Audubon Society to restore Peregrine Falcons in Massachusetts is in progress. A total of \$16,000 is needed. We urge you to contribute by sending a check, made payable to the Massachusetts Audubon Society in care of the Peregrine Fund, Lincoln, Massachusetts 01773.

WANTED TO BUY: Bausch and Lomb Sr. spotting scope and tripod. Contact Fred Bouchard, 9 Walnut Street, Belmont, Massachusetts 02179 (617) 489-2298.

FOR SALE: Keystone 16 mm movie projector, brand new, never used. Contact Ray T. Crosby, 125 Trapelo Road, Belmont, Massachusetts, 02178 (617) 484-5016



Machias Seal Island

- | | |
|-------------|---------|
| Light House | ⊗ |
| Boardwalk | — |
| Buildings | ■ |
| Footpath | |
| Blind | □ |
| Mowed Area | - - - - |

MACHIAS SEAL ISLAND

by Paula Butler, Belmont

Machias Seal Island--the Contested Island*--has served as a sentinel at the south end of the Bay of Fundy since the establishment of a lighthouse in 1832. Before that time, this rock (barren except for a highland meadow in summer) was a mariner's nightmare of sudden fog banks, high seas and hidden rocky shoals. The Harbour Seal, for which this island was probably named, occurs only at a nearby shoal, North Rock. Although today's journey is quite safe, trips to the island are cancelled without notice due to unexpected wind changes or a possible dangerous landing because of ground swells, strong currents and surf.

The meadow area of the island contains a variety of plant life: asters, wild parsleys, docks, grasses, sedges, and many other herbs. This island, like many others in the Machias Bay area, was used for cattle and sheep grazing as well as limited farming. Some of these islands were strategic in the naval maneuvers during the American Revolution. The first naval encounter of that war was in Machias Bay when the villagers of Machias beached the British cutter Margareta.

Most birders and photographers are attracted to Machias Seal Island to observe Common Puffins (Fratercula arctica) at close range. Common Puffins and Razorbills (Alca torda) seem to invite us not only to watch them but to take delight in posing. Two blinds are provided overlooking the rocky nesting area. The puffins arrive in late April and remain in the water until they receive a mysterious signal; then, in one large flock, they settle into their nesting sites. The female makes a simple nest of dead plant material in a sheltered hole among the granite boulders. She then lays a single egg which is incubated by both parents. The peak of the hatch occurs around mid-June and the diligent feeding by both parents continues for over six weeks. Adults and young are present until mid-August. About 800 pairs of Common Puffins currently nest. The Razorbill selects similar nesting sites and also lays a single egg in a crevice or under an overhanging boulder. There are approximately 40 pairs of this species present. Scientists are unable to explain the decline of the Razorbill and suspect sea pollution by toxic chemicals or intensive commercial fishing pressure. Since they have been eliminated from most of their traditional nesting places, author Franklin Russell in his book The Sea has Wings suggests they could not compete against the aggressive hunting of murre and puffins. He comments, "Last of all, the Razorbill most closely resembles the Great Auk, so perhaps he shares that extinct bird's inflexibility of temperament. Unable to adapt, he remains a vestige of another age."

The Arctic Tern (Sterna paradisaea) nests throughout the island, but to the visitor they all seem to be where the passengers disembark. The warning to wear a large hat is no joke. These militant, screaming birds dive at you repeatedly and may score several direct hits. It appears that all 2,100 nesting pairs are in action at once! Nesting activities are well established by the end of May. There are usually two eggs in an exposed ground nest. They are incubated by both parents who fiercely defend them from avian predation. Bad weather, which is not unusual in June, accounts for the demise of many young. The young are fed small fish and insects and are airborne by the middle of July and leave by the end of August for Antarctica and the

Indian Ocean.

It is estimated that 100 pairs of Common Terns (*Sterna hirundo*) also nest here. It quickly becomes apparent to the observer, the points of identification between them and Arctic Terns.

A member of the Canadian Wildlife Service will guide you around the island and his knowledge of natural history will make your visit more meaningful. He carefully guides visitors around ground nests, but you never feel restricted in your explorations. Because Leach's Storm-Petrel (*Oceanodroma leucorhoa*) is nocturnal, your guide might remove one from its burrow for close examination. The petrels use the same burrows for many years, the female laying a single egg which takes 42 days to hatch. Both parents share in feeding young, which do not fledge until well into September. The food of the petrel is obtained by skimming and fluttering over the water for small shellfish and oily food particles. This is why they follow injured seals and are found in the wake of whales--thus the name "whale birds."

A few species of land birds breed on Machias Seal Island, such as Savannah Sparrow (*Passerculus sandwichensis*), Spotted Sandpiper (*Actitis macularia*), and Tree Swallow (*Iridoprocne bicolor*). Over 100 species of migrants and accidentals have been noted here.

Arrangements for this trip are made with Captain Barna B. Norton, Jonesport, Maine (207) 497-5933. He is the only captain at present who takes passengers (up to eight at \$18.00 each) so make your plans early. Smaller groups can be arranged. The boat leaves the Jonesport pier at 9 A.M. and, depending on weather, arrives at the island about 11:30 A.M. After a leisurely lunch and tour, you should return to Jonesport around 4:30 P.M. Bring your lunch, "layers" of clothes and dramamine. Be prepared to be philosophical if the trip must be postponed.

The trip from Boston to Jonesport takes about seven hours and I recommend that you take snacks, as there are only a few Howard Johnson restaurants en route. The best route to reach this area is to take the Maine Turnpike to Bangor; then 1A into Elsworth; north on Rt. 1 to Millbridge; Rt. 1A by-pass to Harrington then returning to Rt. 1. Do not take the first Rt. 187 road south, but proceed toward Jonesboro. At this junction of Rt. 187 is Sunkhaze Campground, which is open from May 15-September 15 and has 30 sites with water, electricity, flush toilets, and swimming pool. The fee is \$3.25 for a family of five with a \$.50 charge for each extra person. Phone (207) 434-2542. For those who prefer indoor accommodations there are cabins in Jonesboro and the Bluebird Motel in Machias. Helen's Restaurant on Rt. 1 in Machias is well known for great food and homemade pastries. Immediately past the center of Machias is a causeway at which you should look across the river for resident Bald Eagles. Osprey often fish this area, Ravens are also possible, and Spruce Grouse are regularly seen.

Pelagic birds do occur on this trip. On July 4th weekend in 1976 I saw several Northern Fulmars, Black-legged Kittiwakes, and Black Guillemots. This is one of the best vacation bird trips I've had along the New England coast. A three-inch shoulder patch of a puffin lettered with "Machias Seal Island" was purchased on the island and has been a neat memento of my trip.

*Machias Seal Island is claimed by the United States government but is operated

by the Canadian Wildlife Service for the Canadian government. The political contest for this rock is of little importance compared with the contest for the survival of the species that struggle to maintain their island breeding grounds.

POSTSCRIPT: MACHIAS SEAL ISLAND, JULY 5, 1977

On July 5th, Nancy Claflin, Nan Harris, Marge Ahlin, Olive Farmer and I went to Machias Seal Island from Cutler. Cutler is on the north side of Machias Bay and the boat trip takes about an hour. Captain Barna Norton sometimes leaves from here when he knows the tides are not favorable for a later trip from Jonesport. We left at 7:30 A.M. So it is necessary to phone him the night before the trip for the latest advisory and starting place. Our stay on the island was only one hour instead of the usual three hours due not only to the tide factor but that the sea was running high and the ground swells were increasing. We felt we saw all that we had expected to see and had enough time for photographs and an early lunch.

The lighthouse keeper's wife, a former Maine Audubon Guide, gave us some pertinent information:

1. The puffin count is down by 50 per cent of last year's 3,500.
2. They are counted not only by island personnel but by other concerned groups.
3. As the puffins circle the island many times in small flocks before coming ashore to nest, they feel the count is quite accurate.
4. The tern and razorbill population appears to be stable.
5. Spring migration of land birds is spectacular. Thousands of sparrows rise in a dense cloud when disturbed in the meadow area.
6. In migration one can literally pick birds out of the air that are attracted by the lighthouse beacon.
7. More strict control of visitors is needed in this fragile nesting area as some birds are off their nests too long due to intrusions.

The Bangor Daily News had a news release on July 5th for the National Audubon Society alerting people along the Maine coast to report sightings of puffins and banded puffins. The Society is deeply concerned as relatively little documented information is available.

NIGHTHAWK MIGRATION WATCH

P. R. B.

There will be a Common Nighthawk migration watch between August 20 and September 7, 1977. For further details please contact: Massachusetts Audubon Society, Natural History Services, Lincoln, Massachusetts 01773.

FALL HAWK MIGRATION

The New England Hawk Watch will take place on September 17-18 and 25-26. The major flight of Broad-winged Hawks will be moving south and volunteers willing to donate any time to this project are urged to call or write: Paul M. Roberts, 24 Pearson Road, Somerville, Massachusetts 02144 (776-8566). More information on this project will be printed in the next issue of Bird Observer.

UPCOMING PELAGIC TRIP

Sunday, August 28, 1977: from Lynn: Brookline Bird Club. For details contact: Bill Drummond: 375-0292 (Haverhill) or Herm Weissberg: 526-4020 (Manchester).

THE WILD TURKEY IN MASSACHUSETTS

by James E. Cardoza
Massachusetts Division of Fisheries and Wildlife

The Wild Turkey (Meleagris gallopavo), like many other species of wildlife, suffered dramatic fluctuations in numbers and distribution in the centuries following the European colonization of America. These changes were particularly severe in the heavily settled and cleared Northeast, and its native Wild Turkey populations were eradicated by about 1850.

This alarming trend continued nationwide, and by the 1930's all four subspecies in the United States were declining throughout their range. The trend began to reverse after World War II, when intensive programs of hunting-season regulation, habitat acquisition, biological investigation, and restocking were initiated. These efforts were astonishingly successful. Within the past 25 years, the estimated nationwide Turkey population has swelled from about 320,000 in 1952 to about 1,300,000 in 1974, and the number of states permitting some form of open season has climbed from 15 to 39.

The two eastern races of the Turkey have nearly doubled their occupied range since the 1930's and huntable populations have been established in at least 16 states beyond the recorded limits of ancestral range. Turkeys are found in some regions of at least 45 states and two more (New Jersey and Maine) are attempting restoration projects this year. Massachusetts has had studies underway since 1959, with a few populations established locally since 1965. Recent releases of wild-trapped birds in the southern Berkshires increase the possibility of reintroductions in areas of suitable habitat elsewhere in the Commonwealth.

LIFE HISTORY OF THE EASTERN WILD TURKEY

Description. The Wild Turkey is essentially a streamlined version of its domestic counterpart, being distinguished by a long neck, legs, and tail, and having a flat, narrow, sparsely feathered head. Adult Wild Turkeys are black to blackish-bronze and are tinted with metallic shades of green and purple on the upper neck, back, breast, and upper wing feathers, with the primary feathers dark brown barred with white. The blackish-brown tail feathers are square-ended and have a sub-terminal black band. Head coloration varies from bluish-gray to reddish, depending on the emotional state of the bird. Adult males (and rarely females) have a spur on the posterior side of the lower leg and a beardlike tuft of bristles arising from the breast. Eleven adult hens captured in Massachusetts between September and March averaged 9.6 (8.2-11.0) pounds live weight, while seven adult toms taken from November to February averaged 19.0 (16.5-22.0) pounds.

