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# TASL News



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Participants in TASL survey and census of water birds in Boston Harbor, February 17, 1980:

NAHANT

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Leader  
Dorothy Arvidson  
Ann Kucera  
Jane Mann

WINTHROP

Craig Jackson  
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Louise DeGiacomo  
Candy Keays  
Rhonda Rivers  
Tim Rummage  
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CENTRAL

Soheil Zende  
Leader  
John Andrews  
Beth & Al Levine  
Dennis Minsky  
Barbara Scheller  
Syd Smith  
Lee Taylor  
Sally Whitney

QUINCY

David Brown  
Leif Robinson  
Leaders

HINGHAM

Wayne Petersen  
Leader  
Sharon & Neil Osborne

We would like to thank the following for their assistance in making "Year of Boston Harbor" a reality: Denise Braunhardt, Bill Giezentanner, Richard Forster, Wayne Hanley, and the staff of Bird Observer.

Graphics for this issue of TASL News were contributed by Denise Braunhardt and Julie Roberts.

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

# TASL News

YEAR OF BOSTON HARBOR

March 1980



## INTRODUCTION TO TASL

The "Take a Second Look" (TASL) program of Bird Observer of Eastern Massachusetts is now in its second year. Designed to encourage birders to watch birds more carefully and to share their observations, the program was to a large extent inspired by two older bird watchers, Ruth Emery and Joseph Hickey. (Hickey's book, A Guide to Bird Watching, is highly recommended for anyone who is interested in studying birds).

In 1979, TASL's first year of existence, a series of field trips were set up to study various aspects of Massachusetts bird-life. The first such trip held last March was a water bird survey of Boston Harbor; other trips throughout the year concentrated on either the study of particular habitats, such as a salt marsh, or other specialized studies, such as the food habits of sparrows.

Probably the most successful of all these trips was the March water bird survey. For the eight participants, the experience was truly one of the highlights of the year. Some of us were amazed to discover the number of birds that utilized the Harbor in the winter. Others observed behaviors that they had never seen before. In our compilation we not only pooled a great deal of prior information with that day's results, but we also came up with many questions for which we didn't have answers. As a result, everyone concluded that the census would have to be continued in future years.

After evaluating the first year of TASL, we decided that our second year should be more focused. Since 1980 is the "Year of the Coast," and since many people felt that further study of Boston Harbor was needed, we set up a series of field trips this year to study the water birds of Boston Harbor. We have called this project "Year of Boston Harbor." Our first census this year has already provided us with important data, and it is hoped that trips later this year and in future years will provide us with a much better understanding of the birds of Boston Harbor.

It is important to realize that better observations and accurate records of bird life are not enough. Unless this information is used to educate people concerning the need to protect and preserve coastal habitats, in the long run there may no longer be any water birds in Boston Harbor.

## SURVEY AND CENSUS OF WATER BIRDS IN BOSTON HARBOR

February 17, 1980

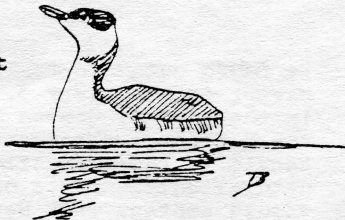
The first field trip organized by "Take a Second Look" in 1980 has set the tone for the rest to come. Enthusiastic participants fully covered the assigned areas of the Harbor, and a long and fruitful compilation-seminar followed. By using this summary of the day's highlights as well as the tabulation of census results (page 7), you should be able to gain a sense of what the day was like.

On February 17 the skies had cleared after a brief snow-storm that gave us about six inches of snow over the previous 36 hours. Fairly cold temperatures, in the 20 to 30 degree range, and brisk northwesterly winds at 10 to 20 mph, made it a less than ideal day for ocean birding. But the brilliant February sun and the crispness in the air made for an exhilarating day with the snow, ice, and water. High tide in Boston Harbor occurred at 11:45 AM, while sunrise was at 6:38. By the time most field parties started their censusing about 9 o'clock, the sun and the tide were rather high and rising. In addition to censusing the total number of birds, each party also marked on a map significant concentrations of birds and the time/location of their sighting. Thus we can compare not only total numbers of birds, but also their locations with respect to tide.

