

TASL News Winter 1996



Take a Second Look
42 Baker Avenue
Lexington, MA 02173

Remaining Winter Census Date:

March 17

for more information, call (617) 863-2392 or (617) 268-7571

Loners

Horned Grebes in winter feed singly or in twos and threes, sometimes far from any other waterfowl, like winter loons, sometimes moving in and out and through and around long strings of large, gregarious eiders and scoters close to shore, diving to pursue small fish in five to twenty-five feet of water.

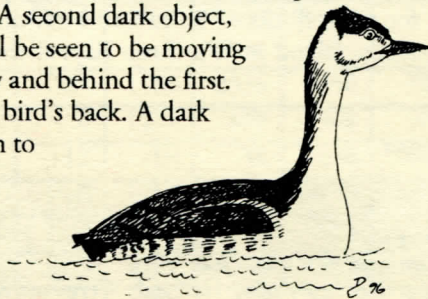
Like winter loons, Horned Grebes seek no company with each other or with other water birds, not even gathering in flocks to rest as do their close relatives, the almost equally solitary Red-necked Grebes.

Horned Grebes dress as plainly as winter loons, dark above and white below. Against a background of bright water they're difficult to find because they're so small, not 14 inches in length. The Red-necked Grebe is 20 inches, the Red-throated Loon 25 inches, the Common Loon 32 inches.

You don't see all of the winter Horned Grebe at once. You have to keep looking at it, wait for its image to emerge. At first, a small dark object can be seen to be moving slowly back and forth above the water's surface or hanging in the air above it like a kite in the wind. That will be the top of the winter bird's head. A second dark object, larger than the first, will be seen to be moving above the surface below and behind the first. That will be the winter bird's back. A dark line can perhaps be seen to connect the first object to the second. That will be a dark line on the back of the winter bird's neck.

The whole of its narrow, feminine face now can take shape, dark above the eye and white below. The whole of its gently curved neck can follow, dark in back and white in front, and so, too, can the the whole of its rounded, compact body, dark above, then gray and then white below.

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Winter Horned Grebe

Illustration by Denise Braunhardt Cabral

November TASL Censuses: A Summary of Results 1980-1995

[This is the first in a series of articles summarizing sixteen years of TASL winter censuses.]

Unlike midwinter TASL censuses, November counts give a snapshot of populations of migratory waterfowl visiting the harbor. For most species populations dwindle as November's cold rains turn to December's first snows. Our data indicates that a few species (Common Eider, Brant, Bufflehead, American Black Duck, Sanderling and Purple Sandpiper) have reached or are close to reaching their overwintering populations by November, while several others (Common Goldeneye, Greater Scaup, Canada Goose) continue to build their populations throughout December and early January.

November censuses were made from 1980 to 1983 and again from 1988 to 1995. **Table 1** provides information on conditions that may have impacted either the timing of migratory activity or the completeness of the individual TASL counts. To address the former I have listed the departure from average Boston temperature for each October and November. This provides a rough indicator of weather factors that may have delayed or speeded up the migration.

Also in **Table 1** are listed factors that may have limited our ability to attain complete counts in the harbor. Some are obvious: for example, some areas received no or only partial coverage. During the first four years of TASL counts certain locations (Reserve Channel in South Boston, Malibu Lagoon in Dorchester, Long Island and parts of Town Cove in Quincy, the mouth of Back River in Weymouth, and Strait's Pond in Hingham/Hull) were not included in the counts, as they are now. Not including these sites decreased the counts of many species by 5 to 8%. Lack of access to Deer Island in 1989 and '90 may have dramatically affected counts of eider and Bonaparte's Gull. Since Hull often reports a disproportionately high

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November Summary (from page 1)

number of species and individuals, the 1982, '88, and '91 counts are low by at least 15 to 20% because Hull was not completely censused. Likewise in 1982 and 1988 Weymouth and Nahant respectively were not counted, affecting the count by 10 to 15%.