Reproduction. Wild Turkeys are promiscuous maters. In early spring, as daylight hours lengthen, males begin gobbling and strut about pompously with engorged wattles, fanned tail, and dragging wing tips. Gobbling serves as an expression of territoriality and to announce the tom's availability to the hen. In the Northeast, gobbling extends from mid-March to early May, usually peaking in mid-April. Gobbling is usually most intense from daybreak to shortly after sunrise.

Hens are bred several times during the season, and begin to lay shortly after

the first mating. The nest is merely a shallow leaf-lined depression, usually next to a stump or under a tangle of vines or fallen branches. The nest location is often at the edge of a field or clearing and is usually not far from water. Clutch size ranges from about 10 to 15 eggs that hatch after an incubation period of 27-28 days. Three nests found in central Massachusetts in early May contained 12, 13, and 15 eggs each.

Nest success for the Wild Turkey is about 40-45 percent, which is usual for ground-nesting species. Turkey poults are precocial and can feed and follow the hen about within hours after hatching, although they must be brooded by the hen for two or three weeks during cool or inclement weather. In Massachusetts broods are first seen from mid-May to late June, with most appearing in the first weeks of June. About 20-25 percent of the brood may be lost between June and September. Hen and poults remain together throughout the summer. Then usually in late fall, young toms split off to form their own flock while one or more groups of young and adult hens will join together in a larger flock.

Food Habits. Wild Turkeys feed most heavily upon plants, though animal foods are also regularly taken. Preferred plants in the Northeast include acorns, beechnuts, hickory nuts, ash seeds, black cherries, grapes, dogwood fruits, fern spores and fronds, and grass and sedge seeds. Mast crops are utilized heaviest in the fall and winter, with tubers and blossoms important in the spring diet and ripening fruits and seeds in summer. Animal food is of lesser importance to the adult Wild Turkey, but newly-hatched poults are heavily dependent on protein-rich invertebrates for several weeks. Insects (especially grasshoppers) and other arthropods are the principal animal foods taken.

Free-flowing seeps and springs are an important source of food for Wild Turkeys in winter, with skunk cabbage, water-mat, violets, and ferns being among the aquatic or emergent plants utilized. Seeps also act as mast traps, enabling Wild Turkeys to find acorns and other foods without scratching through layers of deep snow.

Food items are also often available above the snow. During the severe winter of 1976-77, with deep snow and most seeps frozen, Wild Turkeys were feeding upon such fare as the berries of highbush cranberry, barberry, and bitter-sweet, seeds of burdock and spires, and the fiddleheads of sensitive fern.

Limiting Factors: Weather. Cold spring rains can critically affect the survival of Wild Turkey broods, particularly during the first few weeks. The poults are not only vulnerable to chilling, but may suffer from a lack of food since the rains may severely depress local insect populations.

Generally, severe winter weather conditions can be tolerated by Wild Turkeys. Experiments with penned birds have shown that Wild Turkeys can survive at least 15 days without food. However, mortalities sometimes occur during extended periods (two weeks or more) of low temperatures and deep fluffy snow. When these conditions persist, Wild Turkeys may remain on the roost until they succumb rather than risk getting bogged down in the snow. The losses that occur usually take place in high valleys or plateaus from which Wild Turkeys cannot readily fly to open slopes, plowed roads, or seeps.

Wild Turkeys in Massachusetts' Quabbin Reservation were baited for census

purposes during winters throughout the 1960's. Supplemental winter feeding, using dried cob corn, was also conducted intermittently from about 1965-1970. These artificial feeding programs were terminated after 1970. Although the program did bring some additional birds through the winter, it was also detrimental to the overall restoration study. Weakened, poor-quality birds were surviving and subsequently breeding, thus lowering the vigor of the stock. The Wild Turkeys were becoming dependent on artificially provided grains, rather than adapting to the natural foods, and potential disease-transmission conditions were created by concentrating birds in a small area. Future supplemental feeding programs are unjustified and should not be conducted.

Limiting Factors: Predation. Predation rarely has a serious impact on Wild Turkey populations. Most reported predation mortalities are of weakened or inferior stock, or are scavenged carcasses of birds dead from other causes. Nest predation is occasionally high but does not seem to affect significantly overall reproductive success. Predation might be of concern in marginal or newly-established populations, in areas where unfavorable conditions force birds into inferior range, or where birds are already weakened by extreme weather conditions. In Massachusetts, investigators verified eight (two adult, six juvenile) losses to predators in the Quabbin Reservation between January 1960 and December 1966. Bobcat, Goshawk, and Bald Eagle took one Wild Turkey each, Great Horned Owl probably two, and three succumbed to unidentified avian or mammalian predators.

Limiting Factors: Parasites and Diseases. Several parasites and diseases have been recorded in Wild Turkeys. Under natural conditions, heavy losses seldom occur. However, serious consequences can result when domestic or introduced game-farm stock is allowed to mingle with wild birds. Blackhead, coccidiosis, and avian tuberculosis are among the debilitating diseases which can be transmitted in this manner. Wild Turkeys may also occasionally be afflicted by aspergillosis, a fungal disease; Leucocytozoon, a malaria-like blood parasite; and by gapeworms, tapeworms, and intestinal roundworms.

Habitat and Range. The Wild Turkey today is much more adaptive to variations in cover types than had been assumed in the 1930's. This diversity in habitat utilization hinders generalizations about the vegetal composition of Wild Turkey range. It is safe to assume, however, that the eastern birds are more suited to mature or nearly mature forests than to brush or shrub-stage woodland. Open stands of timber also seem more preferred than areas with a dense understory.

Most occupied habitat in the Northeast consists of hardwood forest types; mast-producing species such as oak, beech, hickory, and black cherry are frequently an important, though not an essential, component of Wild Turkey range. Free-flowing seeps and runs are often important features of winter habitat, while mountain ridges and wooded swamps provide refuges. Well-scattered forest openings, preferably comprising 10-50 percent of the total range, appear to be preferred for nesting and brood rearing.

The minimal area needed to support a self-sustaining Wild Turkey population depends on the pressures to which that population is subjected. Token numbers carefully managed and protected have been established in urban parks of a few hundred acres; however, such isolated stockings are unusual and impractical in most circumstances. Generally, an exploited population requires a minimum of about 15,000 acres of contiguous habitat, with 30,000-50,000

acres being more nearly ideal. The annual range of individual flocks varies with the availability of food, but may approximate four to nine square miles.

THE WILD TURKEY IN MASSACHUSETTS

Wild Turkeys were particularly abundant in presettlement Massachusetts and were probably found throughout the state except on the offshore islands and in the extreme northern Berkshires. The state's pre-Columbian Wild Turkey population has been estimated at about 39,300 birds, based upon a density of five birds per square mile and 7867 square miles of occupied range. William Wood (1634), an elderly resident, was impressed by the abundance of turkeys, commenting "... sometimes there will be forty, threescore, and a hundred of a focke, sometimes more and sometimes lesse ...". The trader Thomas Morton (1937) agreed, writing that "Turkies there are, which divers times in great flocks have sallied by our doores ...".

As settlement progressed, however, the woodlands were rapidly razed to open land for farms and villages, and Wild Turkeys became more and more restricted to isolated pockets of habitat on the less accessible hills and mountain ridges. This extensive and unselective decimation of the forest not only reduced the Wild Turkey's available range, but also made them more vulnerable to unrestricted persecution by professional market hunters who exploited the birds year-round. As early as 1672 Wild Turkeys were considered "very rare" in eastern Massachusetts and gobblers selling for 16 pence each in 1717 jumped to about 12 1/2 cents each by 1820.

By the late 18th century, few Wild Turkeys remained east of the Connecticut River, though one flock surprisingly persisted near Concord until about 1815. Wild Turkeys were still plentiful along the Connecticut River valley and in the southern Berkshires in 1800, but they faded rapidly in the following decades as land clearing reached its maximum. By the 1840's, Wild Turkeys were found only on the slopes of the Holyoke Range. These meagre flocks soon vanished also, and the last known native Wild Turkey was killed in 1851 on Mt. Tom. A few vague reports of stragglers continued until the 1870's, but these birds, if indeed present, were probably escaped domestics.

Soon after the Wild Turkey's extirpation, land use patterns in the Commonwealth shifted as farms were abandoned or neglected for the lure of the California gold fields, the bustle of city factories, or the strife of the Civil War. Nearly a third of a million acres of cropland were abandoned between 1860 and 1870 alone, and by 1910 commercial loggers were at work on once productive farmland. The depleted woodlands had gradually reverted to potential Wild Turkey habitat, but no birds remained to occupy it.

By the early 1900's, wildlife management had progressed to the propagation stage, and the state Fish and Game Commissioners were attempting to replenish scattered wildlife populations by captive breeding programs. Wild Turkeys were raised at the Wilbraham Game Farm as early as 1914, and at least 37 birds were released near Mt. Tom between 1915 and 1918. The program met with little success, however, and active efforts were discontinued after 1916.

In 1922, 65 turkeys of unknown origin were released by private individuals on Naushon Island, Dukes County. Additional releases of small numbers of birds were made in 1923, 1938 and 1940. A population was successfully established, though most birds lacked wildness and remained dependent on man. A few birds

are still present on the island today.

A second state attempt commenced in 1935. Thirty-five immature Wild Turkeys were obtained from a private New Jersey game farm and released in Beartown State Forest in South Lee. About 56 additional birds were released between 1936 and 1937, and at least one brood was produced in the wild in 1936. Additional game-farm birds were released in Savoy in 1935, Dalton in 1936, and Monterey in 1938. Although single birds and small groups persisted until about 1940, little reproduction took place and no population was established. The reasons for failure are not known, but the poor quality of the stock was certainly implicated.

The Division of Fisheries and Game obtained about 300 game-farm Wild Turkey eggs from the state of Pennsylvania in 1946. Hatching success was poor. Thirteen birds were released in the spring of 1947 on Prescott Peninsula in the Quabbin Reservation. At least one brood was produced that summer and 37 additional poults were released in the fall. However, the Wild Turkeys were seen infrequently after November and not at all by the following January. Again, the reasons for failure are unknown, but low-quality game-farm stock and poaching are both suspect.

During the 1950's several eastern states, notably West Virginia, Pennsylvania, and New York, demonstrated considerable success in restoring Wild Turkey populations by live-trapping wild birds in occupied areas and releasing them in vacant habitat. The cannon net trap, recently developed for capturing waterfowl, was readily adapted for use on Wild Turkeys and proved invaluable in obtaining the birds quickly, effectively, and in sufficient numbers. Additional progress was also made in evaluating the quality of various stock types and the suitability of release sites, thus increasing the chance of a successful stocking.

Based upon these advances, the Division decided once again to support a Wild Turkey restoration program. Federal-assistance funding was established by the Division through the Pittman-Robertson program, with the field work to be conducted by graduate students of the Massachusetts Cooperative Wildlife Research Unit at the University of Massachusetts. The study began in 1959 after an evaluation of potential release sites by biologist R. W. Bailey of the West Virginia Game Commission. Prescott Peninsula in the Quabbin Reservation was selected as the most suitable initial site, based upon the extent and quality of habitat, degree of protection, and availability to researchers.

The first releases were made in April 1960, consisting of two adult females from Greenbriar County, West Virginia, and six birds (three males and three females) trapped by permission on Naushon Island. Two broods totaling seven poults were known to be raised that summer. An additional nine juvenile females, raised from eggs provided by Pennsylvania's Allegheny Game Farm, were released on the peninsula in November. Five birds left the area, three were killed by predators, and three were lost to unknown causes, leaving 13 present in the spring of 1961. Five additional West Virginia wild-trapped birds (three males and two females) were released on the study area in March. Approximately 60 poults were produced that summer, with 48 surviving until September, bringing the fall total to about 62 birds.

