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TASL News

531 Putnam Avenue
Cambridge, MA 02139

Participants in TASL survey and census of water birds in Boston Harbor, April 13, 1980

NAHANT	WINTHROP	CENTRAL	QUINCY	HINGHAM
Robert Stymeist Leader	Craig Jackson Leader	Soheil Zendeh Leader	David Brown Leader	Wayne Petersen Sibley Higginbotham Leaders
Dorothy Arvidson	Jim Barton	Mimi Murphy	Fred Bouchard	Dave Clapp
Becky Barber	Elizabeth Bell	Christine Neuman	Kate Ellis	Mary Gartung
	Bill & Francis Harris	Lois Tarlow	Priscilla Jenkins	
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Graphics for this issue of TASL News were contributed by Denise Braunhardt, Julie Roberts and Nancy Henley.

TAKE A SECOND LOOK IS A PROJECT OF BIRD OBSERVER OF EASTERN MASSACHUSETTS

TASL News

July 1980

YEAR OF BOSTON HARBOR

TAKE A SECOND LOOK - SOME FIRST IMPRESSIONS

(The following is an account by a novice bird watcher of her participation in the first three TASL surveys of the Year of Boston Harbor. - Ed.)

The day was cold--frigid. Snow had fallen the night before. I hadn't had breakfast. I was uncomfortable from the beginning. Wrong boots.

This started my first day with Take a Second Look(TASL). On our way to one of the first stops, I spotted a Red-breasted Merganser. Never having seen one before, I surprised myself at how identifiable he was. Only later would it come clear that Red-breasted Mergansers were in great abundance; in fact, they could even become a little boring. On my next TASL trip we would be standing and counting 20 RBM's, 12 male, 8 female, courting, feeding. Another 35 mergs., 18 male, 17 female, courting, etc. The abundance was sometimes distressing, but they still are beautiful.

One conclusion I made very quickly that first day is that harbor birds in the winter are either all black or all black and white; scaup, eider, cormorants, Black Ducks, Buffleheads, gulls, Common Goldeneye. I couldn't even make out the difference between many of these ducks so when we tried to figure out which of the Mallard/Black Ducks were crossed, or interbred, I started getting a little nervous. Frustration set in quickly because of my inexperience. I did, however, take down some notes after that first day, to clarify things a bit more:

1. We saw mergansers first. Red breasts didn't look so red. My first sighting of them. Their heads look like mad professors' hair. Were doing some courting.
2. Black Ducks were aplenty. They are common but getting uncommon. The Mallards are interbreeding and diffusing the distinct characteristics. The speculum of the Black Duck is one way of checking whether or not they have interbred. However, the light catching the speculum treats it a different way each time you look. Black Duck should have a blue-violet speculum with a white border on the outer side only. Mallard's speculum has a white border on both the outer and inner sides of the blue.
3. Buffleheads are delightful, pudgy, cute, diving ducks with big white patch on male's head; female is subtler color with white cheek marking. They usually travel in small groups and they were doing some courting today.

4. Greater Scaup - I don't like these birds. There are too many, they're hard to separate from other black and white birds and they're boring; they usually just sit together in large flocks or fly along the water in large groups. Their features are dark heads, (male) coloring goes all the way down to large white breast with grey back. (Having looked at them more since then, I now know that the breast is also dark and only the side is white). Female is plain colored, brownish, blackish with a supposed white face. Never mind trying to figure out these greaters from lessers. We saw a large flock of about 300 birds in the harbor.
5. Common Eider - we didn't see any but I would like to talk about these. It is the eider that flies in a line along the surface of the water. Almost all eider winter off the coast of Massachusetts. They are confusing because they are black and white too, along with Buffleheads, scaup, and Oldsquaw. Male eiders are black on the underside, white along the back, have a white face and breast with a black cap on the head. I think I'll have a hard time with the eiders. Perhaps with time I'll begin to see more quickly the differences between all these varieties.

Craig and I did the Winthrop section of the harbor on the second "look" by ourselves. Another cold day. A high point of this day was sighting the Black-headed Gulls. I spotted the darker-headed one first in amongst all the other gulls on Deer Island near the sewage treatment plant. I guess after looking at those bird books for so many years, certain things just stand out. Eider ducks were in abundance today. Over 1500 of them. Craig actually tried to count them one by one. After I stepped back from this project, he realized perhaps it would be simpler and less time-consuming to do estimates, but he still persisted in trying to age and sex them all. Frustration set in again. All in all, the second day was a good day, and I realized I had more stamina than on the first trip.

