SUMMARY FOR MAY, 1977

The month of May had record sunshine, near normal precipitation and remarkable warmth. The temperature averaged 62.6° , 4.0° above normal. This tied with May 1959 as the fifth warmest May in 107 years of official record keeping. The highest temperature was 92° on the 17th, and a 90° reading on the 24th, was just 3° shy of that day's record. The mercury dropped to 35° on the 9th, breaking the 37° record set in 1947.

Precipitation totalled 3.52", most of it (3.09") fell during the storm of May 9-10. May 9 and 10 also brought Boston its only officially measured snow in 106 Mays on record. The previously recorded latest seasonal measured snow was on April 28, 1916. Trace amounts have fallen in 12 of the 106 Mays. Heavier snow fell inland only short distances from Boston, and around 8" fell in the Bedford-Acton-Billerica area. The wet, sticky snow clung to newly leafed out trees to topple so many limbs and even whole trees that some areas suffered damage rivaling that of the 1938 hurricane. Massive power outages occurred, especially in the Newton area, where it took 3 days to restore power in some sections. The heavy snow extended remarkably far south, with up to 11" reported in some hilly sections, even in Rhode Island! The wind speed on the 9th was 44-58 m.p.h. from the NE.

The weather had its effect upon the birds, and the storm of the 9th-10th drove thousands of sea birds along the coast, with exceptional numbers in Cape Cod Bay. Note especially the careful estimate of 10,000 Leach's Storm-Petrels there on May 10. Petrels, phalaropes and kittiwakes were present in every marsh and estuary from Sandwich to Eastham on the 10th, and phalaropes were seen flying over Route 6 in Barnstable and Eastham!

Southwest winds, that special wind direction we all wait for during the spring migration occurred on May 2,4,6,16,20-24 and on the 31st. The real peak days were May 6, with a strong southwest wind of 38 m.p.h., and May 16, with a wind speed of 28 m.p.h. On May 7 the wind direction changed to the northwest, enabling many migrants to stay after the great showing on May 6.

On Cape Cod, the presence of good numbers of passerines during the first half of the month can probably be attributed to the advanced foliage which "held" the birds longer than normal. For the second straight year the late spring waves failed to materialize in spite of warm southwest winds during the period. The spring migration on the Cape continues to baffle - there seems to be very little rhyme or reason to it. Also on the Cape, herons continued to be scarce and shorebird numbers were very low. The only significant hawk movement occurred on the 12th when over 100 individuals of 10 species were recorded. Landbird waves occurred on the 1st,7th,13th,17-18th and on the 27th, the last date being exceptional on Cape Cod.

In all, including a few specialities in western Massachusetts, a total of 276 species were observed during the month of May, 1977.

LOONS THROUGH GREBES

Four Common Loons occurred inland at Clinton, with the last individual departing May 29 (HWM), and Red-throated Loons numbered 40 on P.I. May 26, a particularly high count for such a late date (WRP#). Thirty-one Red-necked Grebes, assumedly blown inland by the northeasterly storm of May 9-10, alighted on a lake at Southwick May 10 (SK#).

TUBENOSES

On Georges Bank, an observer for MBO noted 100+ Northern Fulmars, four of them dark-phased, and also reported the region's first Cory's Shearwater of the season May 31 (fide MBO staff). Sightings from shore of Sooty Shearwaters were sparse: one was seen at M.V. May 27-29 (JFK#), one from Provincetown May 29 (FJG) and one from Monomoy May 28 (RRV, MJL). Eleven reports of Manx Shearwaters during the month included one at Rockport May 9 (NC), 6 sightings of singles May 24-31 on Georges Bank (MBO staff), two off P.I. May 21 (RRV#), and singles at Barnstable (RFP) and Provincetown (FJG), both on May 24. Clearly in the wake of the aforementioned northeaster, a black-and-white shearwater, identified as an Audubon's, was studied as it rested upon a lake in Southwick, where it remained for that day only (SK#). Most spectacular was a careful estimate of 10,000+ Leach's Storm-Petrels observed entrapped in Cape Cod Bay May 10 (WRP, RAF, KSA). Apparently intercepted at the height of their northeastward migration along the continental slope, the birds were blown first inshore, and then south into Cape Cod Bay as the winds shifted to the northwest on the 10th. Additional reports of Leach's Storm-Petrels include one off Provincetown May 5 (HD'E), 600+ off Barnstable May 9 (WRP), 18 in Newburyport Harbor May 10 (NC), 400+ still off Barnstable May 11 (TL) and 6 from Marshfield (Brant Rock) May 11 (WRP). Amongst the multitudes of Leach's, 12 Wilson's Storm-Petrels were carefully identified (WRP, RAF, KSA), while 30+ were estimated the next day (BN), representing the earliest inshore records for that species locally. The actual arrival date of Wilson's Storm-Petrel on the productive waters of the continental slope is not as of yet clearly defined, but these reports indicate an arrival by the second week of May.