Heavy winter mortality, possibly due to starvation, occurred during the winter of 1961-62, with only 17 Wild Turkeys being located that spring.

Reproduction in the summer of 1962 was fair, with 34 poults surviving until fall. High winter losses took place again in 1962-63 with 16 Wild Turkeys remaining on the peninsula in the spring of 1963.

In addition to the Quabbin studies, releases were also taking place at localities in western Massachusetts. Eleven Wild Turkeys of game-farm ancestry were trapped in Delaware County, New York, and released in the town of Mt. Washington in the southern Berkshires in January 1961. Sportsmen released 16 game-farm birds from Pennsylvania near Hayes Pond in Otis in October of the same year, and project students liberated 12 game-farm birds, nine poults captured in Quabbin in October Mountain State Forest between April, 1961, and September, 1962.

The Quabbin flock grew only slightly between 1963-65. Hatching success and poults survival showed a steady decline from 1961 to 1964 with only nine of 25 poults hatched in 1964 surviving until fall. Approximately 21 Wild Turkeys were present in the Quabbin in April, 1965, with a few more surviving off the Reservation in Shutesbury and New Salem.

The birds in Mt. Washington showed a high susceptibility to artificial feeding by local residents and became semidomestic in behavior. The October Mountain Wild Turkeys also displayed a lack of wildness. Only 12 birds were present in 1965 despite supplemental feeding by project personnel. The Otis stocking failed to establish a population, as did two released of Quabbin-strain birds on the Holyoke Range in 1964 and 1965.

Recruitment and survival in the Quabbin increased slightly from 1965-67, with 39 birds surviving until the 1966 breeding season and 43 present in April, 1967. Production, survival, and dispersal remained markedly inferior to that of pure wild-strain populations, however. Following the conclusion of graduate studies in 1967, the Wildlife Unit terminated its investigations and the Division of Fisheries and Game assumed full responsibility for the Wild Turkey restoration study.

Due to the slow progress of the project in central and western Massachusetts, plans were made for an additional release in the southeastern area of the state. West Virginia agreed to exchange wild-trapped Turkeys for raccoons, and in February and March, 1966, two gobblers and six hens were released in Miles Standish State Forest in Plymouth. Eight more birds (two toms and six hens) were trapped and transferred to the same location one year later. Unfortunately, considerable dispersal took place upon release and no verified breeding was noted after 1967. Sightings declined yearly thereafter and the last authentic report was received in 1971. Sightings thereafter were received without supporting data and probably represented escaped domestics.

The Quabbin breeding population increased slightly to about 50 birds by 1968, and about 60 by spring 1969. Small numbers of birds were also reported from nearby New Salem, Shutesbury, and Montague. Supplemental feeding was continued in 1969-70 but terminated the following winter. As expected, considerable mortality took place and intensive investigations of the Quabbin birds were curtailed.

Wild Turkeys from the Quabbin-New Salem area were transplanted to Barre State Forest in 1966, 1967, and 1969; to Douglas State Forest in 1968-69; and to

Hatfield in 1971. Initially encouraging dispersal and reproduction was followed by a slump in populations, and at present (1976) few, if any, Wild Turkeys remain at these localities.

The poor progress of the Wild Turkey in central and western Massachusetts had now clearly demonstrated that game-farm or mixed-ancestry birds were unsuitable for use in any further restoration efforts. Numerous studies in other states confirmed this, showing that game-farm Turkeys--regardless of claims of "high quality"--lacked the inherent qualities of wildness necessary for the unsupported establishment of breeding populations. The introduction of penned stock was also demonstrated to contaminate native flocks through cross-breeding or the introduction of disease. Stockings of tens of thousands of game-farm birds in dozens of states from the early 1950's to the present resulted in successful establishment only in limited areas of Michigan and New York. Expenditures were phenomenal and returns limited. Virtually all Wild Turkey biologists now deplore any release of semi-wild birds for any purpose.

Faced with this evidence, the Division decided to continue statewide restoration efforts only if sufficient wild-trapped stock could be obtained from a state with similar habitat and climatic conditions. After several contacts, the Bureau of Wildlife of the New York Department of Environmental Conservation agreed to provide Wild Turkeys in the interest of establishing regional populations.

In March, 1972, despite mild weather which hampered baiting and trapping, New York technicians, a student assistant, and I cannon-netted seven Wild Turkeys in Allegheny State Park in western New York and transported them to Beartown State Forest in the southern Berkshires. A second effort in February and March of 1973 resulted in ten more Wild Turkeys, nine of which were toms that had dominated bait sites and precluded the capture of hens. A final attempt that fall was more successful, with five adult hens and fifteen poults being captured. All Wild Turkeys were released at the same location in Beartown Forest.

Few sightings of the birds were made in the two years following the last release. Project personnel located a few small flocks on and near the forest during winter checks and cooperators observed one small brood during the summer of 1974.

After 1975, however, reports began to increase, and the Wild Turkeys showed additional signs of dispersal from the release area. They were reported not only in the forest but in Tyringham, Monterey, Stockbridge, and other neighboring towns. At least three broods were produced in 1975, and, based upon the distribution of reports, several more in 1976. Winter survival seems very good, with the Wild Turkeys feeding on natural foods in seeps and sheltered areas, and they exhibit a high degree of wildness which probably contributes to the scarcity of sightings.

Nearby states are also conducting Turkey studies, and spillover from expanding populations may well occur. Banded birds seen in northern and western Berkshire County probably originated from releases in New York and Vermont.

Should dispersal and production of the wild-string Wild Turkeys in the Berkshires continue, I can envision successful restorations in other areas of the

state. Massachusetts does lack the extensive interspersions of pastures, abandoned fields, and hardwood ridges found in other states with high populations, but much of central and western Massachusetts is nonetheless suitable Wild Turkey habitat. Small numbers of mixed-ancestry Turkeys still remain in the Quabbin and a few birds are occasionally seen elsewhere in central Massachusetts, but they do not pose an immediate problem to the expansion of wild birds.

The evaluation of the success of the program has been difficult due to the scarcity of sightings of the birds. Reports from cooperators, followed by field checks in the winter, have been our major source of information on the status of the population. These and other applicable techniques should be continued and transplants made as feasible, so that the Commonwealth may once again support flourishing flocks of Wild Turkeys for the enjoyment of its citizens.

Selected References:

- Forbush, E. H. 1912. A History of the Game Birds, Wild-fowl, and Shore Birds of Massachusetts and Adjacent States. Mass. State Board Agric., Boston, 622 pp.
- Hewitt, O. H., ed. 1967. The Wild Turkey and its Management. The Wildlife Society, Wash., D. C., 589 pp.
- Latham, R. M. 1976. Complete Book of the Wild Turkey (rev. ed.), Stackpole Books, Inc., Harrisburg, Pa., 228 pp.
- Lewis, J. C. 1973. The World of the Wild Turkey. J. B. Lippincott Co., Philadelphia, Pa., 158 pp.
- Sanderson, G. C. and H. C. Schultz, eds. 1973 Wild Turkey Management. Current Problems and Programs. Missouri Chapter Wildlife Society and University of Missouri Press, Columbia, Missouri, 355 pp.
- Schorger, A. W. 1966. The Wild Turkey: Its History and Domestication. University of Oklahoma Press, Norman, Oklahoma, 626 pp.

AVAILABLE NOW

Out-of-print books.

Catalog includes ornithology and general natural history.

Free search service if you're looking for a particular book.

Write: Saxifrage Books
P.O. Box 383
Reading, Massachusetts 01867

INTERNATIONAL SHOREBIRD SURVEYS 1977

by the Canadian Wildlife Service
and the Manomet Bird Observatory

In 1974, shorebird survey schemes involving volunteer participants were initiated in eastern Canada by the Canadian Wildlife Service and in areas of the eastern U.S. by the Manomet Bird Observatory. A principal objective of these schemes has been to identify and document areas of major importance to shorebirds in eastern North America. With our estuaries continuing to come under pressure from an increasing number of development proposals, renewed concern must be expressed for this group of birds, and the future preservation of their habitat must be viewed as a matter of some importance.

It is clear that some estuaries are of critical importance in the yearly cycles of many species of shorebirds. Without the feeding and resting areas that such estuaries provide, many shorebirds would be unable to accumulate the large fat reserves required for an oversea journey to the wintering grounds. Owing to the large geographical area involved, one of the only ways of obtaining regular, coordinated information concerning shorebirds has been to request the assistance of volunteer observers, who have adopted a local area which they have surveyed for shorebirds once every two weeks during the southward autumn migration. The results of these surveys have already been most useful and are making a valuable contribution towards the conservation of a very important segment of the bird life of North America.

In 1975 and 1976, the survey scheme was extended to cover as much of the eastern coast of North America as possible, as well as the Caribbean Islands and northern South America. In 1977 we wish to extend the scheme as much as possible in all areas, and to include coverage in the winter and spring periods where appropriate. We hope that you may be willing and able to assist in this project. It would involve adopting a good shorebird location or 'study area' in which you could count or accurately estimate the numbers of shorebirds once every 10-14 days during autumn (early July until mid October) or spring migration periods, or at monthly intervals during the winter (November to March). If you are unable to visit an area regularly, occasional counts from other areas, especially during peak migration periods, would be very welcome and worthwhile, e.g. counts from shorebird areas that you might make during the course of a vacation. Areas could be covered on an individual basis or as a group project.

Thank you very much for your consideration. If you are able to assist us, or know of any other competent birders who might, we should be grateful if you could contact one of the following:

(1) for areas in Canada:

Dr. R. I. G. Morrison
Canadian Wildlife Service
2721 Highway 31
Ottawa, Ontario
CANADA K1A 0E7

(2) for areas in U.S.A., Caribbean Islands and South America:

Brian A. Harrington
Manomet Bird Observatory
Manomet, Massachusetts
U.S.A. 02345

THE STELLER'S EIDER

by Robert C. Vernon, Westwood

Imagine! A Steller's Eider in Massachusetts! Perhaps that is not too surprising. Every year seems to have its rarities. There was the Great Gray Owl, the Ross' Gull, the Ivory Gulls, and Eurasian Curlew, and the McCown's Longspur. But my son, James H. Vernon, and I continue to be amazed that we were the ones to "discover" the Steller's Eider. We are only intermediate birders and just happened to be at the right place at the right time.

Jim and I were both on vacation that last week in March. On Tuesday the 29th, we decided to go birding on the South Shore. We drove down to Brant Rock and leisurely worked our way north. This was the first of the record warm sunny days of late March. In spite of a fresh breeze we were comfortable enough to take time to stop and "scope" the sea birds wherever there was a convenient place. At nearly every stop we saw Common Goldeneyes, Red-breasted Mergansers, and Common Eiders. Around 10:30 we arrived at a small parking area by a seawall where Turner Road intersects Jericho Road in Scituate. I looked through the scope for a while, and then Jim took a turn. Within a short time he said, "There's an eider with a beautiful, rusty breast." The bird at the time was preening itself so that Jim could not see its head. I had my copy of Robbins in hand so I opened it to the page of eiders and reported that "the Steller's Eider has a rusty breast." Jim indicated that this bird really did seem different and that I had better take a look. I looked at it and began to call off the field marks while Jim held the book: "Large, black eye, dark promiscences on the back of the head, a small bill, and a black collar around its neck." Pretty soon it flapped its wings and "stood up" on its tail. I saw that the entire undersides were a beautiful, rusty brown. Finally, I noted that the back was black. Jim said that all those field marks corresponded with the description of the Steller's Eider!