For all participants this day was a graphic demonstration that the middle of February is the nadir of the birding year -- "the pits" as one person put it. It is, of course, possible that the gusty northwest winds throughout the day forced many birds to lie low behind headlands and islands not visible from any of our observation spots; certainly the harsh light, heat shimmer over the ocean, and the wind made observation and identification of distant birds difficult. In particular, we found that loons, grebes, scoters, and shorebirds were in very short supply. Please note, however, that this is the first such comprehensive census of the Harbor ever done in mid-February. Although the number and variety of birds was distinctly limited as expected, we think that the relative mildness of this winter so far helped maintain a fairly high population of certain birds such as Brant and Greater Scaup in the Harbor. Obviously, repeating censuses such as this over the next few years will give us a much clearer sense of the population fluctuation of birds in the Harbor.

As mentioned previously, loons and grebes were extremely scarce. In fact, of the entire group, only Horned Grebe was observed: a total of eighteen in the central and southern Harbor regions. It should be noted that one week later, on the 24th, 6 Red-throated Loons, 5 Red-necked Grebes, and several Horned Grebes were seen from Winthrop. Has migration already started for these birds?

Of the 430 Great Cormorants counted, almost half were on Shag Rocks off Hull. Wayne Petersen pointed out that for several years the Quincy Christmas Bird Count had the highest North American total of Great Cormorant, precisely because of the Shag Rocks birds. I reported seeing a fairly large number of cormorants perched on piers in the Charlestown boatyard and also further up the Mystic River in Somerville.



Brant numbers in the Harbor this winter have been consistently on the high side. 1100 Brant were seen in the Weymouth Fore River, and almost none elsewhere. On other days, however, groups of Brant may be seen anywhere there is shallow water and eel grass or sea lettuce to feed on: Snake Island in Winthrop, Quincy Bay shore, and various locations in Hingham Bay.

Common Eider numbered 7000. This species, with its spectacular flocks and its rather pelagic distribution, evoked a great deal of discussion at the compilation meeting. Please see the special eider article (next page) for more details.

Of the scoters, only the White-winged was seen, and that in such smaller numbers than expected. Dave Brown noted that the scoters had not showed up in very large numbers this year in Quincy Bay, where flocks of one or two hundred are expected throughout winter. Craig Jackson pointed out that the numbers seen in Nantucket Sound on the ferry crossing this year have also been low compared to previous years.

Shorebirds, particularly Sanderling, were very few in numbers. However, it is possible that there were Purple Sandpipers in Winthrop that escaped notice on the rocks where they blend in so well: A flock of about one hundred was seen there on the 24th.

The Winthrop party found five adult Black-headed Gulls at Deer Island, none banded. A banded adult and an immature have been seen in the area recently, bringing the total to seven in the Harbor this year. This is the highest total of these gulls since the early 70's, when flocks of 20 to 30 used to be seen at Winthrop and in Quincy Bay.

Finally, two Harbor Seals were seen, one at Deer Island and another at Castle Island. We would like to draw the attention of readers to a seal census that is being conducted along the northeast coast. Observations of seals, their numbers and movements, should be reported to:

Professor Howard Winn  
University of Rhode Island, Narragansett Bay Campus  
Narragansett, RI 02882

In the near future we plan to publish more on this marine mammal and its population fluctuations.

Of the 26 participants in this census, fifteen came to the compilation-seminar. We are very grateful to the leaders and participants who made the day a success, and expect to see everyone again at future censuses.

S. Z.

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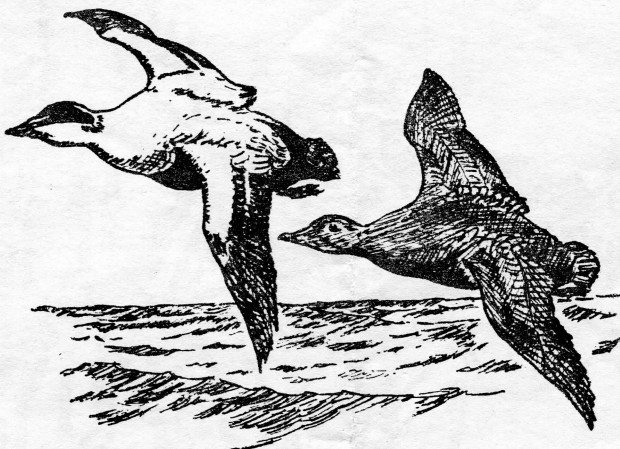
We found out, in trying to set up the slide show on the birds of Boston Harbor for February 3, that it is very difficult, sometimes impossible (as in the case of Common Goldeneye) to find good slides of water birds -- in the Harbor or elsewhere. We think it is an excellent project for TASL to tackle -- the production and maintenance of a slide file on the birds and natural environments of Boston. Anyone interested in pursuing this project should contact TASL News.