GANNETS THROUGH HERONS

Although Gannets were unreported from Cape Cod Bay during the storm, 65 passed Rockport and 8-9 were in W. Gloucester May 9 (NC). Lingering Great Cormorants of unreported ages were noted in Wollaston May 1 (JJC) and as late as May 31 in Plymouth Harbor (MBO staff). Data for occurrence of Great Blue and Green Herons are rather superficial and perhaps of negligible value; reports totalled 12 and 35, respectively, for each species. Eight Little Blue Herons, all but one of them adults, were reported from as many localities along the outer coast from Nantucket to P.I. (v.o.), while 3 Cattle Egrets occurred at Nantucket May 1-3 (Katie Gibbs,EFA), 6 in Ipswich May 1 (MFL,BAL) and 7 in Marshfield May 11(WRP). Great Egrets numbered 8 from as many localities throught the month, while the higher counts of snowies were 40 at P.I. May 22 (HWM) and 35 at Martha's Vineyard May 27-29 (JFK#). Louisiana Herons totalled a near average 5 this month, following a high total of 12 in May 1976. This year's birds appeared at Marion May 1 (GBM), at Neponset May 6 (SH), 2 at E. Boston May 1 (SZ) and one at Marshfield May 22 (WRP). A Yellow-crowned Night Heron at Nauset May 5 was unique in the state in May (GC,HC). A Least Bittern first appeared at P.I. May 7 (v.o.), and one was seen perched in a flowering shrub in Mt. Auburn Cemetery May 17 (PMR). Other singles occurred at Marshfield May 21 (WRP) and S. Peabody May 25 (RSH). Glossy Ibis, inclusive of local breeders as well as summering non-breeders, numbered roughly 248 this month, a substantial increase over the last 4 year's totals of 120,119,110 and 168.

WATERFOWL

Lingering flocks of Brant included 1700 at Barnstable May 1 (WRP), 200-300 at Plymouth May 16-21 (v.o.) and 12 continuing until May 28 at Newburyport (HW). Two Snow Geese remained at P.I. until May 20 (v.o.), a single (possibly a winterer) was in Chatham May 15 (Jeff Bryant) and a flock of 30 flew over Lexington May 13 (PS), surprisingly late. Two American Wigeon were at Newburyport May 15 (RHS, TL) and one at the same locality May 28 (WRP). Two Northern Shovelers at Cambridge May 8 were rather unusual for that locality (LT). A number of additional species of late lingering waterfowl included 2 Ring-necked Ducks at Newburyport (WRP#), 5 Greater Scaup at Squantum May 28 (JM), a Common Goldeneye at Plymouth May 21 (WRP), a Bufflehead at P.I. May 15 (TL), 500+ Oldsquaw at Newburyport May 15 (MK) and 3 at Chatham May 30 (AAC). Two of the 3 Harlequin Ducks that wintered off the beach at E. Orleans remained until at least May 7 (RAF, CAG, BN). Common Eider numbered 125 at P.I. May 7 (SZ), and 20 were seen at Scituate May 22 (JNi). An adult drake King Eider was seen May 21 at Scituate (WRP#). On May 8, several thousand scoters, 3000 of these identifiably Whitewinged, were observed flying northeastward past Gooseberry Neck in Westport into Buzzard's Bay (RRV, MJL). Up to 3 Hooded Mergansers were sporadically observed at Bolton May 18-30 (HWM), while the latest Redbreasted Mergansers reported were 5 at P.I. May 14 (JN).

RAPTORS

A decided increase of vagrant Turkey Vultures is evident in eastern Massachusetts in spring as well as in the fall. Some 21 individuals were reported from 12 localities in May (cf. 3,3,12,10 May totals since 1973). Goshawk nests were located in Weston and Boxford, with 2 young noted in each (LJR, v.o.). In addition, 2 adults were present at Andover May 1 (BM), one adult was at Lancaster May 8 (HWM), and a bird of unreported age was seen at Sherborn May 8 (PRB). Coastal flights of migrant accipiters and falcons occurred following SW winds on the 12th, and, to a lesser extent, on the 1st (actually a carry-over from the major movement April 30), although generally, this year's raptor migration was considered poor. Fifteen Sharp-shinned Hawks were counted at P.I. May 1 (PMR) and 20 at Truro on the 12th (WWB,CAG). Also on the 1st, Cooper's Hawks (please report ages!) occurred in Provincetown (1) and Newburyport (1-2). An adult was observed chasing a Green Heron in Norwell May 1 (BAL#), and one occurred at Truro on the 12th (BN). Six Red-shouldered Hawks were reported from suitable nesting habitats; one at Middleboro May 8 (WRP), one at Milton May 21 (SH),