We began to get excited. We both took two or three more turns examining the bird. It was keeping company with Common Goldeneyes, and it was clear that this bird was slightly smaller. The bird gradually moved away from shore and toward the south. We were now thoroughly convinced that we were seeing a drake Steller's Eider. Jim went to the car and wrote down everything he could think of regarding description of the bird, weather conditions, time, place, etc.

I had been calling the "Voice of Audubon" quite regularly, and I had not heard of any Steller's Eider. Therefore, our next thought was to notify the birding community of our find. We were fearful that the bird might leave before anyone else got to see it. The nearby houses seemed deserted, and there were few people about, so we proceeded north keeping a lookout for a telephone booth. During the noon hour we found a filling station with a phone booth, and I called Massachusetts Audubon. Richard Forster was out to lunch, so I left a brief message about the discovery.

We continued northward and stopped at a few more places, but gradually our enthusiasm for birding gave way to a desire to share our excitement with others. Around 3:30 P.M., I again tried to call Richard Forster to make sure he had received word of our find and to describe the field marks to him. He was still unavailable, so I called Ruth Emery. To my surprise she had already heard about it! Apparently Richard Forster had been sufficiently

convinced by our message to call her. We later learned that several people had seen it by that evening. The news had travelled quickly.

We spent the rest of the afternoon looking up information in Pough, Bailey, Griscom, A. C. Bent, and Kortright. We learned that the species is found in Arctic Siberia and in the Bering Sea. It winters in the Aleutians and along the Arctic coast west to northern Europe. It apparently had never before been seen in Massachusetts. (According to Richard Forster the only previous sighting in the lower forty-eight states was in Maine in 1926.) By now we were elated!

That evening Jim called some birding friends in Greenwich, Connecticut, where he lives. A friend on the Audubon staff there didn't believe Jim at first. He thought he was joking. When finally convinced, all the friend could say was "Karrumba!" I called Kimball Elkins in New Hampshire. Just after I had gotten into bed that night, the phone rang. It was a man from Hartford who wanted to learn just where we had seen the eider.

Because of a minor illness my wife had missed the thrill of seeing the Steller's Eider. By Wednesday afternoon she felt well enough to go, so the three of us went back to Jericho Road. With the help of birders on the scene we soon spotted the bird again. It came closer gradually, and we had very good views of it as it put on a great show trying to court some female Goldeneyes. While we were there, we met some of Jim's friends from Connecticut, a couple from Poughkeepsie, New York, and two people from Maine, one from as far away as Lincoln. It is interesting how the news had spread. (I wish that someone would write about how the birding "hotline" works.) We heard about other birders from out of state who had been there that morning.

On Wednesday evening we were interviewed and photographed by the Globe. Later I was interviewed by the New Yorker magazine. But the best of the fringe benefits was having other birders come up to us, shake our hands, and either congratulate or thank us.

BINOCULAR HUNTING

WITH TODAY'S HIGH COSTS RARELY DOES

QUALITY AND ECONOMY COMBINE

YOU GET THAT RARE COMBINATION

WHEN YOU ORDER

SWIFT BINOCULARS, TELESCOPES, AND TRIPODS

FROM

SANDFORDS NEW HORIZON BOOKSHOP
DEPOT STREET, WELLS, MAINE 04090
TELEPHONE (207) 646-7587

FRANK SANFORD GIVES A VERY SPECIAL PRICE
ON EACH ITEM. SELECT YOUR CHOICE, WRITE OR
PHONE, AND FRANK WILL GLADLY QUOTE YOUR
SPECIAL PRICE, AND SHIP YOUR ORDER FAST

THE SERVICE ON SWIFT INSTRUMENTS IS PHENOMENAL

OUR SATISFIED BBC CUSTOMERS
ARE OUR BEST ADVERTISEMENT

WINTER OF '77

In the middle of March, Marvin Pave of the Boston Globe reported that the Cape Cod Museum of Natural History and the Cape Cod Chapter of Ducks Unlimited were responsible for the spreading of 16 tons of corn in prime waterfowl feeding areas on the Cape this winter. Some of the corn was purchased by funds from the museum and from the Massachusetts Audubon Society, but most was purchased by money donated by the public. Volunteers distributed the corn at two major feeding areas, one at Pleasant Bay in Chatham, and the other at Nauset marsh located between Eastham and Orleans. It was estimated that only 5% of the Canada Geese and Black Ducks and other migratory birds were lost this winter instead of half the population that might have perished if the supplemental feeding program had not been implemented.

The February 2, 1977 news release from the U.S. Fish and Wildlife Service tells how the severe winter's ice and snow prevented the migratory birds from foraging for their normal diet of roots, grass, sea grains, mussels, etc. Migratory birds were weak from travel and found food scarce. They didn't often find alternate feeding areas, and so they suffered from starvation, higher incidence of disease, and died in greater than normal numbers.

Waterfowl also were more susceptible to lead poisoning this year. The ice clogged wetlands drove birds inland to cornfields swept clean of snow by the wind. Waterfowl that eat corn show a higher incidence of lead poisoning. Mr. McCord of the Massachusetts Department of Fish and Wildlife explained by personal communication the reason for this phenomenon. He said that the waterfowl ingest lead shot along with gravel which lodge in the gizzards of the birds. Since corn is harder for the waterfowl to grind up, the gizzard grinds longer and causes the lead pellets to be pulverized into fine particles which readily pass from the digestive organs into the bloodstream, and subsequently poisons the animal. The typical natural food stuffs of waterfowl do not require so much grinding, so less lead is freed into the bloodstream when normal food supplies are adequate.

Lack of snow fall in the pothole country breeding grounds for waterfowl will undoubtedly have adverse effects on next year's productivity.

Game birds also suffered this winter. Some died when the tail feathers of male pheasants froze to the ground. In others, fine particles of snow blocked the nasal passages of quail and grouse, suffocating many. Many starved because their food was typically covered by a thick layer of ice.

If the deep ground frost killed many of the insects lying dormant in the soil, then the songbirds will find food in short supply.

Eagle, hawks, and other raptors were forced further south this winter to escape the raging winter.

In New Jersey, supplemental feeding of Brant was undertaken because they could not reach their usual wintering spots due to scarcity of food enroute. Since there are very few Brant, and many feared there would be further dwindling this year, wildlife officials took steps to save them.

Most species of birds will not receive such aid, and it remains to be seen what impact this year's harsh winter will have on next year's hunting, fishing, and birding.

SUMMARY FOR MARCH, 1977

March was unusually warm, a much welcomed change from the bitter cold of the previous months. The temperature averaged 44.7°, 6.6° above normal and the highest for the month of March since 47.2° in 1946. This was the fourth warmest March in the 107 years of official record. The month's high temperature of 81° on the 30th set a new record for that date, topping the previous high of 75° set in 1962. The average daily maximum was 52.5°, the average minimum was 36.8°, with the low on the 2nd, a mild 27°.

Precipitation totalled 4.76", .75" more than normal. The most rainfall in any 24 hours was 1.60" on the 22nd-23rd. Thunderstorms on 2 days were most unusual. Snowfall totalled 10.7", 2.7" above average. A major storm on the 18th-19th dumped 9.6". The seasonal total now stands at 58.0", 16.5" above average and the most in this period since 1963-1964.

Wind averaged 13.1 m.p.h. The storm of the 22nd had gusts of 60 m.p.h. from the Northeast. Considerable damage was noted in the Greater Boston area from the wind on that date.

LOONS THROUGH CORMORANTS

The outstanding flight of Red-necked Grebes continued in April. Apparently they were staging before the flight northward. The largest flocks were found along the south shore. Here is the complete breakdown for the month:

March

1,2	Cohasset-Hull, Manomet	75, <u>192</u>	GRF, MBO staff
3,5	Cape Ann, Dennis	20+, <u>42</u>	MHM; WRP, RAF
5,6	Hull-Brant Rock, Nahant-Rockport	<u>306</u> , <u>77</u>	SH, RAF
6,11	Hull-Scituate, Nahant	30, <u>30+</u>	RRV, SZ
13	Dennis, Cohasset	87, <u>41</u>	BN, CAG; NSO
14,19	Marblehead, Cohasset	28, <u>136</u>	RSH, NSO
23,26	Marblehead, Marshfield	40, <u>31</u>	MK, NSO
27,30	Nauset, N. Scituate	125, <u>60+</u>	BN, CAG; RAF

Horned Grebes numbered 110 between Nahant and Rockport (RAF) and 110 on Nauset Beach, Eastham (CAG, BN). Fifteen Pied-billed Grebes were noted during the month - one was on a road in Dover (FRH) and two in the ocean off P.I. (JWB)! Gannets were migrating at a rate of 500 per hour past Nauset Light on the 27th (BN, CAG). One hundred-eighty seven Great Cormorants were noted off North Scituate (SH) and the first Double-crested Cormorants were noted on the 30th at Scituate where 14 were reported (JM).

HERONS

The first Great Egrets arrived on the 27th at Wellfleet (CAG) and on the 30th in Marshfield (BT). Three Snowy Egrets were found on the 30th at Long Island (MK) and fifteen were observed in Marshfield on the 31st (BT). Only five Black-crowned Night Herons were reported -

the same number that was reported during February 1977. Three American Bitterns were noted; one each from Scituate Mar. 6 (RRV), Lancaster Mar. 29 (HM), and Plum Island Mar 29 (GLS#). A dead Glossy Ibis was picked up on the incredibly early date of March 5 in Beverly (fide J.Lazell). This is the earliest known date for this species in the state. Eleven Glossy Ibises were noted at Scituate on the last day of the month (FB).

WATERFOWL

Canada Geese totalled 1300+ on the 26th at Plum Island (RSH), while 1000 Brant were observed in the Squantum-Wollaston area and 2335 were counted in Brewster (PWC). Snow Geese at Plum Island peaked at month's end to over 100 individuals (MG) from two birds at the beginning of the month (GAW). At Townsend, 150-200 Snow Geese were noted on the 31st (MB). One adult "Blue" Snow Goose was noted at Plum Island on the 12th (RRV,MJL). Ducks began to increase by month's end from the low numbers of the previous cold months. Noteworthy were the counts of 130 Pintail at Plum Island on the 26th (RSH) and 60 Green-winged Teal on the 26th at Marshfield (WRP#). The first migrant Blue-winged Teal was found at Salisbury on the 7th (MHM) with a general arrival on the 12th-27th. A "Eurasian" Green-winged Teal was noted at West Harwich on the 20th and remained there through the 31st (DB#). A maximum of four Northern Shovelers were reported from P.I. Wood Ducks were first noted on Long Island on the 6th (RRV) and at Broadmoor, South Natick on the 9th (BL). A maximum of 16 were found in Lancaster (HM). The high count of Redheads was 48 at Falmouth on the 25th (AAC) with the only other count being 7 at Lakeville (RPE). Ring-necked Ducks totalled 122 on the 20th in North Carver (DB) and 154 on the 26th in Middleboro (DB). Over 250 Canvasbacks were found in Falmouth on the 12th (AAC), while there were close to 500 on the 14th in Falmouth last year (AAC). Rafts of 1500+ Greater Scaups were at Squantum (JM) and over 2000 were reported from Newburyport (HLJ#). A male Barrow's Goldeneye was seen at Squantum-Wollaston on the 1st (GAW) and from 1-3 were in Newburyport Harbor from the 5th-28th (v.o.). Oldsquaws built up to 300 in Newburyport Harbor (GLS#). Eleven Harlequin Ducks were present in Magnolia through the 18th and three remained the month in East Orleans (v.o.). A total of over 2100 Common Eider were present in Boston Harbor (JM,SZ). Over 300 Common Mergansers were counted in Brewster on the 7th (BN) and 129 were present at Cambridge Reservoir in Lincoln on the 29th (RHS).