The third trip out was again to the Winthrop section and spring was setting in. We saw our first Snowy Egrets of the season, Black-crowned Night Herons, and Purple Sandpipers.

The sandpipers were supposedly sitting on rocks just within view. I couldn't see them. Liz Bell couldn't see them. Suddenly, something startled them and they all flew together in this wonderful formation over, under, around, and through the rocks and as they flew, they changed in color. The whole flock became this sort of iridescent silver, then brown color. It was a new delightful experience that I don't think I'll forget.

Several large flocks of Brant were travelling northward, and they were also delightful to see.

My overall impressions thus far are:

Bird-watching requires stamina and madness.
It's too cold to watch birds in February.
Birders are a strange lot.
Birds are wonderful to look at and I think I'm hooked.

Barbara Scheller

THE YEAR OF BOSTON HARBOR - AN ANALYSIS OF THE FIRST THREE TASL SURVEYS

Every bird survey should have some surprises. Clearly, the Mew Gull found by Wayne Petersen's group on April 13th takes first prize for TASL's first three months. Did Soheil Zendeh find the same bird a month later, then in summer dress? Otherwise, the April count revealed business pretty much as expected -- the numbers of most species drastically reduced as spring migration got underway in earnest. Black Ducks decreased 81% from March, Greater Scaup 99%, Common Goldeneye 96%, Bufflehead 48%, Common Eider 94%, Red-breasted Merganser 78%. In contrast, Horned Grebes were up 127% as southern winterers moved northward, and Double-crested Cormorants swapped lodgings with the Greats. Brant futures remained static. Shorebirds and herons returned with no surprises.

The following table of Boston Harbor populations pertains to loons, grebes, cormorants, geese, and ducks only. For each month total numbers are given for the five study areas and for the harbor as a whole. For March and April the percentage change in population over the previous month is also given.

	A	B	C	D	E	Total
February	3346	2927	954	3775	4141+	15,143+
March	4510 +34.8	2898 -1.0	1159+ +21.5	3600 -4.6	5646 +36.3	17,813+ +17.6
April	184 -95.9	1105 -61.9	330 -71.5	833 -76.9	1310 -76.8	3762 -78.9

Clearly, until at least mid-March, the harbor supports a very substantial number of "waterbirds." Areas A and E are particularly important numerically. The magnitude of the population in A was due almost entirely to the large concentrations of two species, Greater Scaup and Common Eider (90% of total birds in February and 81% in March). In E Common Eider alone accounted for 70% of the total in February and 55% in March. Areas B and D are next in importance nevertheless, B held the second highest concentration of Common Eider in both February and March, while D accounted for a thousand Brant in February and nearly 800 in March (virtually all Brant in the harbor in February and 2/3 in March). C is clearly the least important area, yet it still supports a thousand "waterbirds" during the period of peak abundance.

Overall, during the first three censuses, the following species were found at some time in numbers exceeding 200 per area census.

Great Cormorant: D,E
Double-crested Cormorant: E
Brant: B,C,D,E
Black Duck: A,B,C,D
Greater Scaup: A,B,C,D,E
Common Goldeneye: B,D,E
Bufflehead: C,D,E
Common Eider: A,B,D,E
Red-breasted Merganser: D,E

Heron Survey: Sunday 20 July 1980

Shorebird Survey: Sunday 3 August 1980

These surveys have several purposes. First, we would like to approximate the total number of herons and shorebirds that utilize the Boston region. For herons we also want to determine the importance of various sites by calculating the number of "heron-hours" for each site. This documentation will be helpful in preserving important areas from future development. Second, by comparing our morning and evening populations on the July 20 census, we hope to determine to what extent summering herons utilize the Harbor Islands for roosts, and how important mainland night-time roosts are and their locations, if possible. On the August 3 census we will be comparing the number of shorebirds at high tide roosts and those at feeding areas. Finally, we hope to introduce a number of individuals to the rewards of watching birds in an area close to where they live.

The specific plans for these surveys are as follows:

1. We have divided the Harbor region into three areas: North, Quincy, and Hingham.

2. High tide in Boston is at 5:45 AM (DST) on July 20 and 5 AM (DST) on August 3. Observers should be at their sites no later than 7 AM on July 20 and 6 AM on August 3; they should leave no earlier than 11 AM on July 20 and 10:30 AM on August 3. In this way each site will be under continuous observation for nearly half a tide cycle.