one at Marshfield May 22 (JNi) and 2 at M.V. May 27-29 (JFK#). Four Broad-winged Hawks were observed May 1 at Provincetown (HD'E) and 50 were counted over Truro May 12 (WWB). The late spring concentrations of immature buteos, mostly Broad-winged Hawks, unique to the Cape in recent years, never materialized in 1977. Late Rough-legged Hawks included one at Newburyport May 1 (PMR) and one at Truro May 12-15 (BN, CAG). An immature Bald Eagle was noted at Monomov May 28 (BN, CAG). Also on May 12, 8 Marsh Hawks were noted migrating along the outer coast at N. Scituate (GRF). About 10 Osprey nests are active along the Westport River, and 15-17 individuals were reported from 12 additional non-nesting localities throughout the state, indicating a slow increase in recent years (cf. 7,2,6,6 totals of migrants since 1973). Two adult Peregrine Falcons were observed over a field in Halifax May 8 (WRP,KSA) and two separate adults occurred in the Newburyport-P.I. region May 12-14 (WRP, RAF). Lingering migrant Merlins numbered a comparatively high 12 May 1-15 (v.o.), and two were still at P.I. May 21 (RRV, SAP, HM). Migrant American Kestrels at Truro May 12 numbered 12 (BN#).

CRANES THROUGH SHOREBIRDS

A Sandhill Crane was seen flying over Plymouth Beach May 28 (MBO staff), for the second state occurrence this year and at least the third, maybe the 6th, since 1973. The only King Rails reported were 1-2 from GMNWR at Concord May 1-3 (BM#). This species, at the northern periphery of its breeding range in Massachusetts, has not been recorded from P.I. or Lynnfield, two supposed breeding areas, since 1975. A Clapper Rail was heard calling at P.I. May 12 (RAF). The peak of the shorebird migration occurred on May 25 for most species, somewhat later than last year, as monitored from Newburyport and Monomoy. The now well-established American Oystercatcher numbered 10+ at Monomoy throughout the month and 5 at M.V. May 27-29 (JFK#). The first Semipalmated Plovers to arrive were singles May 10 at Eastham and May 14 at Newburyport (WRP); the peak occurred on the 25th with 60 at Newburyport (RRV#). Inland, 3 were at Lancaster May 21 (HWM#). An unusual report was that of a flightless young Killdeer begging for good from its parents in a wooded, suburban section of Waltham in RHS's back yard! Black-bellied Plovers were once again particularly abundant as a spring migrant and roughly 2/3 as numerous as last spring with the peak occurring around May 25 (cf. May 19 in 1976). The higher counts were 4100 at Newburyport May 25 (RRV, SAP), 1800 at Plymouth May 27 (JJC), 415 at Monomoy May 28 (RRV, MJL) and 300 at E. Boston May 30 (SZ). Inland, 9 occurred at Lancaster May 12 (HWM), 35 at Rochester May 28 (DB) and 4 at Bolton May 29 (HWM). Ruddy Turnstones were distributed most heavily on the sand flats of the south shore and outer cape, numbering 60 at Plymouth Beach May 16 (RHS), 80 there May 27 (v.o.), 210 on Monomoy May 28 (RRV, MJL) and 44 at Squantum May 28 (BM). One was at Bolton May 27 (HWM). Whimbrel reports included 3 at P.I. May 19 (John Kieran), 3-5 at Monomoy May 28 (RRV, MJL) and one at M.V. May 28 (JFK#). Upland Sandpipers totalled 11 from 6 localities, all (at least) presumptive breeding areas. The last Solitary Sandpipers seen were 2 at Lynnfield and one at Rowley May 21 (RHS,RRV#). Of 16 Willets reported, 10 occurred as bona fide migrants or vagrants coastally from Newburyport-Plymouth May 5-29; 6 on Monomoy