The highlight of the month and most likely the "Bird of the Year" was the adult STELLER'S EIDER found by Robert Vernon off the Sand Hills section of Scituate on the 29th. This was a first for the state and only the 2nd record for the East coast, the other being one seen in 1929 off Scarborough, Maine. A reference of 3 Steller's Eiders being shot out of a flock of eight on January 4, 1967 in Maryland (Handbook of North American Birds, R. S. Palmer, 1975; vol. 3, pg. 10) is erroneous: the birds were Canvasbacks.

RAPTORS

Turkey Vultures were noted in three places, one in Lancaster on the 15th and another one on the 26th (HM), while two were seen in Princeton on the 26th (PMR) and one in Framingham on the 28th (EM). Single Goshawks were reported from Dennis (PWC), Lynn (CJ) and South Peabody (RSH). Cooper's Hawks were seen in Wellfleet and Eastham (WWB,CAG) and on the 27th in Weston (LJR) and one on Plum Island on the 29th (GLS#). There was an early arrival of Broad-winged Hawks with an incredibly early date of March 3 in Bridgewater when 4 were seen (LR). One adult was seen in Eastham on March 8 (CAG,BN). Two Broad-winged Hawks were observed courting in Norwell on the 12th (MFL,BAL) and one on a nest in Bridgewater on the 27th (WRP). Another was recorded at Ipswich River Wildlife Sanctuary, Topsfield on March 20 (RSH). In March of 1976 none were reported and only two in 1975. Eleven Rough-legged Hawks were reported, with the first one on the 27th in Hingham (SH). Two immature Bald Eagles were present in Littleton on the 15th (VFS#), and one in Hingham on the 26th (BT#). The first Osprey arrived in Westport on the 20th (JJC). Three Merlins were reported - one each at Middleboro (DB), Sudbury (JL), and Plum Island (GLS#). A white-phased GYRFALCON was reported in the Boston-Cambridge area between March 6-19th. The bird was first seen on the 6th in Cambridge on the church at the corner of Brattle and Sparks Streets where it chased pigeons (R.Hooper). Upon further investigation, several people in that neighborhood mentioned a large white bird chasing pigeons most of that day. On the 16-19th this Gyr Falcon watched over the city of Boston from atop the old John Hancock Building (E.Smith,PMR#). Two different office firms had scopes set up on the bird and watched it for over 3 hours! (This writer sat in a traffic tie-up on Clarendon St., two blocks away, only to miss the bird by 3-5 minutes. It flew toward Cambridge and up the river.)

RAILS AND SHOREBIRDS

A Sora Rail was picked up dead on the 3rd at First Cliff, Scituate (GRF). Very few Soras survive the winter, and this bird probably was an early migrant, blown off course during a storm in late February. The first Killdeers were reported during the early part of the month with a general arrival in all sections by the 24th. A Golden Plover was found on the 26th at Plum Island (HWF). Although no details were received, this would be the earliest record for this species, which normally migrates up the Mississippi River and across the plains in the spring. The only other recent March record is on 3/31/73 by Gardler. Only one Black-bellied Plover was reported from Long Island on the 20th (HM). Seventy Ruddy Turnstones were along the shore at Cohasset (SH). American Woodcocks arrived during the first week of March and 12 were seen courting in Rock Meadow, Belmont on the 12th (RHS). Nine Common Snipe were found in Concord on the 23rd (RAF) and 12 in Lancaster on the 26th (HM). One Greater Yellowlegs was found in Scituate on the 20th (MFL,BAL) and six were seen on Plum Island on the 28th (MHM). One Lesser Yellowlegs was seen on Plum Island on the 28th (MHM) and single birds were seen on the 30th at W. Harwich (RC), Scituate (BT), and Long Island (MK). On the 5th at Revere, 21 Red Knots were present (SZ) and on the 6th, 60 were observed in Cohasset

(SH). Over 800 Purple Sandpipers were present throughout the month in North Scituate (RRV#). This flock was present in February and is one of the largest counts in Massachusetts records. Pectoral Sandpipers arrived on the 30th-31st with one in Bolton (RAF), 4 in Truro (BN), and one in Concord (MHM). Dunlins totalled 350 in Scituate (GRF), 500 in Hingham (RPE), and 200 in Acoaxet (JJC). Over 300 Sanderlings were present all month along Revere Beach (SZ).

GULLS THROUGH ALCIDS

Fourteen Glaucous Gulls were reported during the month (cf. 6,6,6,11 for the last four years). Forty-two Iceland Gulls were present in Gloucester (RAF) and 80 were seen at the north end of Plum Island (WRP). Only 2 Black-headed Gulls were present at Newburyport and no Little Gulls were reported. On the 27th from Nauset Light, Black-legged Kittiwakes were heading north at a rate of 100 per hour. A possible Forster's Tern was reported from Newburyport on the 12th (J.Grugan). The Forster's Tern that was seen regularly at Newburyport from April 10-30, 1975 gives this record some credibility. The heavy concentrations of Thick-billed Murres of the previous months all but disappeared with the only exception being over 60 on the 20th off Provincetown (BN). Eight Thick-billed Murres were observed off Scusset on the 6th (JL#) and 10 were seen off Sandwich on the 20th (FA). A single Dovekie was reported from Andrew's Point, Rockport on the 3rd (MHM), and four Black Guillemots were seen there on the 6th (RAF). Other guillemot reports came from Nahant where 2 were reported on the 27th (SN), and one in Provincetown on the 6th (BN).

OWLS THROUGH WOODPECKERS

Eight Screech Owls were heard calling in the Middleboro-Bridgewater area on the 12th (WRP) and singles were reported from eight other localities. Ten Great Horned Owls were reported from ten different localities. The two Snowy Owls continued in the Plum Island-Salisbury area through the 14th and one was seen in Mendon on the 27th and 28th (J.Ober). The Barred Owl continued in Cambridge throughout the month where it was observed on several occasions chasing squirrels in the Lowell House courtyard of Harvard University. Apparently successful, the remains of several squirrels were found at Lowell House and at Eliot House where the owl roosted. Other Barred Owls were found in Essex and three in Middleboro. Three Short-eared Owls were found in Squantum and one remained at Plum Island through the 20th. Another was found in Scituate on the 6th (GRF). Two Saw-whet Owls were found in Middleboro on the 12th (WRP) and one was seen in the New Pines on Plum Island (HTW#). Three Saw-whet Owls were present in Brewster on the 27th-30th (BN,CAG).

Pileated Woodpeckers were reported from Lancaster (HM), Dover (FRH), Weston (LL), Lincoln (RHS), and Topsfield (RSH). An adult Red-headed Woodpecker was found in West Boylston on the 25th (B.Barriere). The Red-bellied Woodpeckers remained throughout the month in Adamsdale (fide C.Wood) and through the 20th at Eastern Point, Gloucester (MK#). Another Red-bellied Woodpecker was seen in Hanover on the 16th (WRP).

FLYCATCHERS THROUGH SNOW BUNTING

The first Eastern Phoebes were single birds observed on the 9th in Dedham (JM), on the 11th in Sherborn (EWT), and on the 12th in Whitman (WRP). A general arrival throughout eastern Massachusetts occurred on March 20th. Tree Swallows first appeared on the 12th at Great Meadows in Concord (RW) and 2 were seen at Bridgewater on the 14th (LR). Small numbers of Tree Swallows began arriving after the 26th at various locations. One Purple Martin was seen on the 30th in Orleans (CAG). Only one Fish Crow was reported during the month from Roxbury (J.Murphy). The winter may have had a devastating effect on Carolina Wrens, with only 2 individuals being reported from Scituate and one from Marshfield.

A single Gray Catbird was reported from Dorchester on the 30th, an apparent survivor of the winter (J.Murphy). Brown Thrashers were reported from Falmouth (AAC) and South Hanson (WRP). Substantial counts of American Robins arrived at mid-month and in Waltham, 189 were seen migrating with blackbirds the morning after the big snowstorm. Hermit Thrushes were observed in Lynn on the 28th (P.W.Corrigan) and another was seen in Scituate on the 30th (MHM). Eastern Bluebirds were reported from E. Middleboro (EK), Horn Pond in Woburn (GG), three in Raynham (J.Cushman) and 2 in Boxford (GLS#). Fifteen Golden-crowned Kinglets were seen in Topsfield (MK). Water Pipits were reported from Bolton, where 7 were seen on the 13th (HM), and single birds were observed in Lancaster on the 29th (HM) and on the 31st in Marshfield (BT). A BOHEMIAN WAXWING was present on the 3rd and 4th on Nantucket (EFA), particularly unusual for that locality. Northern Shrikes were reported from seven localities throughout eastern Massachusetts with 3 individuals in the Plum Island-Salisbury area. A Loggerhead Shrike was well observed at close range in Wellfleet on the 12th (CAG,BN).

Only one Yellow-rumped Warbler was noted at Marshfield on the 26th (SSBC-N.S.Osborne). Eastern Meadowlarks arrived on the 11th in the Bolton-Lancaster area where as many as 10 were seen (HM), and eight were observed in Middleboro on the 19th (WRP). Redwinged Blackbirds were moving in large numbers during the month with 18,000+ individuals in W. Newbury on the 12th (RRV#) and 8000 in Waltham on the 18th (RHS). A single Northern Oriole was observed in Rowley on the 20th (RSH). Rusty Blackbirds were reported in good numbers. The first arrivals were on the 2nd in Lancaster, where as many as 10 were seen during the month (HM). Six Rustys appeared in South Peabody on the 5th (RSH) and on the 6th 45-50 were noted in E. Middleboro (DB). On the 13th 30 were seen at Bolton Flats (HM) and 75 were counted on the 16th in the Sudbury Valley (RAF). In West Newbury, 2000+ Common Grackles were noted on the 12th and over 4000 were migrating in the early morning of the 19th in Waltham (RHS). In the Bolton-Lancaster area, 600 were noted on the 13th (HM). Brown-headed Cowbirds totalled 200 in Bridgewater on the 6th (GRF), 800 in Weymouth on the 8th (RRV), and 320 in Topsfield on the 27th (RSH). Purple Finches were five times more abundant during February and March 1977 than during the same period in 1975 and 1976. High counts included 27 in Lancaster (HM), 15 in Weston (LJR), and 30 in Topsfield (RSH). Two Red Crossbills

were reported from Dana in the Quabbin area (BGB). Single Rufous-sided Towhees were reported from Westport (JJC), Topsfield (RSH), and Norwell (MFL,BAL). An "Oregon" Dark-eyed Junco was seen in South Peabody on the 28th (RSH). Chipping Sparrows made it through the winter and were reported from Lancaster (HM) and South Peabody (RSH). White-crowned Sparrows continued in Natick (Broadmoor) (EWT) and in Lancaster (HM). These two birds were reported all winter. Other White-crowned Sparrows were reported from Waban (EPG) and 4 were seen in Hingham (MFL,BAL). Fox Sparrows were seen in good numbers at the Ipswich River Wildlife Sanctuary, Topsfield, where 21 were seen on the 20th (RSH). Other counts of Fox Sparrows include 12 on the 22nd in Lincoln (WWH) and 16 in Weston on the 27th (LJR). Song Sparrows were migrating and 50 were counted in the Sudbury Valley on the 12th (RAF), with 85 present at Marblehead Neck on the 14th (RSH). A single Lapland Longspur was found in Marshfield on the 26th (SSBC-NSO). Over 200 Snow Buntings were reported from P.I. on the 6th (MHH) and a single bird was found in Lancaster on the 16th (HM).