COMMON EIDER: Somateria mollissima

Description and plumages. Large, long-headed, rather short-necked, bulky sea duck; bill with long triangular profile. Adult male: Crown black, rest of head and neck white, pale green patch on nape (close range almost necessary). Mantle, scapulars, tertials, round patches on sides of rump, and wing-coverts white. Rest of upperparts, most of primary coverts, and wing-quills black. Bill olive-grey and strongly hooked. Adult female: All plumage rather dull but warm brown, darker on back than head. Subadult male: Assumes breeding plumage slowly with periodic eclipse plumages and erratic or continuous molt contributing to strange, irregular piebald appearance during first year and a half. White appears first on neck, then on scapulars, breast, and later on rest of upperparts; clean face and pinkish chest not attained until fourth winter.

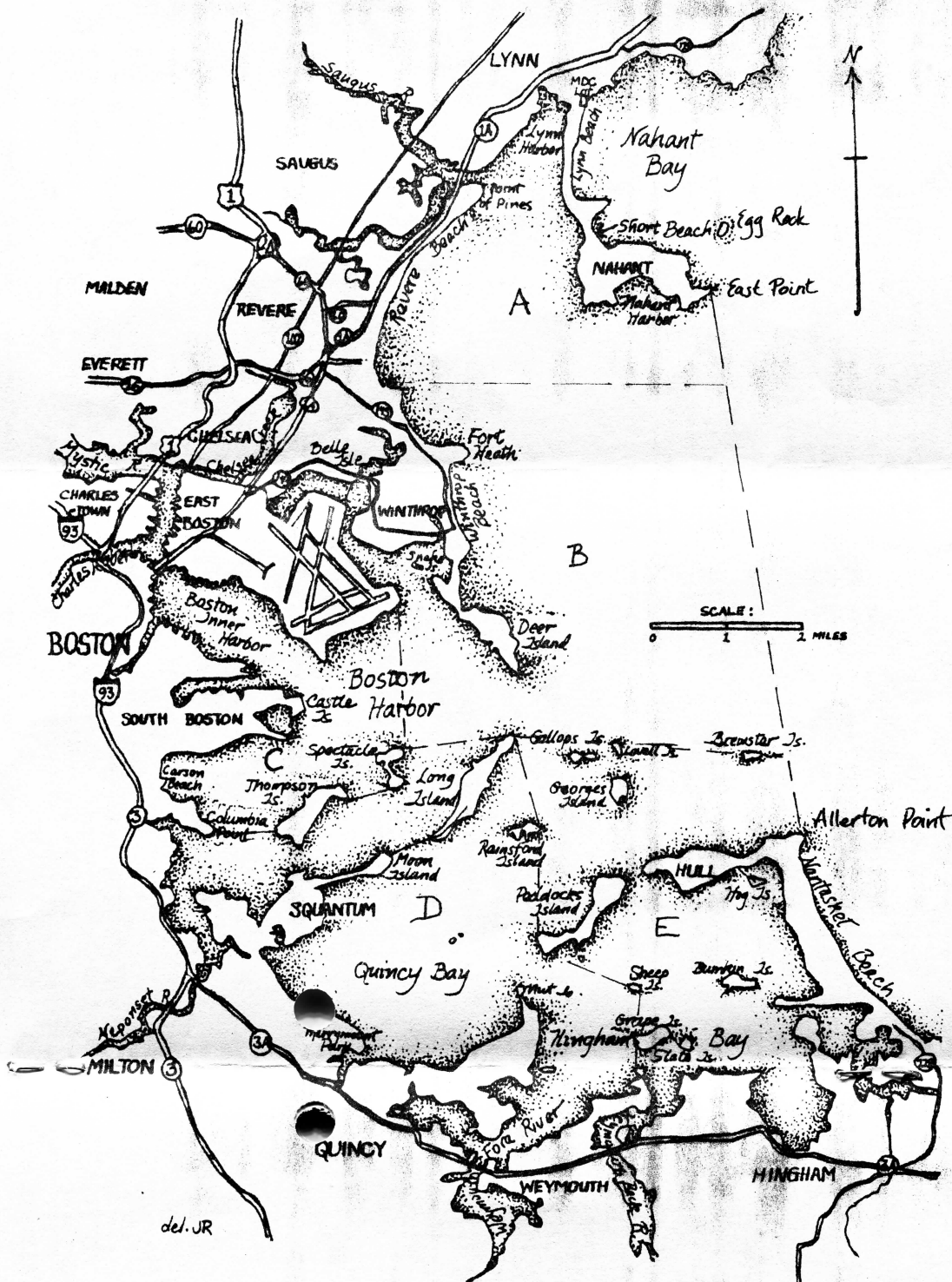
Behavior and food. Eiders have a strong steady flight, usually fly in strings. The Common Eider feeds mostly on blue mussels. Often gulls feed with flocks of eider and when the eider brings up food the gulls make the eider drop the food and, if they are fast enough, retrieve the mollusks.