May 28 may have been breeders. As Willets did nest at Monomoy in 1977, eventual recolonization of the entire east coast from Florida-Nova Scotia seems imminent. Greater Yellowlegs totals for Newburyport Harbor May 1,12,28,31 were 185,320,150,5, respectively (RRV,MK,HW#) and elsewhere 60+ were at Scituate May 2 (GRF) and 8 at Lancaster May 21 (HWM). Always uncommon as a spring migrant, Lesser Yellowlegs seemed particularly scarce this month, with a total of 13 reported [cf. 26,22,16,72(high?) totals since 1973] from coastal localities, predominately Newburyport, May 1-21 (v.o.). Surprisingly, two appeared inland at Lancaster May 21 (HWM) despite their scarcity elsewhere. Red Knot reports included 1 at Scituate May 15 and 3 there May 22 (GRF), 2 on M.V. May 27-29 (JFK#), 20 on Monomoy May 28 (RRV,MJL) and 4 at Newburyport May 31 (RRV). Purple Sandpipers remained at least until the third week of May with 120 at Lynn (HM, SAP, RRV, MJL) and 125+ at N. Scituate (WRP), both May 21. The last Pectoral Sandpipers were 2 at Newburyport May 17 (RHS). White-rumped Sandpipers, apparently more numerous on sand than on mud, numbered 25 at Scituate May 21 (RAF), 15 at Newburyport May 25 (RRV, SAP) and 35 at Monomov May 28 (RRV, MJL). Totals of Least Sandpipers for Newburyport May 1,25,31 were 85,1300,250, respectively, (RRV, SAP, MJL), showing a migratory pattern similar to Black-bellied Plover and Greater Yellowlegs, and 11 were recorded at Lancaster May 21 (HWM). A Curlew Sandpiper in almost complete alternate plumage was found at Newburyport Harbor May 28 (PA,GT), where it remained for that day only. This brings to a total of 6 the Curlew Sandpipers observed in the period May 12 - June 2 in Massachusetts since 1973. Higher counts of Dunlin were 150 at Nauset May 4 (RAF), 300+ at Newburyport May 12 (MK), 125 there May 25 (RRV) and 225 at Monomoy May 28 (MJL#). Five Shortbilled Dowitchers arrived on Nauset May 4 (RAF), 300 were at Newburyport May 25 (RRV, SAP) and a peak of 700 there May 27 (RRV, SAP); by May 31, they had dwindled to 100. The Stilt Sandpiper from April remained at Newburyport until at least May 14 (v.o.). Semipalmated Sandpipers reached peak concentrations in Newburyport somewhat later than most other species, on May 21, when 2750 were counted there (RRV). Other high counts include 700 in Newburyport May 25 (SAP#) and 400 on Monomoy May 28 (RRV, MJL). A Marbled Godwit was observed in Newburyport Harbor May 29 (J.Nove). Recent spring records of Marbled Godwit in the area are of particular interest in light of the recentlydiscovered breeding colony near James Bay, Manitoba, far to the northeast of their previously defined breeding range. A Ruff was on Monomoy May 6 (Peter Cannell), a female was in Wellfleet May 15 (BN#) and a second female was on Plymouth Beach May 21 (RAF, WRP). A count of 1150 Sanderlings was made on Monomoy May 28 (RRV, MJL). Following the easterly gale of May 9-10, 148 Red Phalaropes were observed off 1st Encounter Beach (RAF#), 2 were in Scituate (MFL, BAL) and one female was in Lynnfield (MLG) May 10. On the 11th, 5 were observed in Plymouth (MBO staff), and on the 27th and 28th 1440 and 2416, respectively, were observed along the continental slope on the southern edge of Georges Bank (MBO staff). On the 9th, 157 Northerns were counted in Cape Cod Bay from Barnstable (WRP), 75 were in Scituate on the 10th (MFL, BAL), 300 in Gloucester May 10 (CWL) and 633 in Cape Cod Bay on the 10th (WRP, KSA, RAF). One thousand were seen off Plymouth Beach on the 11th (MBO staff). Reds show a pronounced pelagic distribution compared to Northerns, being virtually confined to the waters of the

continental slope during the spring migration. This was the strongest spring flight of Wilson's Phalaropes ever recorded in Massachusetts; the total of $\underline{12}$ reported included $\underline{8}$ on P.I. May 18 (v.o.), and singles at Orleans May 7 (BN,CAG), S. Dartmouth May 8 (RRV,MJL), WBWS May 14-16 (WWB) and Clinton May 21 (HWM).

JAEGERS, SKUAS, GULLS, TERNS

A storm blown Pomarine Jaeger was observed off Eastham in Cape Cod Bay May 10 (RAF), and 11 were noted "on Georges Bank" May 30 (MBO staff). Two adult Parasitic Jaegers flew by Manomet Pt. May 5 (MBO staff), two were seen at Barnstable May 9 (RFP) and one was off Eastham on the 10th (RAF#). Consistent with our conception of the coastal nature of the migration of Parasitic vs. the pelagic nature of that of the Pomarine, all jaegers identified on Georges Bank in May were Pomarines. A total of 10 sightings of skuas (sp?) were made on Georges Bank in the period May 24-31 (MBO staff). On the 10th, a Glaucous Gull was seen at Provincetown, one at Barnstable and two at Eastham, all in Cape Cod Bay (WRP, RAF). Five or more Iceland Gulls lingered around Provincetown for the entire month (BN) and 1,3 and 1 birds were observed at Marblehead on May 10,19 and 21, repectively. An Iceland Gull was observed inland at Clinton May 8 (HWM) and finally, one occurred May 26 on Georges Bank (MBO staff). Rather scarce all winter, the only Black-headed Gulls in May were one immature at Squantum May 12 (SZ) and an adult at Newburyport May 28 (WRP). A Laughing Gull in Newburyport May 26-28 was the only one north of Cape Cod (WRP, RPE). Bonaparte's Gulls numbered 180 in Winthrop throughout the month (SZ), and 46 in Falmouth May 1-3 (AAC). Five adult and one immature Little Gulls appeared in Newburyport Harbor May 1 (WRP, RRV) and 3 were still there May 14 (J.Nove). Eighty-five Black-legged Kittiwakes were observed in Cape Cod Bay on the 9th and 63 on the 10th (WRP, RAF, KSA). The first Common Terns on the north shore were 2 in Newburyport May 1 (WRP#). Migrant Arctic Terns blown into Cape Cod Bay, mostly adults, numbered 200 May 10 off Eastham (WRP#) and 4 were seen on Plymouth Beach May 21 (RF). Two Caspian Terns were observed in Hingham May 15 (NO,SO). Finally, on the 10th, 2 Black Guillemots were seen in Rockport and one in Beverly (CWL).