3. On data sheets we will provide, each party should mark the number of birds present at ½ hour intervals; also, please note the cloud cover, wind data, and temperature. In addition, we will provide maps to parties so that arrival and departure directions can be accurately described. Observers should concentrate on shorebirds and herons but also keep notes on waterfowl and terns.

4. On July 20 we will meet at 12:30 for a combination compilation/barbecue (place to be announced), where we will discuss the morning results. Participants will be asked to contribute $3 toward the cost of hamburgers, hot dogs, beer, etc., and also to bring a cold salad, fruits, or beverage. The August 3 compilation will be at Soheil Zendeh's from noon on. Beer and cold drinks will be provided; bring lunch. The fee for this seminar will be $1. First-time TASL participants will also be asked for a $1 fee in addition.

5. On July 20 at around 4:30, we will leave in several groups for various vantage points (sites to be determined) to observe the evening heron flights to (and from) the Islands.

The success of these censuses depends on the participation of a large number of observers. Even if you feel uncomfortable about identifying different species, you should still consider participating. There will be experienced observers to help you and you will have a fine opportunity to improve your skills during the morning. If you would like to participate or to find out more about our program, please contact one of the TASL Coordinators:

Craig Jackson, 531 Putnam Avenue, Cambridge 02139; (617) 864-1917.

Soheil Zendeh, 380 Broadway, Somerville 02145; (h) (617) 628-8990, (w) 923-0941,

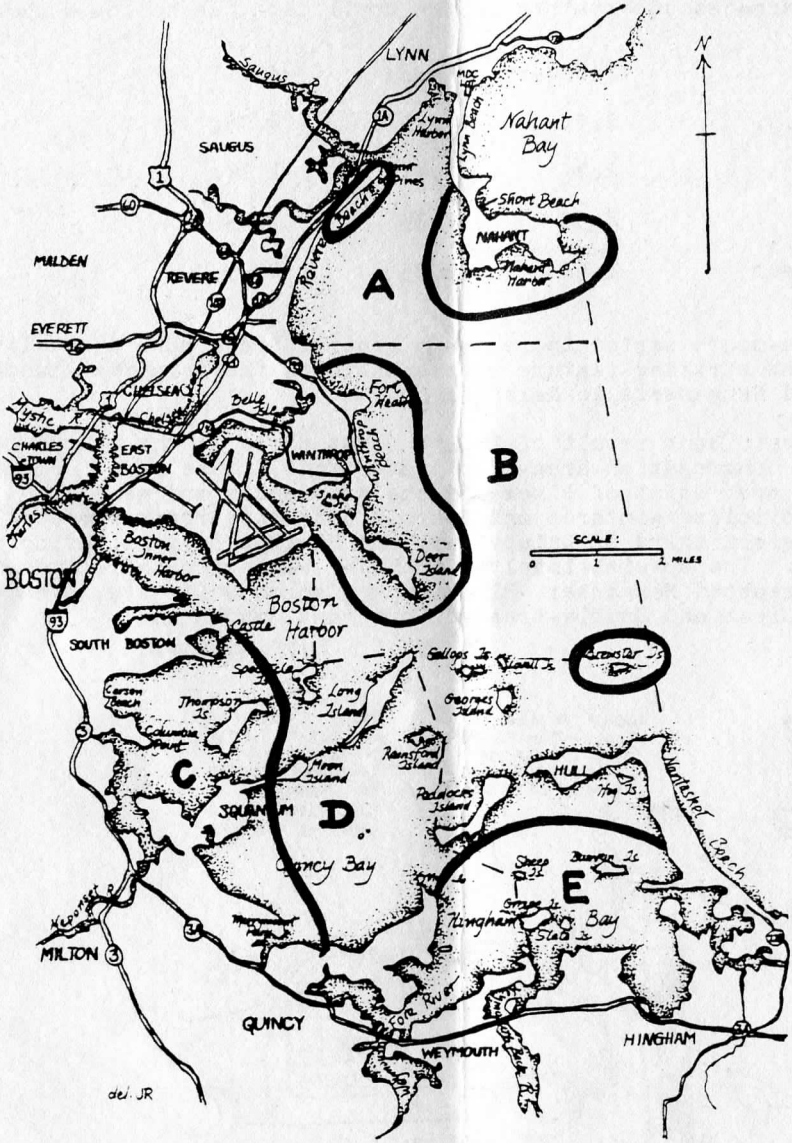
Let's take another look at the sex ratios (M/F) for four generally abundant species; the (:) indicates uncertainty in the April data due to low numbers.