RHS,RRV

LIST OF CONTRIBUTORS

John Alexander, Edith F. Andrews, Theodore T. Atkinson, Fraby Austin, Wallace W. Bailey, Doris Baines, Beatrice Barriere, G. Bartlett, James W. Berry, Bradford Blodgett, Fred Bouchard, Dorothy Briggs, Elizabeth Burbank, Michele Busher, Richard M. Butler, Colin Campbell, Persis W. Campbell, John J. Clancy, Anne A. Clarke, Paul W. Corrigan, Davis H. Crompton, Viola G. Crompton, Lod Crofoot, Jane Cushman, Herman H. D'Entremont, R. Paul Deveau, Ruth P. Emery, Harold W. Ferris, Gerald R. Flaherty, Richard A. Forster, Murray L. Gardler, Ida Girunas, Carl A. Goodrich, George Gove, John Grugan, Fred R. Hamlen, H. Warren Harrington, Winthrop W. Harrington, Jeff Harris, Richard S. Heil, Sibley Higginbotham, Carl and Barbara Holdridge, R. Hooper, Craig Jackson, H. Lawrence Jodrey, Mark Kasprzyk, Oliver Komer, Edward Korpinen, Louise Langley, Tad Lawrence, James Lazell, Beverly A. Litchfield, Marcia J. Litchfield, Myron F. Litchfield, Jay Loughlin, Bruce Lund, Janet Luck, John Marshall, Martha H. McClellan, Harold Merriman, Edward Morrier, Joshua Murphy, Albert W. Nickerson, Blair Nikula, Jack Ober, Jane O'Regan, Neal S. Osborne, Philip Parsons, Robert F. Pease, Clarence Peters, Wayne R. Petersen, Louis Resmini, Paul M. Roberts, Leif J. Robinson, Pat Sayre, Elaine Smith, Gerald L. Soucy, Virginia F. Sprong, Jayne Stairs, Robert H. Stymeist, Eliot W. Taylor, Barbara Treat, Richard Turner, Richard R. Veit, Richard Walton, Herman Weissberg, Henry T. Wiggin, George A. Wilson, Charles Wood, Soheil Zende, Brookline Bird Club, Manomet Bird Observatory, (v.o. - various observers).

SUMMARY FOR APRIL, 1977

April in Boston was very warm and sunny, with more rain than normal. The temperature averaged 51.3°, 2.7° above the average. This was 3.8° cooler than the record April of last year, yet it was the second warmest April since 1945. The lowest temperature was 26° on the 9th, only 2° over the record low for the date. The old saying goes, "If you don't like the weather in New England, just wait." Well, on the 12th, the temperature was a hot 85°, and on the 13th, the mercury hit 86°, topping the old record of 84° set in 1896. The month's high temperature was 88° on the 22nd, a new high mark for that date, beating 84° set in 1973. The last freeze came on the 11th, three days later than average.

Rain totalled 4.07", 0.58" above normal and the most in April since 1973. The most rain to fall in any 24-hour period was 1.53" on the 23-24th. Snow was limited to trace amounts on the 2nd and the 8th, leaving the seasonal total at 58", 15.8" over average and the most in a decade.

On the cape, according to Blair Nikula, "The weather was pleasant, but not conducive to good waves. The only exceptions were on the 22nd-23rd and on the 30th. The only southern storm occurred on the 5th and produced a few vagrants. The hawk flight was disappointing probably due to a lack of persistent southwest winds. Significant movements did occur on the 22nd and 30th. Herons were very scarce with some species unrecorded. Swallows were also few and far between. There were no southern warblers seen during the month, for the first time in my memory."

LOONS AND GREBES

A single Common Loon was seen flying over Lincoln April 25th (JB), while out at sea a total of 25 were seen over Georges Bank April 27th (MBO staff). Roughly 376 Red-necked Grebes continued along the coast from Essex County to Cape Cod; the higher individual counts made were 118 between Scituate and Brant Rock April 2 (WRP#), 45 at Winthrop on the same date (SZ), 152 at Manomet Point April 7 (MBO staff) and 10 as late as April 27 at Marblehead (CWL). Eighty-five Horned Grebes occurred at P.I. April 2 (RAF) and two were recorded inland at Lakeville April 10 (WRP). Pied-billed Grebes totalled 7 from six localities.

GANNET THROUGH HERONS

"Hundreds" of Northern Gannets were noted migrating northward from shore on Nantucket April 15-18 (SZ) and 200+ were estimated on Georges Bank on the 15th (MBO staff). Other counts from traditional vantage points include 119 from Rockport April 23rd (HD'E) and 100 from Barnstable April 24 (WRP). The general arrival of migrant Double-crested Cormorants occurred on the 9th-10th, when 300+ were noted flying northward offshore from Scituate April 9 (RRV,MJL) and 200+ appeared in Newburyport April 10 (HWM). The "last" Great Cormorant report for the month was of 2 at Rockport April 23 (HD'E). Six adult Little Blue Herons arrived in Manchester, close to their nesting location of last

year on House Island, on April 9 (P.Parsons), while other adults occurred at Scituate April 2 (GRF), at North Scituate April 22 (WRP) and at Marion April 27 (G.Mock). An "immature", presumably a pied individual in its first winter, was seen at Squantum April 18th (M.Argue). Cattle Egrets totalled 20 from 7 localities (cf. 34,16,9,39 since 1973) including birds as early as April 1 in Halifax (H.Maxim) and 2 birds April 2 in Marshfield (WRP). The extensive farmlands in Ipswich harbored 8 of these birds April 16-30 (v.o.). Great Egrets numbered a high 22 in the region and seem to be experiencing a steady increase locally (cf. April totals since 1973, 5,12,16,12). The highest counts came from Marshfield (8 on April 9, BAL,MFL) and Westport (5 on April 16, RRV,RHS#). A Snowy Egret at Lancaster April 28 was somewhat unusual for that inland locality (HWM). An adult Yellow-crowned Night Heron in Eastham April 22-26 was unique to our region (BN,CAG), while Louisiana Herons occurred at Plum Island April 9-19 (NMO) and 1 or 2 in the Marshfield-Duxbury area April 30 (WRP). Although virtually entirely absent from the cape, Glossy Ibis continue to increase substantially as migrants (?) along our north shore. The higher counts include 45 at Topsfield April 2 (RAF), 51 at Marshfield April 9 (RRV), 86 in Rowley April 9 (JWB), 51 in Rowley April 12 (M.Gardler) and 254 in Ipswich April 25 (P.Parsons).

WATERFOWL

Two of the smaller forms of Canada Goose appeared in the state this month: an almost definite "Richardson's" Goose at P.I. April 17 (RRV,MJL), identified by its very small size and general light coloration (color of back matching color of underparts), and a small dark individual, possibly a northwestern form, at Lincoln April 4-30 (WWH#). Brant numbered 1000 in Duxbury Bay April 10-24 (GRF#) and 150 in Newburyport April 27 (J.Murphy). The Snow Goose flock at the Plum Island marshes reached maximum proportions at 435-460 April 2-17 (v.o.), this flock containing one adult "Blue" Snow Goose. Additional migrant flocks included 25 at Scituate April 9 (RRV,MJL), 21 in Wellesley April 15-16 (RAF) and 40-50 in Lancaster April 8 (HWM). Waterfowl of a western affinity at P.I. included 30 Gadwalls April 17 (RRV), 29 Pintails April 2 (WCD) and 350 Green-winged Teal April 10 (RSH). American Wigeon numbered 32 in Belmont April 2 (RHS) and reports of 27 Northern Shovelers included one female inland at Bolton April 25 (HWM). A single Redhead in Wayland April 4 was somewhat surprising (MHM) and counts of Ring-necks included 18 at Lynnfield April 1 (VA), 55 in Middleboro April 10 (WRP), 15 at Topsfield April 14 (MHM), and 14 at Concord April 10 (OK).

Two drake Barrow's Goldeneyes remained in Newburyport Harbor until the 10th (v.o.) and a single drake appeared in Manomet on the 12th (MBO staff). Wintering Oldsquaw lingered at Nantucket until at least April 18 when 5000+ were estimated (SZ); 284 were counted at Cape Ann April 23 (HD'E) and 100 remained in Newburyport to the 30th (P.Parsons). Up to four Harlequin Ducks continued intermittently at East Orleans, where they wintered throughout the month, and 12 were still at Magnolia on the 12th (J.Grugan). The Steller's Eider discovered in late March in Scituate remained to be seen until April 7th. Two Hooded Mergansers in Lincoln April 2 were unique (HWF), and Common Mergansers numbered 20 at Newburyport April 2 (WCD) and 14 in Lincoln April 23 (RAF).

RAPTORS

Pronounced flights of accipiters, falcons and Broad-winged Hawks occurred coastally on the 23rd and 30th, while inland no flight was apparent and numerous observers at traditional inland lookouts such as Mt. Wachusett noted a scarcity of Broad-wings. Turkey Vultures were plentiful and widespread with 17 individuals reported, (cf. 6,5,16,10 since 1973). Most reports were of singles except 5 at Provincetown April 22-23 (BN,CAG) and 3 at Wachusett April 21 (MHM). Two Goshawk nests were located during April; one in Weston (LJR) and one in Boxford where the species has nested previously (v.o.). Other Goshawks (singles) were noted a P.I. on the 9th and 17th (E.Pyburn;BAL,MFL). On April 23rd, 10 Sharp-shinned Hawks passed Provincetown, and on the 30th 52 were counted at P.I. (PMR), 15 in Provincetown (BN) and 2 in Cambridge (P.Butler). Three to four Cooper's Hawks were recorded on the outer cape, one was found in Lancaster April 12 (HWM) and one was present in the Newburyport-P.I. region April 15-16 (CWL,RSH). A meager four Red-shouldered Hawks were reported, and the only perceptible movement of Broad-wings was 40 at Provincetown April 30 (BN).

Rough-legged Hawks lingered until the 13th at Whitman (LR) and the 16 in Newbury (CWL,D.Briggs). A Bald Eagle in Eastham was unique this month, although the exact date of occurrence was unreported (fide BN), and three Peregrine Falcons were observed; one in Scituate April 23 (GRF), one on P.I. April 23 (J.Nove) and one on Duxbury Beach April 29 (PFC). Merlins totalled 8 for the month and American Kestrels were noted moving on the 16, 23, and 30th.

RAILS AND SHOREBIRDS

A King Rail, presumably a migrant, was observed dead in the talons of a Marsh Hawk April 10 in East Orleans (BN,CAG) and a second was seen at GMNWR April 21-23 (R.Walton). A Clapper Rail was seen in Marion on the 24th (G.Mock).