CUCKOOS THROUGH WOODPECKERS

Yellow-billed Cuckoos totalled 11 from 6 localities May 21-31, while Black-billeds totalled 18 from eleven localities, somewhat earlier, May 7-30. A Barn Owl nest with two young was found on Martha's Vineyard May 28 (JFK#), where they have bred regularly in-recent years. A Horned Owl with young was noted occupying an Osprey nest in the Westport area May 6 (F.Marsh). Whip-poor-wills were particularly numerous in the Rowley-W. Newbury area in the early hours of May 21, when 35 were estimated calling (RHS,RRV#). The earliest Common Nighthawk was one on Gooseberry Neck, Westport, May 8, and migrants otherwise numbered 17+ throughout the state. The first Ruby-throated Hummingbird arrivals were two in South Middleboro on May 5 (HWi), a female banded at MBO May 7, and 1 in Mt. Auburn the same day (PRB). A pair of Red-bellied Woodpeckers has been frequenting a feeder in Plainville, near the Rhode Island border, and suspected of possibly breeding there (WRP#). Two vagrant Red-headed Woodpeckers were noted: one at WBWS May 18 (CAG,WWB) and one on M.V. May 27-29 (JFK#). Yellow-bellied Sapsuckers remained quite late; until May 21 at Plum Island (DH,RCH) and at Mt. Auburn (RHS), both singles.

FLYCATCHERS THROUGH SWALLOWS

In a pattern similar to last year, the most pronounced wave of passerine migrants occurred on May 6-7, while waves subsequent to that were illdefined and localized. The first wave marked the arrival of many routine species such as Eastern Kingbird, Great Crested Flycatcher, Wood Thrush, Veery, most species of warblers, Chipping Sparrow and White-crowned Sparrow. About 16 Yellow-bellied Flycatchers were noted in the period May 18-31, all coastally with the exception of one at Weston May 27 (LJR). The peak appeared to occur May 27, when 8 were noted along the north shore from Nahant-P.I. (RRV, SAP). MBO banded 4 of the now to-be-expected Acadian Flycatchers; one on the 22nd, 2 on the 25th and one on the 29th, and another was seen at M.V. May 27-29 (JFK#). An Alder Flycatcher at Nantucket May 6-8 predated that species' typical migration period by some two weeks (EFA#). Somewhat less surprising, an E. Wood Peewee May 7 at Falmouth (AAC) was nontheless quite early. Six reports of single Olive-sided Flycatchers were received in the period May 13 (Mt. Auburn) - 26, that total being somewhat lower than average. A pair of Cliff Swallows was noted nest building near their former colony site on P.I. May 31 (WRP). The nest was eventually abandoned, however. A count of 12 Cliff Swallows at Newburyport May 12 was rather high for recent years (MK), and may suggest the species' eventual return to Essex County as a more widespread breeder.

RAVEN THROUGH THRUSHES

Although outside of our region, in Berkshire County, the report of two Common Ravens from the Savoy State Forest is of sufficient interest to warrant inclusion in this report. Two birds were carefully studied May 29 by R. Ferren, D. McNair, A. Sanborn# and I quote from their report, "Two (Common Ravens) seen simultaneously by two groups of experienced observers One croaked many tunes as it flew about, meanwhile being dive-bombed by a crow. All observers familiar - only previous records this century are of one seen by Ferren in New Ashford 1973 and one seen in Richmond in April 1967 and Feb. 1968, but these birds were not heard. The Savoy area is a very wild spruce swamp with a steep mountain rising nearby, the base elevation being over 2000'." Two Fish Crows were seen at E. Bridgewater May 29 (WRP). The latest migrant thrushes included a Gray-cheeked May 7 at Mt. Auburn (HC) and a Veery May 2 at Marblehead (MK). Banding data from MBO show that the majority of Swainson's and Gray-cheeked Thurshes went through in the period May 23-28. An adult Eastern Bluebird was observed feeding young at Woburn May 7 (CJ), and other reports include one in Cambridge May 1 (CM), one at N. Scituate May 6 (WRP), two at Boxford May 21 (RHS), two at Sherborn May 21 (EWT) and 3 at Holliston May 26 (PH).