	February	March	April
Greater Scaup	2.03	1.60	2.33:
Common Goldeneye	2.97	1.41	1.12:
Bufflehead	2.53	2.39	1.09
Red-breasted Merganser	1.52	2.25	0.99

Throughout the three-month period there was a general trend toward equality of numbers. The most striking feature of the table is the relative abundance of male Red-breasted Mergansers in March.

Perhaps the most significant result of TASL's first three months is the identification of major congregation areas for "waterbirds." (see map). From north to south they are: Point of Pines and the area south and west of Nahant; the area encircling Winthrop and Deer Island; the Brewsters; Dorchester Bay; the western third of Quincy Bay; and Hingham Bay, including the Weymouth Fore River. The species involved include: wintering shorebirds, Common Eider, Red-breasted Merganser, Black Duck, Common Goldeneye, Greater Scaup, Bufflehead, Great and Double-crested Cormorant, and Brant.

Leif Robinson


LYNN
Saugus
SAUGUS
MALDEN
REVERE
EVERETT
CHELSEA
EAST BOSTON
WINTHROP
BOSTON
SOUTH BOSTON
Nahant Bay
Short Beach
NAHANT
Lynn Harbor
Nahant Harbor
Fort Heath
Deer Island
Boston Inner Harbor
Boston Harbor
Castle Island
Long Island
Thompson Is.
Carson Beach
Columbia Point
Moon Island
Ramsford Island
Peddocks Island
Gallops Is.
Georges Island
Slate Is.
Grape Is.
Sheep Is.
Bumpkin Is.
HULL
Hog Is.
Nantasket Beach
Hingham Bay
SQUANTUM
Quincy Bay
MILTON
QUINCY
WEYMOUTH
HINGHAM
A
B
C
D
E
N
SCALE:
0 1 2 MILES
del. JR

WATER BIRDS IN BOSTON HARBOR

Tabulation of Census of April 13, 1980

Species	Area A	Area B	Area C	Area D	Area E	April Totals	March Totals	Feb Totals
Common Loon	1	1				2	1	
Red-throated Loon				1			1	
Red-necked Grebe	2			2		4	4	
Horned Grebe	8	2	2	64	40	116	51	18
Great Cormorant				1	1	2	609	430
D.-c. Cormorant	19	40	24	21	452	556		
Snowy Egret		5	1	13	4	23		
B.-c. Night-heron		10	6			16	1	1
Brant		451	35	196	504	1186	1309	1100
Canada Goose							33	
Mallard	6	15	6	2		29	43	90
Black Duck	51	45	89	94	15	294	1527	1450
Pintail								1
Blue-winged Teal		1				1		
Redhead		1				1		
Canvasback							1	9
Greater Scaup	30	1			10	41	3629	3000
Lesser Scaup							1	
Common Goldeneye		22		5	14	41	1133	650
Barrow's Goldeneye							1	3
Bufflehead	65	63	160	239	172	699	1351	800
Oldsquaw		5				5	11	2
Common Eider		351			75	426	6799	7000
King Eider					1	1		
W.-w. Scoter		2		5	2	9	67	33
Common Merganser				76		76		23
R.-b. Merganser	2	102	14	128	24	273	1245	700
Shoreb[illegible] (sp.)(		200				200		
Killdeer		5		6	1	12	2	1
Greater Yellowlegs		3		1	10	14		
Red Knot								5
Purple Sandpiper		300				300	100	15
Dunlin							213	140
Sanderling							90	2
Iceland Gull							1	2
Mew Gull					1	1		
Black-headed Gull							2	5
Bonaparte's Gull							2	7

TASL SUMMER CENSUSES: An Introduction

Herons. Since the 1930's, there has been a general expansion of herons, mostly Snowy Egrets, northward along the Atlantic Coast. This has been accompanied by even greater increases in southern heron populations. In one species, Glossy Ibis, the whole center of population has moved northward into the Middle Atlantic states. It appears that the Glossy Ibis, which is an Old World invader, is either physically better suited to the temperate zone, or else, being more timid, it has a better chance of success in the less crowded colonies of the North (Ogden, 1978). In any case, the Glossy Ibis is now rapidly expanding its population in the Northeast.

In contrast to this northward expansion, Black-crowned Night Herons, which have been northern breeders since before the 1930's, have suffered population declines, though with the recent control of pesticides their populations may be recovering.

In our area, a major increase in populations of herons occurs in mid to late summer during the "post-breeding dispersal" of first-year birds. In recent years the number of birds involved in this northward movement has increased dramatically.