American Oystercatchers arrived in Chatham on April 16 (P.Trull), and 5-6 were present on Monomoy April 30 (BN,CAG). Of particular interest were two separate Golden Plovers occurring during the month. One appeared at Squantum on the 21st and remained until the 30th (BM) and the second appeared at Bridgewater on the 23rd (WRP,KSA), and at least the latter was examined for a differential diagnosis from the Eurasian Greater Golden Plover. A count of 91 Common Snipe April 15 in Bolton was noteworthy (HWM), and 55 wintering Ruddy Turnstones continued at Scituate April 9 (RRV). A Whimbrel occurred at P.I. April 22 (J.Murphy) and 6 were at WBWS April 30 (WWB). An Upland Sandpiper April 9 in South Duxbury was particularly early (WRP); 21 others were reported from 8 localities during the remainder of the month. A Willet occurred at Squantum April 29 and two were on Monomoy April 30; Greater Yellowlegs built up at Newburyport from 11 on the 2nd (RAF) to 20 on the 16th (S.Grinley) with 99 on the 27th (RRV). Lesser Yellowlegs totalled a rather high 37 for April (cf. 4,11,4,14 since 1973) following a number of early migrants in late March.

The higher counts of Pectoral Sandpipers were 46 at Marshfield April 2 (WRP), 44 in Bolton April 17 (HWM) and 85 in Newburyport April 20 (MG), and Least Sandpipers arrived in Newburyport on the 29th with 35 reported (RRV). A Stilt Sandpiper seen April 10-30 in Newburyport Harbor represents the earliest New England record by six weeks (RRV#). The bird remained into May and was observed to attain full alternate plumage by the end of April. A report of a very early Semipalmated Sandpiper April 16 on P.I. was intriguing, although unaccompanied by complete details (RSH). Finally, observers on Nantucket reported the appearance of a female Ruff and an American Avocet on the same day, April 26 (EFA, Chester Fauna).

GULLS AND TERNS

Lingering Glaucous Gulls numbered 6, all coastally, and higher counts for Iceland Gulls were 40+ at P.I. April 8 (RAF) and 22 in Gloucester April 17 (J.Nove). In Addition, 16 Iceland Gulls were on Nantucket April 17 (SZ). Two adult Black-headed Gulls occurred in East Boston April 2 (SZ) and another was in Newburyport the same day (RAF). A single adult was seen in Squantum April 24 (B.Morrissey), although the wintering flock never materialized in Boston Harbor this year. Single Laughing Gulls appeared on the coastal plain by April 3 at Dartmouth (JL), April 8 at Nahant (SZ) and April 10 at Cape Ann (J.Grugan), and 4 adult Little Gulls were present in Newburyport Harbor throughout the month (RRV#). Three Common Terns were seen at Chatham on the 10th (AAC), and by month's end 50 were observed on Monomoy (CAG#). In Squantum 1-2 Caspian Terns were reported, unusual for the month; a single bird appeared on the 20th (JTL, PRB) and on the 26th two birds were seen (B.Morrissey).

ALCIDS THROUGH WOODPECKERS

Aboard the Albatross IV, 12 Razorbills were reported from Georges Bank between the 17-19th (AWN-MBO). A single Razorbill was reported from Barnstable on the 24th (WRP), and on the 15th two Thick-billed Murres were observed at Provincetown, with one on the 16th (S.Stanne). As many as 7 Black Guillemots were observed at Nahant (SZ), and 6-8 were seen off North Scituate on the 16th (WRP). Single Black Guillemots were observed at Provincetown on the 15th (S.Stanne), off Magnolia on the 17th (D.Briggs), and one was still present at Nahant on the 23rd (SZ).

On board the Albatross IV, the NOAA Research Vessel, Bert Nickerson reported 16 Common Puffins on Georges Bank from April 17-26th, for Manomet Bird Observatory. A single Common Puffin was reported from Provincetown on the 2nd (BN, CAG). A Dovekie was observed on Georges Bank on the 22nd (AWN-MBO).

A Barn Owl was reported from Brewster on the 26th (R.Prescott). The Harvard University Barred Owl continued chasing squirrels throughout the month, and a Saw-whet Owl was picked up dead on P.I. on the 16th (C.Baines). Whip-poor-wills were reported on the 18th from Manomet (MBO staff) and in Marblehead (RSH), one was heard in Acton on the 21st (SPG), and another was found dead in Cambridge on the 22nd (RHS).

A Chimney Swift was observed in Lincoln on the 22nd (RAF). An early Ruby-throated Hummingbird was observed at Rockport on the 18th (R. Norris). Single Pileated Woodpeckers were reported from 5 localities and the Red-bellied Woodpeckers continued in Adamsdale (fide C.Wood). The adult Red-headed Woodpecker continued through the 3rd in West Boylston (FMcM). Yellow-bellied Sapsuckers arrived in several localities on the 12th and 17 individuals were reported (v.o.).

FLYCATCHERS THROUGH WRENS

Phoebes finished nest-building on April 2 at Mount Auburn Cemetery, Cambridge, where 8 birds were reported throughout the month. A Great-crested Flycatcher was carefully observed at Provincetown on the very early date of April 16 (S.Stanne). Thirty Horned Larks were observed at Plum Island on the 16th (BBC-SPG).

The first Tree Swallows arrived in scattered locations between the 9th and 15th. On the 16th 150 were found on Plum Island (BBC-SPG), building up to over 800 individuals by the 30th (BBC-P.Parsons). On the 21st, Tree Swallows were seen feeding young in a nesting box (Mrs.E. Schoolman). Bank Swallows were reported from Bolton on the 17th (HM), from Westport on the 24th (RRV#), and from Milton on the 27th (B.Morrissey). Rough-winged Swallows arrived on the 14th in Marblehead (MK), on the 17th in Gloucester (J.Nove), 15 were counted in Milton on the 27th (B.Morrissey) and over 20 were observed in Falmouth on the 29th (AAC). Single Barn Swallows were reported from scattered localities through the 17th, with more individuals reported by month's end. Cliff Swallows were reported from Halifax on the 9th (WRP), from Belmont on the 21st (C.Oberhauser), and from Milton on the 27th (RPE#). Purple Martins arrived on the 2nd at P.I. (RAF), single martins were reported from Marshfield on the 3rd (T.Raymond), on the 9th in Halifax (WRP), on the 10th in Danvers (J.Grugan), and one was seen in Lancaster on the 29th (HM); by the 30th over 40 pair of Purple Martins were on territory in 5 places in the town of Middleboro (RCM#).

Fish Crows were reported from 4 locations, with 14 being reported from Scituate on the 21st (GRF). Twelve Red-breasted Nuthatches were reported from six locations, and 5 Brown Creepers were observed on the 20th at Marblehead Neck (MK). House Wrens arrived on the 18th in Lancaster (HM), on the 21st in Saugus (SZ) and Marblehead (MK). Winter Wrens were reported from 8 localities, with three individuals in Marblehead on the 18th (MK#), and 4 from Milton on the 27th (RRV,MJL). Only six Carolina Wrens were reported and all the reports came from south shore communities. This species should be closely watched this breeding season, since the very cold winter could have been destructive to the population. A single Long-billed Marsh Wren was reported from Plum Island on the 16th (BBC-SPG).

MIMICS THROUGH SHRIKES

The first Gray Catbirds were reported on the 14th from Scituate (J.Williamson) and on the 18th from Chestnut Hill (E.Cushman). Singles were reported from many localities on the 30th. Brown Thrashers arrived on the 17-18th, and were reported in higher numbers by month's end.

Sixty American Robins were reported from Gloucester on the 17th (BBC-J.Nove). Wood Thrushes were reported from three localities, arriving on the 22nd in South Peabody (RSH). Hermit Thrushes arrived in small numbers at the beginning of the month, with a general arrival on the 12th. At Mount Auburn Cemetery, 11 were reported on the 15th (fide RHS); also on the 15th, 10 were seen in Marblehead (MK), and 7 were observed in South Peabody (RSH). A Veery was reported from Marblehead Neck on the 23rd (JTL,RHS). The only other April report since 1973 was on April 23, 1974. Eastern Bluebirds were nesting in 2 places in Lincoln (WWH,P.Brooks) and in Middleboro (D.Briggs).

Blue-gray Gnatcatchers were reported from 10 localities with an early report on the 12th from Newburyport (MLG). From the 21st as many as 7 were seen at Mount Auburn Cemetery (fide RHS), and 4 were banded at MBO during the week of the 24th. Golden-crowned Kinglets were virtually absent during April with only 9 individuals reported. The maximum for Mount Auburn was only 2 birds, as compared with a high of 32 during April, 1976. Ruby-crowned Kinglets on the other hand were migrating at regular numbers with a maximum of 38 on April 20 at Mt. Auburn (fide RHS). On the 20th over 50 were observed at Marblehead Neck (MK#) and on the 26th 22 were banded at MBO. A mass arrival of Ruby-crowned Kinglets occurred on the 20-24th. Water Pipits were reported from the 1-15th in Bolton (HM) and from the 3-30th in Marshfield (JWB,v.o.). A single Cedar Waxwing was reported from Wellesley on the 29th (RAF). A Northern Shrike was found on Plum Island on the 2nd (RAF#). Loggerhead Shrikes were reported from April 2-12th at Marshfield (WRP) and another was seen in Marion on the 10th (G.Mock).

VIREOS THROUGH WARBLERS

A White-eyed Vireo was singing in Westport on the 16th (RHS#) and one was present at Marblehead Neck from April 20-27 (MK#); another was observed on Nantucket (EFA#). A Solitary Vireo was found on the 16th at Plum Island (P.Parsons#), but the general arrival occurred after the 20th. At Mt. Auburn as many as nine were reported (fide RHS).

A very early Black-and-White Warbler was reported on the 10th in Pembroke (ECP). There were 11 other reports after the 22nd. A Prothonotary Warbler was found on the 20th at Marblehead Neck (C.Blaszczak#,v.o.). The bird remained at the sanctuary until the 27th. Nashville Warblers were found at Mt. Auburn on the 24th (J.Grigan), a Northern Parula was observed at Marblehead Neck on the 14th (MK). Yellow Warblers arrived on the 30th in Bolton (HM) and in Nahant (RRV), a week later than usual. A Cape May Warbler was well observed on the 22nd in Weston (LJR). This is only the 2nd April record since 1973. The big flight of Yellow-rumped Warblers began at mid-month with the general first arrivals. On the 22nd there were over 50 at Mt. Auburn (fide RHS), 45 at S. Peabody (RSH), and 45 at Marblehead Neck (MK). At Provincetown 250 Yellow-rumped Warblers were noted on the 23rd.

Black-throated Green Warblers were noted on the 16th in North Scituate (GRF), three were seen at Boxford on the 17th (RRV#) and another was reported from Marblehead on the 18th (MK). A Blackburnian Warbler was

observed in Baldwinville on the 17th and 18th (J.O'Regan). The best warbler of the month was the Yellow-throated Warbler found on the 14th at Mount Auburn (D.Verger, T.Marvin, v.o.). The bird sang constantly along Indian Ridge for two days and was seen by many observers. Last year, a Yellow-throated Warbler was found there on April 25. Southern warblers (Prothonotary, Yellow-throated) are likely to show up after a strong southwest wind during the month of April. Pine Warblers were reported from eight localities, arriving at mid-month. The Palm Warbler is a common April migrant, and although early arrivals often appear in the first two weeks, it is not until April 13-17 that the appearance becomes widespread. Maximum abundance occurs in the last weeks of April, and 28 were found at Mt. Auburn on the 22nd (fide RHS), 50 were reported the same day from Chestnut Hill (E.Cushman#), and 25 were seen at South Peabody (RSH). On the cape, over 10 were seen at Provincetown (GAG), this representing the highest spring count for the cape to date. Northern Waterthrushes were found on the 25th on Nantucket (J.Alward) and at Marblehead Neck (MK). Louisiana Waterthrushes were on territory by month's end in Boxford, where three were reported (HTW). Single birds were reported from six other localities. A Yellowthroat was found at Falmouth and in Sandwich an American Redstart was noted on the 27th.