A King Rall was heard GNATCATCHERS THROUGH WAXWINGS he 29th to 30th

(RSH). A Sons Reil to Bheakheart Reservation in Saugus was an

Nesting Blue-gray Gnatcatchers were found in Bridgewater May 8 (1 pr., WRP), in Boxford May 5 (1 pr., MLG), in the Middlesex Fells Reservation (4 prs., PMR) and in Falmouth May 17 (1 pr., AAC). A Golden-crowned Kinglet was particularly late at Lancaster May 21 (HWM), and the last Ruby-crowned Kinglet to be reported was one May 22 on P.I. (v.o.). Water Pipits remained on P.I. until May 21, when 2 were observed (VA#). About 150 Cedar Waxwings were reported from diverse localities following a winter of virtual absence from eastern Massachusetts.

WARBLERS

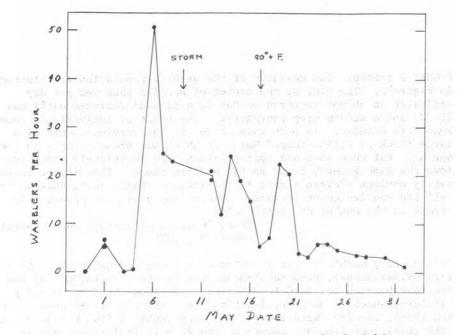
The warbler migration seems to generate the most interest among birders during the month of May. At Mount Auburn Cemetery in Cambridge, hundreds of observers came each day to watch the tree tops, and some of us got the annual "warbler neck" syndrome on busy days. Southwesterly winds, the most favorable for migrants occurred on May 2,4,6,16,20-24 and 31st. Southeasterly winds were blowing on May 1,8,14 and 30th. The best days were May 6,16, and 21st at Mount Auburn.

A total of 35 species were recorded during the month, with 32 alone at Mount Auburn. Several observers kept daily records at their favorite locations and the results were remarkably similar. We would like to thank John Andrews and Craig Jackson, who reported from Pine Banks Park in Melrose, Rick Heil for South Peabody, Mark Kasprzyk for Marblehead Neck, Harold Merriman for Lancaster, Leif Robinson for Weston, and Bob Stymeist for Mt. Auburn.

Manomet Bird Observatory banded the following warblers during the month:

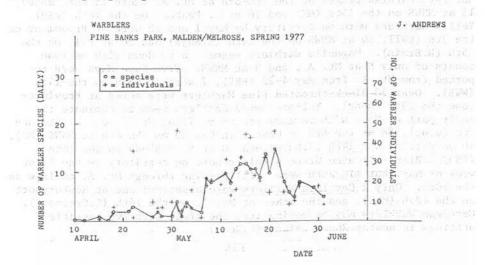
Species	Number banded	Dates(May)
Black-and-white Warbler	27	13th only
Worm-eating Warbler	3	5th-25th
Nashville Warbler	8	6th only
Magnolia Warbler	63	throughout
Blackpoll	54	13th on
Ovenbird	87	6th on
Northern Waterthrush	77	6th on
Common Yellowthroat	168	throughout
Yellow-breasted Chat	4	17th-25th
Wilson's Warbler	12	13th-17th
Canada Warbler	94	throughout
American Redstart	22	25th only

The following graphs were submitted by John Andrews, Melrose, and Leif Robinson, Weston, and they show a remarkable similarity, despite the difference of total species and individuals of Andrews, versus that of birds per hour by Robinson.



L. J. Robinson

FIGURE 1 (above) From a purely quantitative view, the May, 1977 warbler migration as observed in Weston was classic. Except for the interval immediately following the "white 10th", the warbler waves flowed at 4 or 5 day intervals: May 1 (minor), 6 (best of season), 14, 19-20, 23-25 (minor). This spacing approximates the <u>average</u> rate of cyclonic activity through our region at this time of year. This pattern is in direct contrast to May, 1976, when virtually no wave of activity occurred. Specifically, the May 6 wave was dominated by Yellow-rumpeds, with large flocks of birds scattered throughout the woodlands. May 14 and 19-20 contained a good mixture, with Tennessee Warblers highlighting the latter.



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FIGURE 2 (above) Two measures of the warbler population are plotted in Figure 2. The plot of the number of species observed per day indicates an abrupt increase on May 7, a gradual increase until May 21-22, and a sudden drop thereafter. The count of indivuals is somewhat more erratic. In part this is due to the varying counts of a large flock of Yellow-rumped Warblers which was present early in the spring. But when smoothed appropriately, the individuals count follows the same general trend as the species count. This is not necessarily obvious -Payson's data * for Middlesex Fells found that in the fall the species count increases substantially with no apparent increase in the number of individuals.