Robert H. Stymeist



Breeding. Half a dozen recognized races of the Common Eider breed along the shores of the northern oceans of the world. In eastern North America, the coast of Maine is the southern limit of their breeding range. After mating, the females lay their five or so eggs in down-lined nests hidden among rocky crevices or on grassy hummocks near the coast.

Migration. The drakes take no part in incubation, but instead leave en masse to protected feeding areas where they spend the rest of the summer molting in nearly all-male company. This segregation by sex (and often by age-group)



del. JR

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WATER BIRDS IN BOSTON HARBOR

Tabulation for Census of February 17, 1980

Species	Area A	Area B	Area C	Area D	Area E	Harbor total Est's Rounded
Horned Grebe			7	4	7	18
DC Great Cormorant	6	42	49	56	281	430
Black-crowned Night-heron				1		1
Brant				1078	6	1100
Mallard	4		59	28		90
Black Duck	161	118	210	754	197	1450
Pintail				1		1
Canvasback				9		9
Greater Scaup	1200	255	401	820	292	3000
Common Goldeneye	49	166	69	305	69	650
Barrow's Goldeneye				2	1	3
Bufflehead	62	138	128	407	89	800
Oldsquaw					2	2
Common Eider	1849	2134		23	2975	7000
CM White-winged Scoter	1	3		19	10	33
Red-breasted Merganser	62	71	44	260	265	700
Killdeer				1		1
Red Knot				5		5
Purple Sandpiper					15	15
Dunlin	1	50		87		140
Sanderling	2					2
Iceland Gull				1	1	2
Black-headed Gull		5				5
Bonaparte's Gull				7		7
Common Merganser				10	13	23

Area A = Nahant and Lynn Harbor

Area B = Winthrop

Area C = Central Harbor

Area D = Quincy Bay

Area E = Hingham Bay

is a very noticeable aspect of the eider flocks that migrate and winter along our coast. Sometimes in a winter flock of a hundred birds one is hard put to find more than two full adult drakes. Other flocks may show a four-to-one preponderance of males over females.

Eiders are very late fall migrants, building to their highest concentrations in Boston Harbor around the first week of December. During the February 17 compilation, Bob Stymeist reported that on December 2, 1979, there had been a flock of roughly 18,000 eider off Deer Island in Winthrop. A week later no more than forty could be found in the area, the majority presumably having moved further south.

Wintering. But eider don't go much further south. It has been known for a long time that vast flocks winter on the southeastern coast of Massachusetts, and that further south they are very scarce in winter. Again, during our compilation, Wayne Petersen talked about Ludlow Griscom's eider research during the 1940's. At that time, Griscom found that a stable population of about one-half million eiders wintered on the shoals surrounding Monomoy Island. But the flocks would break up half-way into January due to the depletion of the mussel-beds in the area. Wayne pointed out that this same pattern of eider flocks depleting a food-resource and then dispersing in mid-winter is observed in Plymouth Harbor.

Early last winter, two very large concentrations of Common Eiders were regularly seen in Boston Harbor. I knew of about 4000 that were always in Lynn Harbor, and Dave Brown kept track of a flock of 5 to 8 thousand that concentrated within the inner Harbor, between Long Island and Spectacle Island. In the latter part of last winter the Lynn Harbor flock dwindled to about half its earlier size, probably due to depletion of the mussels they fed on. This winter, the occurrence of eider in Lynn Harbor has been very sporadic, and the inner Harbor flock has not returned at all. On the February 17 census the vast majority of the Common Eiders observed were to the east of the protected sections of the Harbor, in the shoals surrounding Nahant, east of Deer Island, and interspersed among the Brewster Islands.

Conclusion. Many informed people believe that the Common Eider population is doing very well and that there are lots of eiders far out of sight of land where we can't ordinarily census them.