Although the heron breeding colonies on the Boston Harbor Islands have been censused regularly and, with little human interference, seem to be doing quite well, not much is known about the numbers of herons that utilize the marshes, estuaries, and roosts of the Boston Harbor region, particularly during the post-breeding dispersal. Our Heron Census is a preliminary attempt to document

the importance of various habitats in the Harbor to visiting herons.

Shorebirds. Over twenty-five species of shorebirds can be found with some regularity in the marshes, mudflats, and estuaries of Boston Harbor. Many of these shorebirds are among the champion long-distance travelers of the bird world, breeding in the northern, even Arctic, regions of the northern continents and migrating to the central and southern regions of the southern continents to winter.

Typically, northern or Arctic shorebirds begin laying eggs and incubating by the middle of June, when there is still plenty of snow around. Often, one set of parents (in many species, the females) leave almost immediately on the first leg of their "fall" migration, first moving to the coastal marshes of northern Canada, then southward, arriving in our region by the middle of July. The young being precocial, the second (incubating) parents follow the first soon after the eggs hatch, and their arrival in Massachusetts is generally around the beginning or middle of August. The young develop flight rapidly and follow by the end of August or later.

Many of these birds spend several weeks at favored coastal locations, fattening up considerably before setting off on a transatlantic flight to South America. While here, they follow a typical pattern with respect to tides: Low tide finds them spread out over acres of tidal flats, mussel-beds, and beaches. At high tide they congregate in dense roosting flocks on upper beaches (where available), salt-marshes, or breakwaters. Each tide cycle they travel up to several miles back and forth between these two classes of habitats. Both kinds of habitats are crucial to their survival strategy.

The human impact on these habitats is enormous and growing. Beaches are used most heavily during the peak of the shorebird migration. Mudflats and mussel-beds run the risk of pollution by heavy metals, pesticides, and sewage. And salt-marshes are being destroyed at a steady rate despite the Wetlands Protection Act. This destruction of habitats is widespread along the entire East Coast, so every small bit that we can preserve for shorebird usage can have great significance in the maintenance of their populations.

Censuses. The upcoming TASL surveys of Boston Harbor will take place on July 20 and August 3 and will focus on censusing and observing the heron and shorebird populations of the area. In general, these surveys will consist of the following: Observers will be stationed at various marshes, estuaries, mudflats and roost sites, and will keep track of the populations, movements, and activities of the birds at their site during the morning. On July 20 we'll meet for a combination compilation/barbecue, and in late afternoon leave in groups to station ourselves at various vantage points to watch the evening flight of herons to the Harbor Islands. On August 3 we will hold a simple compilation and seminar.

We would like to encourage participants in these surveys to take a second look at the movements and behavior of the commoner species that they observe, making notes on the feeding and roosting habits of the birds in whose company they will be spending a good part of the morning.

SNOWY EGRET: Egretta thula

Many birdwatchers, seeking the rarer "southern herons", pass the Snowy Egret by in spring and early summer, and fail to take in the "delicate, ethereal quality" of the bird in full nuptial plumage, a sight which defies words (Pough, 1951). Later, in late summer and fall, birders search among a flock of Snowies numbering in the hundreds, eager to pick out a young Little Blue Heron which so closely resembles the adult of Egretta thula. Such sights, not just of flocks, but also of single birds, were once rare, and well within living memory. Before 1948, the Snowy Egret had been reported in Massachusetts only 11 times. Sightings of 30 birds in that year were considered remarkable, a part of an "invasion" (Bailey, 1955).

The Snowy first nested in Massachusetts in 1955, and in Boston Harbor in 1974. Now, 200 nesting pairs can be found on House Island off Manchester in June (Erwin, 1979), and 200 active nests were on Clarks Island in Plymouth (Davis, Smith, Harrington, 1979). Smaller colonies in Boston Harbor, on Spectacle Island and (formerly) Peddocks Island, contain 50 to 60 nests (Erwin, 1979).

Worth remembering at the sight of a single bird or of many is that so much beauty has been dearly bought. Commercial hunters nearly extirpated the Snowy in the late 19th Century, when the plumes of the breeding bird were much in demand as adornments for women's hats. Prime season for the hunters was the very time when the adults were most needed by their young (Bent, 1963). In the Everglades, late last year, a friend pointed out to me the marsh where a warden, hired by the Audubon Society to protect the nests of the Snowies, had been found near them, murdered. Protective legislation, backed by the power of the government, was necessary to save the birds.