Bad weather also hampers our ability to make good counts. Heavy rains in 1982 contributed to the very low counts for many species. Likewise strong winds which cause rough seas (1981, 1990, 1991, 1994) limit the observers' ability to find small water birds (e. g., grebes, Bufflehead) or birds often found individually or in small groups (golden-eye, loons). Rough seas also make it harder to get accurate counts of congregating birds such as eider, scoter, Bufflehead, scaup, or mergansers). It is not unreasonable to suppose that very rough seas will drop counts by at least 10%, moderately rough seas by at least 5%, and heavy rains by at least 10%.

Table 2 contains the total number of water bird species (i. e., loons, grebes, cormorants, ducks, geese, shorebirds, waders, alcids, and specialty gulls) observed on each date. Also, the totals for the most common species are provided.

On average, 33 species have been identified on a given census. The high was 39 species in 1983 and the low was 28 in 1982 and 1988, when two of the seven areas were not covered.

Selected Species Overview

LOONS: Most November birds are Red-throated. These fish eaters appear to be more numerous over the past several years. They are mainly found on the ocean side of Nahant, Winthrop, and Hull.

GREBES: Most are Horned. A small number of Red-necked commonly seen off Winthrop Beach. Fall populations have generally been stable but variable since the early '80's. Sizable numbers are usually found off Wollaston Beach and Hough's Neck in Quincy and off World's End in Hingham and Hull. Their winter diet consists of small fish and crustaceans.

CORMORANTS: In Table 2 Double-crested and Great Cormorants are lumped together. While there is no clear trend in total cormorant numbers, the proportion of Greats has decreased from over 90% of the total in the early '80's to

25 to 30% more recently. The midwinter data provides a clearer indication of the steep decline in Greats. (This issue will be dealt with in a later article.) The flip side is that Double crested have shown a modest increase over the past several years. Both are fish eaters with Greats being found off the harbor islands north and west of Hull and the Double-crested found mainly in the inner harbor and Dorchester Bay.

GREAT BLUE HERON: Large increase in the late '80's and '90's over the early '80's. Most of the increase is unexplained; some may coincide with our access to Logan Airport between 1988 and '94, where a substantial number roost in adjacent marshes.

BRANT: Extremely stable populations over the past 16 years. Low counts occurred during years of incomplete coverage. Brant feed mainly on eelgrass. Over the past fifty years Brant populations have declined on the East Coast due to the loss of eelgrass beds to a wasting disease. Ironically, in Boston they are never found around the eelgrass in Hingham. Brant also like sea lettuce, a submerged green leafy plant which grows well in the high nutrient waters of Boston Harbor. Highest concentrations of Brant occur around Squantum and Hough's Neck in Quincy and around the airport in East Boston. Once the Deer and Nut Island wastewater discharges cease in 1997 or '98 the major source of nutrients to the harbor will be eliminated. Will this affect the sea lettuce beds and the Brant? We'll see in a few years.

CANADA GOOSE: Our data is consistent with other studies which show an increase in the overwintering population in southern New England. This is apparently due to the artificial feeding of these parkland visitors.

AMERICAN BLACK DUCK: Very stable population with little variability. Highest densities in sheltered mud flats around the harbor. They feed on mud snails and vegetation.

GREATER SCAUP: The high variability in population partially masks the downward trend which is more evident in the midwinter data. Scaup populations are declining throughout the east, presumably due to heavy metal (e. g., lead, copper, nickel, zinc) contamination. (More on this in a later article.) Scaup are generally found in flocks of 50 to 250 birds around Snake Island in Winthrop Bay, at the mouth

of the Weir River in Hull, in western Wollaston Bay or at the mouth of the Fore River in Weymouth. They tend to feed on mussels and other mollusks.

COMMON EIDER: The most abundant species in the harbor, with close to 5000 seen in the average year. In November they are found in the highest densities around mussel beds off Deer Island in Winthrop, on the north shore of Hull, and off Nahant. Their populations have been stable but variable with all but one of the lowest counts occurring when either Deer Island, Hull, or Nahant were not censused. The low count of only 264 in 1993 came on a relatively early (November 14) and unseasonably mild (71° F) TASL census. Presumably, the main eider movement had not yet occurred.