Like terns and raptors, which are also carnivorous, eiders are at the top of the food chain. Fortunately, they have not yet been subjected to the serious population losses caused by pesticides that were suffered by other predators during the forties and fifties. Some of these other predators are now "coming back", but we don't fully understand the complexities of oceanic pollution and thus must be careful not to assume that everything is well with eiders. We should continue to keep a close watch on birds such as the Common Eider, which can serve as environmental early warning systems. S.Z.

#### References

- Cramp, Stanley, editor, 1977. Handbook of the Birds of the Western Palearctic, Volume 1, Oxford.
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## LOOKING AT BEHAVIOR

Probably the most interesting aspect of "bird watching" is watching birds. While this may seem like a redundant statement, too often in our haste to see every bird in a given area within whatever time we have allotted for our "bird watching," we actually see very little. Since we don't take time to observe any particular bird, we barely notice the various behaviors. These behaviors, of which there are many types, can often be as exciting to observe as a new "life-bird" since they too are things that we have never seen before. (I would bet that most birders would be as amazed and excited to observe the "grunt-whistle" and "nod-swimming" of Mallards as Donald Stokes was. (See the introduction to A Guide to the Behavior of Common Birds by Donald Stokes).

Ethology, the study of naturally-occurring animal behavior, has become increasingly important in recent years. In looking at behavior, ethologists have developed a classification system which is useful to amateur bird watchers in analyzing different things that they observe. In studying winter water birds in Boston Harbor we can see the following types of behavior.

Ingestive (feeding) is probably the most often observed of all behaviors since birds ordinarily spend a large part of their day feeding and drinking ('Ingestive' includes both) due to their high metabolism rates. Although internal needs (hunger) obviously determine to a large extent the frequency and duration of feeding, other factors such as tide, time of day, and weather conditions also seem to regulate this behavior.

Shelter-seeking is somewhat self-explanatory. This behavior can best be seen during adverse weather conditions when birds will huddle in protected areas. (Bird watchers, on the other hand, will often expose themselves to these same types of conditions). Another example of this type of behavior is gulls and ducks flying out to sea to sleep on the open ocean or herons flying to their night-time roosts.

Agonistic behavior is a specialized term to describe any action taken during a conflict between two animals. While fighting would obviously be included, it also includes retreat or passivity if occasioned by a conflict. In waterfowl, the chasing away of rivals during courtship is probably the most common example of this, although fighting over food can also be seen.

Comfort movements would include any activities an animal performs to increase its physical comfort. For water birds these would include preening, bathing, the drying out of wings (by cormorants), resting, stretching, scratching, etc. It should be noted that these actions are often necessary for survival.

Sexual behavior includes actions associated with the formation of pair bonds and the process of reproduction: Courtship, pre-copulatory, copulatory, and post-copulatory displays. The actions involved in these displays are often similar if not the same as some of the comfort movements, although their performance is generally much more ritualized.

Allelomimetic (I'll call it flocking) behavior is seen when two or more animals perform the same action with mutual stimulation. The best example in

waterbirds is the close-formation flight of shorebirds, though it can be seen in other families as well.

Migration is really a specialized form of flocking, but since its causes are distinct, I'm including it separately.

Of course, these different forms of behavior can often be joined together, e.g., flocking and shelter-seeking. Likewise, they can be initiated as the result of either external or internal causes, and may occur at particular times and places. In two successive Sunday surveys of Winthrop I observed distinctly different behaviors on the whole. While the predominant "activity" the first Sunday was resting, one week later feeding was so active that it was very hard to count many of the birds. Clearly tide, being reversed (the surveys were done at approximately the same time), would seem to be the major factor behind the change, but without further observations and record-keeping this can not be confirmed.

One way to better understand the significance of these relationships is to note which behaviors are observed at particular times and places. For those water bird census leaders who have either the time or enough participants to record the data, I would suggest the following:

1. Duplicate beforehand your lookout sheet(s).
2. At each lookout, record on one sheet, as you have been doing, the number of each species observed, indicating sex and age where possible. On the duplicate sheet record for each species behaviors that were noted, indicating which ones were either widespread or performed vigorously. The following abbreviations are suggested; those behaviors which are widespread or vigorously performed could be indicated by a circle around the abbreviation:

Ingestive -- I	Shelter-seeking -- S-S	Sexual -- S
Agonistic -- A	Comfort -- C	Flocking -- F1
Migration -- M		

In some cases, particularly if you have the time, it is best to take detailed notes on behaviors that are observed. In doing this, there are three points to keep in mind:

1. Try to create as little disturbance as possible yourself. The less disturbed the birds are, the more natural their actions will be.
2. Write down not only the actions you observe but also the time, date, place, weather, and other pertinent data.
3. Write down explanations or thoughts that come to you concerning the behaviors observed, but be sure to distinguish them from actual facts by enclosing them in brackets.