> *Bird Observer of Eastern Massachusetts May-June, 1975

Prothonotary Warblers were reported from Provincetown on the 12th and 13th (N.Mazzarese), from Marblehead Neck on the 17th (A.Murphy) and from Sherborn on the 22nd (J.Willison). Besides the 3 Worm-eating Warblers banded at Manomet, 1-2 birds were reported from Dover on the 4th (FRH), one from Watertown on the 11th (RHS), 2 from Weston on the 13th (LJR), one from Mt. Auburn on the 20th (L.Taylor) and one in Stoneham on the 24th-26th (M.Martinek). Golden-winged Warblers continue to decrease with only 10 individuals reported, four from the West Newbury area (v.o.). Blue-winged Warblers continue to increase with as many as 8 in Lancaster throughout the month (HWM). "Brewster's Warblers" were reported from 5 localities, but no "Lawrence's Warblers" were noted.

Tennessee Warblers peaked on the 20th at Mt. A. with 26 being noted (v.o.) and 21 from Bedford-Lincoln on the same day (RAF). Only 3 Orange-crowned Warblers were noted, 1 each from Mt. A. (v.o.), MNWS (MK) and N. Scituate (BAL). Fifteen Nashville Warblers were noted at Mt. A. on the 8th (v.o.) and 20 were counted at MNWS on the 6th (MK). Northern Parulas peaked on the 7th-8th at Mt. A. where 15 were noted, 13 at MNWS on the 15th (MK) and 16 at S. Peabody on the 16th (RSH). Yellow Warblers were on territory by May 1 and 25 were at Broadmoor on the 7th (EWT), 50 at MNWS on the 14th (E.Soja) and 50 at P.I. on the 15th (W.Ervin). Magnolia Warblers seemed to be down with maximum counts of only 8 at Mt. A., and 9 at MNWS. Five Cape Mays were reported from Mt. A. from May 4-22 (RRV), 7 were at WBWS on the 14th (WWB). Over 20 Black-throated Blue Warblers were noted at Provincetown the 19th (RHS#). Yellow-rumped Warblers seem to dominate the early part of May, with maximum counts of 75 at Mt. A. on the 6th and 7th (v.o.), 88 on the 6th in Weston (LJR), 30 on the 6th at MNWS (MK), 40 on P.I. on the 14th (J.Nove) and 70 at S. Peabody on the 16th (RSH). Black-throated Green Warblers were on territory by the first week of May, but migrants were still passing through Mt. A. as late as the 28th. Only 2 Cerulean Warblers were observed; one at Newburyport on the 12th (MLG), and the other at Mt. A. on the 16th (L.Crofoot#). Cerulean Warblers may be moving into the area, with two possible nestings in nearby Rhode Island (C.Wood).

Yellow-throated Warblers were noted at Mt. A. on the 2nd-5th (R.Timberlake, v.o.), one from Nantucket on the 8th (EFA) and a different bird at Mt. A. on the 12th-14th, and on the 17th (SAP, v.o.). This year at least 3, possibly 4 Yellow-throated Warblers were seen at Mt. Auburn, tying the record number of sightings at the Cemetery. Blackburnian and Chestnut-sided Warblers were reported near normal numbers; early Bay-breasted Warblers were reported on the 8th in Lancaster (HWM) and in Hingham (NO,SO). As many as 7 were noted at Mt. A. (RRV, v.o.) and 8-12 individuals from MNWS on the 24th (MK).

Blackpolls dominate the last weeks of May, and as many as 18 were noted at Mt. A. on the 21st (R.Murphy,v.o.) and 7 at Annisquam on the 28th (HTW). Two pairs of Pine Warblers were breeding in Clinton (HWM) and 4 were found in the Westport area on the 22nd (BBC-SPG#). Twentysix Prairie Warblers were noted on the BBC Westport trip on the 22nd (SPG) and 20 were found on Martha's Vineyard on the 28th-29th (BBC-JFK#). A late <u>Palm</u> <u>Warbler</u> was reported from Mt. A. on the 17th (SAP#), the largest flocks passing through during April. Ovenbirds were very much in evidence throughout with 14 reported from S. Peabody on the 16th (RSH) and 22 from MNWS on the 17th (RHS#). A Louisiana <u>Waterthrush</u> nest was found at Crooked Pond, Boxford with 5 eggs on the 21st (RHS#) and 5 young later (EWT#). There were probably 2 other pair breeding in the Crooked Pond area as well. <u>Kentucky Warblers</u> continue on the increase with 10 individuals noted:

KENTUCKY WARBLER:

May

Newburyport, Rockport	1,1(b)	RSH, R. Norris
Mt. A., MNWS	3 singles	RJH, LET,
		R.Rabinow;MK
Dover, WBWS	1,1	FRH#,CAG#
P.I., Weston(1st record)	1,1	JJC, J. Hines
	Dover,WBWS	Mt. A., MNWS 3 singles Dover, WBWS 1,1