BLACKBIRDS THROUGH LONGSPUR

The first Northern Orioles were reported on the 28th in So. Bridgewater (R.Beckman) and on the 30th in Falmouth (AAC). Rusty Blackbirds were noted in many localities with 30 reported from Provincetown on the 23rd (BN#). This is the highest count for the cape in spring. An immature male Summer Tanager was present from April 10-16 in Wellfleet (Mrs.Hall, v.o.). Rose-breasted Grosbeaks were reported from Wellfleet (fide P.Bailey), Chatham (BN), and Woods Hole (AAC). Blue Grosbeaks, like the Summer Tanager, occasionally appear in April after southerly storms. In Pembroke many observers recorded a Blue Grosbeak on a feeder from April 7-13 (P.McKenna#). One was picked up dead in Chatham on the 10th (fide B.Nikula). On the 29th and 30th two Blue Grosbeaks were reported from Nantucket (Mrs.Oldham), and a female was found in Provincetown (BN). Single Indigo Buntings were reported from Chatham on the 9th (E.Soja), South Dennis on the 23rd (C&BH) and on the 26th on Nantucket (J.Alward#). A Dickcissel was reported from a feeder in Billerica (THS). Dickcissels are rare in spring with an occasional bird hanging around feeders until April. Over 50 Purple Finches were counted in Baldwinville on the 23rd (JO'R). Two dead Common Redpolls were found by smell in a classroom at Brookline High School on April 25 (JTL). Where they came from is a mystery, but one thing was for sure, they had been there over the warm weekend! Two Red Crossbills were found at the New Pines from April 4-23 (v.o.). Rufous-sided Towhees arrived in small numbers early in the month, but the general arrival occurred on the 22nd when 18 were found at Mount Auburn (fide RHS) and 25 were noted at Marblehead Neck (MK).

Savannah (Ipswich) Sparrows were found on Gooseberry Neck, South Dartmouth on the 16th (RRV#) and possibly the same bird was noted at Demarest-Lloyd State Park on the 18th (RPE#). A Seaside Sparrow was banded at MBO on the rather early date of April 29. Vesper Sparrows

were reported from Plum Island on the 10th (RSH#), in Dover on the 15th (FRH), in South Peabody on the 17th (RSH) and 2 were in Bridgewater on the 23rd (EA#). Chipping Sparrows arrived at mid-month with a maximum of 10 being seen at Mt. Auburn (RHS#). Wintering White-crowned Sparrows continued in South Natick (EWT#), Lancaster (RK), Truro (CAG), with three on Nantucket (SZ). Over 500 White-throated Sparrows were reported from Provincetown on the 23rd (BN). On the same day, 100 were reported from Marblehead Neck (MK) and 50 were at Nahant Thicket (JTL#). On the 26th, 52 were banded at MBO. The last Fox Sparrows were noted on the 16th with one at Mt. Auburn (RHS) and one in Weston (LJR). Two Lapland Longspurs were last reported on the 16th in Salisbury (D.Briggs).

RRV, RHS

LIST OF CONTRIBUTORS

Virginia Albee, Janet Alward, Kathleen S. Anderson, Edith F. Andrews, Arthur and Margaret Argue, Dorothy Arvidson, Thomas Athearn, Theodore F. Atkinson, Priscilla Bailey, Wallace W. Bailey, Charlotte Baines, James Baird, Helen C. Bates, R. Beckman, James W. Berry, Chester Blaszczak, Dorothy Briggs, Paul Brooks, Paula R. Butler, Richard M. Butler, Ian Campbell, Peter F. Cannell, John J. Clancy, Anne A. Clarke, Ronald F. Clayton, Lod Crofoot, Earl and Florence Cushman, Elizabeth F. Cushman, Dorothy Davis, Thomas Davis, Herman H. D'Entremont, William C. Drummond, Ruth P. Emery, Trevor L. Lloyd-Evans, Harold W. Ferris, Gerald R. Flaherty, Richard A. Forster, Patricia R. Fox, William French, Murray L. Gardler, Elizabeth P. Garrey, Kathryn Gibbs, Carl A. Goodrich, George Gove, Steven P. Grinley, John Grugan, Mrs. Hall, Kenneth Hamilton, Frederick R. Hamlen, Winthrop W. Harrington, Richard S. Heil, Barbara and Carl Holdridge, Rev. John Holman, Flora Ingals, Mark Kasprzyk, Oliver Komer, Ray Kongorski, S. Lazell, Christopher Leahy, Joseph T. Leverich, Beverly and Myron Litchfield, Marcia J. Litchfield, Clarence and Janet Luck, John Marshall, Thomas C. and Ursula Marvin, Reginald C. Maxim, Martha H. McClellan, Edward McDermit, Paul McKenna, Francis X. McMenemy, Harold Merriman, E. Mills, George Mock, Edward Morrier, Bernard Morrissey, Joshua Murphy, Albert W. Nickerson, Blair Nikula, R. Norris, John Nove, Nancy M. Ober, C. Oberhauser, Mrs. Oldham, Jane O'Regan, Philip Parsons, Ethel C. Pearson, Robert F. Pease, Wayne R. Petersen, R. Prescott, Evelyn Pyburn, Ruth Rabinow, Theodore Raymond, Louis Resmini, Paul M. Roberts, Leif J. Robinson, Eric Samela, Mrs. Eliot Schoolman, Eleanor Soja, Steve Stanne, Robert H. Stymeist, Michael Sullivan, Eliot W. Taylor, Lee Taylor, John Tomfohrde, Peter Trull, Richard R. Veit, Roland Walton, Elizabeth Whitehouse, Henry T. Wiggin, J. Williamson, George A. Wilson, Charles Wood, Soheil Zende, Brookline Bird Club, Manomet Bird Observatory, (v.o.-various observers).

CANADIAN WILDLIFE SERVICE

SHOREBIRD COLOR-MARKING 1977: REQUEST FOR INFORMATION

In 1977, the Canadian Wildlife Service will be continuing an extensive program of banding and color-marking shorebirds in James Bay, with the objective of defining migration routes used by shorebirds on their journeys between the Arctic breeding grounds and wintering areas. A highly successful program in 1976 resulted in over 580 reports of color-marked birds from among 12,400 banded in southern James Bay, in areas ranging from eastern Canada to South America. Much new information is being obtained, and your assistance in looking out for and reporting color-marked birds would be very much appreciated and would contribute very substantially to the success of the program.

Feather dyes and colored leg bands will be used to mark the birds. If you see a marked shorebird, please record details of: species, place, date, color-marks and, if possible, numbers of other shorebirds present. For color-dyed birds, please record the color and area of the bird that was dyed. For color bands and standard metal leg bands please record which leg the bands were on, the colors involved, and the relative position of the bands if more than one was on a leg (e.g. right leg, blue over metal, etc.). A note should also be made whether the bands were below or above the 'knee' of the bird.

Thank you very much for your assistance. All reports will be fully acknowledged and should be sent to:

Dr. R. I. G. Morrison
Canadian Wildlife Service
2721 Highway 31
Ottawa, Ontario
CANADA K1A 0E7

TIDE TABLE

July and August 1977

Here is the tide table for Newburyport Harbor, accurate to the nearest quarter hour on Daylight Savings Time. For best shorebird viewing be at the harbor approximately four hours before or after high tide.

	<u>High Tide</u>	<u>High Tide</u>
Sat. July 2		12:00 noon
Sun. July 3	1:15 a.m.	1:00 p.m.
Mon. July 4	2:00 a.m.	2:30 p.m.
Sat. July 9	6:30 a.m.	7:00 p.m.
Sun. July 10	7:30 a.m.	8:00 p.m.
Sat. July 16		12:15 p.m.
Sun. July 17		1:00 p.m.
Sat. July 23	5:00 a.m.	5:15 p.m.
Sun. July 24	6:00 a.m.	6:15 p.m.
Sat. July 30	11:45 a.m.	12:00 noon
Sun. July 31		12:30 p.m.
Sat. August 6	5:00 a.m.	5:30 p.m.
Sun. August 7	6:00 a.m.	6:30 p.m.
Sat. August 13	11:00 a.m.	11:15 p.m.
Sun. August 14	11:45 a.m.	12:00 noon
Sat. August 20	3:30 a.m.	4:00 p.m.
Sun. August 21	4:30 a.m.	5:00 p.m.
Sat. August 27	10:30 a.m.	11:00 p.m.
Sun. August 28	11:30 a.m.	

American Birds

is the one journal
that keeps you up-to-date
on the ever-changing birdlife
of Canada, the United States,
and Latin America

"A must for bird-finding..." Olin Sewall Pettingill Jr.

"I devour it eagerly..." Roger Tory Peterson

"I use it constantly..." George Miksch Sytton

"An invaluable mine of information..." Chandler S. Robbins

"American Birds is a necessity for bird-lovers..." S. Dillon Ripley

Identification: Illustrated, detailed articles by experts on the fine points of difficult identifications.

Feature articles on the birdlife of the Americas.

The Changing Seasons: A unique continent-wide panorama for each of the four seasons. The what, where, when, how many, and by whom of U.S. and Canadian birding. Reported by more than 5000 observers, summarized by 23 regional editors, analyzed for trends and patterns in an expert review.

Christmas Bird Count: World's biggest birding project.

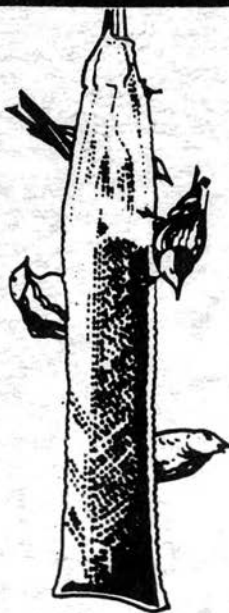
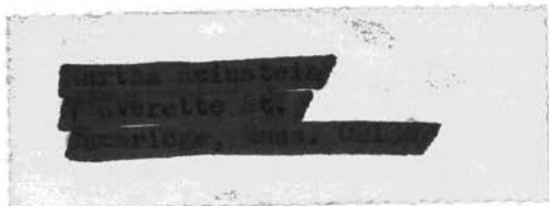
Special features: Photographic essays. Book and record reviews. Photo contest. "The Blue List" of declining species. University profiles.

Plus: Short papers. Work in Progress. Mini-essays. Photographs. News. Communications. And more.

AMERICAN BIRDS
950 Third Avenue, New York, N.Y. 10022
(212) 832-3200, Ext. 277, 278

BIRD OBSERVER
462 Trapelo Road
Belmont, Mass. 02178

SECOND CLASS
MAIL PERMIT
PENDING
BOSTON MA



THISTLE STOCKING

Attract colorful songbirds to your yard with thistle seed! Birds will cling to the sides of this netted feeder and pick out individual seeds. 12" long, with drawstring. Holds 12oz. of seed.

Thistle Stocking ----- \$1.95

Add 25¢ for post.&hdlg.

Thistle Seed (5 lb.)----- \$5.00

Add \$1.00 for post.&hdlg.

All orders acknowledged with our 32-page catalog of wild bird feeders and supplies. Catalog only, send 25¢ for hdlg.

duncraft
WILD BIRD SPECIALISTS

Dept. DA76
25 South Main Street
Penacook, N.H. 03301