C.J.

#### References

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- Scott, John Paul, Animal Behavior, Doubleday, Garden City, 1963.
- Stokes, Donald W., A Guide to the Behavior of Common Birds, Little, Brown, and Company, 1979.

## A CLOSER LOOK AT COURTSHIP

With the approach of spring, the migratory and sexual urges of wintering water birds become stronger. To encourage TASL participants to pay close attention to and record the many unusual sexual displays they might see, I have excerpted part of an article I wrote for Bird Observer. The article, which will appear in its entirety in a future issue of B. O., is a summary of descriptive notes on courtship behavior taken during the first TASL field trip last March.

Varied courtship behavior was noted in two groups of Red-breasted Mergansers. One large group (about 25 birds), just off Short Beach in Winthrop, became quite active when the sun appeared. The following courtship behavior was exhibited, mostly by males: "head shaking" (up and down), "sky pointing" (holding an erect posture with bill pointed forward and slightly upward), male aggression, and a strange "head dipping," in which the mergansers would swim through the water with their necks stretched forward and their heads slightly submerged.

The second group, which was even more active, consisted of 31 Red-breasted Mergansers in Belle Isle Inlet, East Boston. The birds were both paired and in small groups, and were actively diving and courting. We observed various males "head dipping," and one male "sky pointing." In one definite pair the female was observed to be "soliciting". She sat in the water very stiffly, with neck stretched completely upward and bill pointing outward and slightly above the horizontal. She held this posture while facing the male, and after a while he became interested and started circling her. As he did so, she pivoted without changing her posture so that she was always facing him. Soon afterwards the pair engaged in coition, then in post-copulatory display: The male "sat up" and rapidly flapped his wings, and then the two birds quickly swam apart.

C.J.



### BIRD OBSERVER OF EASTERN MASSACHUSETTS

Since 1973 Bird Observer, a bimonthly magazine, has been publishing records of eastern Massachusetts bird-sightings. Each issue features an article on where to find birds in this state (and elsewhere). The February 1980 issue has a lengthy article on birding Boston Harbor. Other pieces on field problems, ornithological research and news, and controversial subjects such as birding etiquette also appear in the magazine.

Annual subscription to Bird Observer is \$6.50. If you are interested in subscribing, please mail your check to: BIRD OBSERVER, INC., 462 Trapelo Road, Belmont, MA 02178.

TASL CALENDAR - 1980

The following is a list of "Year of Boston Harbor" field trips for the rest of 1980:

March 16 (Sunday), survey and census of water birds  
April 13 (Sunday), survey and census of waterbirds  
July 20 (Sunday), heron census  
August 3 (Sunday), shorebird census  
November 23 (Sunday), survey and census of water birds

For the summer censuses of herons and shorebirds, in particular, many volunteers are needed so that we can cover all known or suspected roosts and feeding areas for these birds. The logistics of these censuses will necessitate the use of boats. For example, the mudflats around Logan Airport and Snake Island can be covered adequately only by boat. Also observers will need to go out on a number of the islands to check for feeding and roosting spots.

Therefore, please get in touch soon if you intend to participate, and particularly if you have access to a boat. We need to finalize plans for these censuses by early June. The numbers to call are:

Craig Jackson: 864-1917  
Sohell Zende: 628-8990 home  
923-0941 work

TASL News is produced by Craig Jackson and Sohell Zende, with assistance from Lelf Robinson. Funds for producing and mailing this newsletter have come partly from the contributions of field participants and from those persons who signed up to be on our mailing list at the February 3 public meeting. In order to disseminate the ideas and information generated by "Take a Second Look," we would like to be able to mail this publication to a number of people and organizations who are not presently involved or contributors: officials of state and federal fish and wild life agencies; local Conservation Commissions; local and national conservation organizations; and birders and birding organizations along the East Coast whom we would like to encourage to set up similar projects in their areas.

If you have already contributed, we thank you and ask that you share this newsletter with friends and solicit new subscribers for us. If, on the other hand, you or your organization have not contributed, please do so today. Your contribution will help us in this effort to study and to preserve our natural heritage.

"The conservation movement is a breeding ground of Communists and other subversives. We intend to clean them out, even if it means rounding up every bird watcher in the country."

former Attorney General John N. Mitchell