Description. The Snowy Egret is a brilliant white wading bird, 20 to 27 inches in length, found chiefly in marshes and along sea shores where it stalks prey in heron style, sometimes deliberately with careful steps, and sometimes hurriedly, striking with its black bill like a cobra from a coil. In breeding season adults carry white plumes on the top and back of the head, at the base of the neck, and on the back. The Snowy's legs are black. Its feet are yellow. In flight they can often be clearly seen. The bird in flight also holds its head close to its breast, in a "tight curve" (Robbins, 1966). But the bird's aptly chosen common name is perhaps the most important thing to remember when it flies. The wings, a yard in width, flash in the sun with an intensity that is reminiscent of mountain snowfields struck by the sun coming out from behind a cloud.

Immature Snowy Egrets have a yellow stripe up the back of the leg, making them look yellow-legged when walking away from the observer (Peterson, 1959).

The Snowy is "more active than other white herons" (Robbins, 1966). It "shuffles around with its feet to stir up the food, a habit not noticeable in other white herons" (Peterson, 1959).

Comparison with other white herons. The Great Egret, Casmerodius Albus ("Common" in Robbins, "American" in Peterson), is a much larger bird, 32 inches in length, and with a wingspread of 55 inches. The Great Egret has

a larger, broader yellow bill, black legs, and black feet (the reverse of the Snowy). The Great Egret lumbers up into the air, rather than leaping into flight as the Snowy does. The Great Egret tends to fly with its neck in an open curve" (Robbins), somewhat resembling a Mute Swan at rest on the water. The Snowy darts with its bill; the Great Egret stabs. In our area, the Snowy is far more common.

The Cattle Egret, Bubulcus ibis (most often seen with cattle in fields, catching insects), has ochre about the head, breast and shoulders in adult plumage. The immature is all white and, like the adult, is similar in size to the Snowy. But Cattle Egrets have short yellow or orange bills. Their necks are also noticeably shorter than the Snowy's.

The all-white immature Little Blue Heron, Florida caerulea, has bluish or greenish legs and dark feet. But small white herons with dark feet can be tricky. Snowies that have mucked about in the mud with their yellow feet can easily muck the birder as well. Examine the bill of the bird: The immature Little Blue has a two-toned bill, bluish with a black tip only.

Occurrence. Records published in Bird Observer for the years 1973 through 1979 present the following pattern of seasonal occurrence for the Snowy Egret:

Snowies are rare in eastern Massachusetts from November through February. A few scattered birds may winter, chiefly along the southeastern coast and on the Islands. In March the first birds arrive from the south; most first arrivals date from the end of the month.

In April, May, and June the records generally show an average of 30 birds as high counts at various locations (exclusive of nesting colonies). In July in recent years, high counts at Plum Island have ranged from 300 to 375 birds. The record high count for a single location to date was 985 birds at P. I. in late August, 1978, followed by 880 from P. I. in August, 1979. In the Boston Harbor region, high counts at Belle Isle Marsh have occurred in late July and early August: 47 in 1977, 90 in 1978, 55 in 1979.

September high counts vary widely, from 776 in 1973 at P. I., and 850 in 1977, to 100 in 1979. October highs also vary, from 250 in 1973 to 12 in 1978 to 150 in 1979. By November all but a few birds are gone, many to winter on islands in the northern Caribbean (Ryder, 1978).

Nesting. Snowy Egrets in New England lay their eggs during April and May. Peak hatching occurs in May and June (Erwin, 1979).

The Snowy nests in colonies with other herons, near water. "Nests may be 6 to 12 feet up in trees or shrubs, but often are only a foot or so above the water in matted marsh vegetation. The structure is a frail, sparse platform of sticks lined with finer material. The 4 to 5 eggs are pale blue-green." (Pough, 1951) At Clarks Island in 1978 "over 200 of the Snowy Egret nests were found in cedars." (Davis et al, 1979)

This season (1980) the following herons are breeding on Spectacle Island in Boston Harbor: 60 pairs Snowy Egret; 220 pairs Black-crowned Night Heron;

1 pair Great Egret; 6 pairs Glossy Ibis. The formerly active colony at Peddocks Island is not being used this year. (Jeremy Hatch, pers. comm.)

Mortality. More than 50 percent of Snowies die within their first year. Many go south, far fewer return, though thankfully in increasing numbers. A report on mortality, based on a study of 300 birds, listed the highest cause of death, accounting for 35 percent of deaths, as "shot." (Ryder, 1979) J. H. Barton

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