Mourning Warblers are the last to arrive and continue through early June. Here are the totals:

MOURNING WARBLER:

May

21-28,21,28	Mt. A., Lancaster	1-3,1+1	HHD'E+v.o.,HM
25,26,27	Manomet, Winchester, Chathan	1(b),1,1	staff, BN, GG
28-31,31	P.I., Nahant, MNWS	1-2,1,2	v.o.,RRV#,MK

Common Yellowthroats numbered over 50 at MNWS on the 14th (E.Soja) and 50 at P.I. on the 21st (RSH#). Besides the 4 <u>Yellow-breasted Chats</u> banded at Manomet, others were seen at MNWS from the 14th-18th (MK,v.o.), 21st-26th at W. Newbury (RRV,HM#;v.o.) and one at Fowl Meadow, Milton on the 21st (JDO'R). The bird at West Newbury was first found on a Big Day run at 2:30 AM singing, and was still singing at 7 PM that same day.

Hooded Warblers continue to increase each year, with at least 11 reported during the month.

HOODED WARBLER:

May		I LEEDER BRADE RITH	LETTER CONTRACTOR NOTION
4;75 d 10	Melrose; Mt. A., MNWS	2;1,1	J.Andrews; LC#, CB#
8,14-15,21	-22 P.I.	1,1,1	CWL, J. Nove#, D. Hall#
14,15	Dover,WBWS	1,1	FRH, BN
18,21	S.Peabody, MNWS	1,1	RSH,K.Nappa

"Hundreds" of Wilson's Warblers were reported from P.I. on the 18th (MLG#,v.o.). Manomet banded 12 individuals between the 13th-17th (staff) and 13 were noted on the 17th at MNWS (MK). Thirteen Canada Warblers were recorded from MNWS on the 29th (RSH) and an early record of May 3rd at Mt. A. (0.Earle#). American Redstarts arrived later than usual with 22 being reported as a maximum for Mt. A. (J.Rabinow#, v.o.), and 15 from MNWS (MK#,v.o.). Over 250 American Redstarts were recorded from P.I. on the 31st (RRV#).

ORIOLES THROUGH PINE SISKINS

On Nantucket, 2 female Orchard Orioles were observed May 2-4 (EFA), an unusual record for the island. Elsewhere, Orchard Orioles numbered 19 from 14 localities (v.o.). Another record from Berkshire County is that of a Rusty Blackbird nest found abandoned in the Savoy State Forest May 15 (CQ,DM), for a first state nesting record. On the 29th, a nest with 4 eggs was discovered nearby in Florida, Mass. (RH#). Summer Tanagers totalled a rather high 7 for May (cf. 6,4-5,3,3 since 1973) from scattered localities, 3 of them on Cape Cod. The first was in WBWS May 1 (PB), one came to a feeder in Lexington May 12-18 (Mrs.D.Jenkins, fide RAF), one appeared in Sandwich May 16 (RFP), a male and a female were seen in Mt. Auburn May 17 and 20, respectively (JG, PMR) and singles were at Nahant May 18 (MLG) and Monomov May 28 (BN, CAG). Two Blue Grosbeaks, a female and a male, were seen on Nantucket May 1-5 (Mrs.J.Oldham, fide EFA) and another bird was seen in Provincetown May 1-6 (BN). Evening Grosbeaks numbered 68 between Cambridge and N. Scituate between May 3-21 (v.o.). A pair of Pine Siskins was seen briefly (one day only) May 5 in Boxford (MLG), and were otherwise unreported.

SPARROWS

Grasshopper Sparrows first arrived on breeding sites May 8 in Dartmouth (RRV,MJL) and May 19 on M.V. (DB,DD). A Seaside Sparrow occurred on Plymouth Beach May 21 (WRP), and 2 in S. Dartmouth at a more traditional breeding locale May 26 (GLS,HLJ). The passerine rarity of the season was a <u>Lark Sparrow</u> in Provincetown May 15 (BN,CAG), the only spring record in recent years. Three Dark-eyed Juncos were present May 3 in Weston (LJR). Fifty-two White-crowned Sparrows from 14 localities were reported for a slightly higher than average spring flight. A count of 80 White-throated Sparrows May 14 at P.I. (JN) reflects that species' super-abundance in New England over the winter months. Finally, a total of 15 Lincoln's Sparrows were reported from 9 local-ities in the period May 13-31.

RRV, RHS

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LIST OF ABBREVIATIONS

Mt. A. - Mount Auburn Cemetery, Cambridge MNWS - Marblehead Neck Wildlife Sanctuary WBWS - Wellfleet Bay Wildlife Sanctuary P.I. - Plum Island GMNWR - Great Meadows National Wildlife Refuge