SCOTER: All three scoter species are grouped together since there are numerous reports of mixed flocks of scoter spp. (i. e., birds too far away to identify to species). The majority (80%+) are White-winged Scoters with most of the rest Surf. While White-winged populations have been stable, Surf populations have risen sharply over the past several years. Both species feed on mussel beds and are found in highest densities on the ocean sides of Revere, Winthrop, and Hull and in northern Wollaston Bay.

COMMON GOLDENEYE: Found in highly variable numbers with no discernible trend. Their variability is mainly due to their late migration and is probably somewhat weather dependent. They are found uniformly throughout the harbor and feed on mussels and small crustaceans.

BUFFLEHEAD: Very stable population found in highest density in and around Hingham Harbor and the Weir River estuary in Hull/Hingham. They have a varied diet of crustaceans, mollusks, fish, and aquatic vegetation. Their high density in Hingham Harbor may be related to the occurrence of the last remaining eelgrass bed in Boston Harbor found at the mouth of Hingham Harbor. Besides being a good source of food, eelgrass beds provide an important nursery for fish and crustacean populations. In recent years the size of the bed

has been decreasing, and coincidentally the Bufflehead have tended to be found farther up into Hingham Harbor rather than at its mouth. Are these observations linked?

RED BREASTED MERGANSER: The population of these fish eaters has also remained stable, but less variable than that of the eider. Like eider, low counts can be attributed to incomplete coverage. In November mergansers are found throughout the harbor; but routinely the highest concentrations occur around Thompson Island in Dorchester Bay (500 to as many as 1500) and at the mouth to Hingham Harbor (several hundred).

SHOREBIRDS: Black-bellied Plover numbers show no trends since the 1980's. Sanderlings have shown a definite increase during the '90's while Dunlin and especially Purple Sandpipers have apparently been decreasing. The vast majority of Sanderling and Dunlin are found along Revere and Winthrop beaches, while the Purple Sandpipers are on the rocks along Nahant or on the Five Sisters off Winthrop Beach. The plovers are more commonly found in the marshes and mud flats in Quincy.

BONAPARTE'S GULL: Steadily increasing since the early 1980's. Most birds are found around the effluent discharge off Deer Island. Their diet is reputed to be mainly insects and small fish. It is unclear whether the birds off Deer Island are feeding on invertebrates/fish drawn to the discharge or are scavenging on the organic matter discharged. Their close relative, the Common Black-headed Gull is a scavenger on garbage dumps and wastewater effluents in Europe. During the early '80's only a single black-headed gull was reported on November counts. More recently several of these rare birds are reliably found.

The numbers of these two species could be reduced once the Deer Island discharge ceases in 1997 or '98.

HARBOR SEAL: Sightings increased in the late 1980's and have leveled off since. This trend is identical to that reported by the New England Aquarium for the breeding population in the Gulf of Maine and the wintering population in

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Illustration by Mike Payne

TABLE 2 - Total species number and abundance of selected species

Date	# of Species	Loon	Grebe	Cormorant	Great Blue Heron	Brant	Canada Goose	Black Duck	Greater Scaup	Common Eider	Scoter	Common Goldeneye	Bufflehead	Red-breasted Merganser	Sanderling	Purple Sandpiper	Dunlin	Bonaparte Gull	Harbor Seal
11/23/80	38	21	341	1458	12	1237	85	1989	2356	9350	705	504	1612	2596	23	508	450	55	1
11/29/81	33	6	62	436	1	1697	0	1277	679	5908	904	157	775	997	5	87	527	253	0
11/13/82	28	26	184	156	2	378	17	789	48	2138	444	39	1233	903	4	85	56	230	2
11/19/83	39	125	419	379	7	1756	5	1752	912	9129	1280	354	2775	2846	80	80	657	765	2
11/13/88	28	4	68	175	29	1182	7	1174	326	295	413	391	2141	767	10	8	87	712	2
12/10/89	29	4	64	71	4	1090	205	2871	796	3657	504	1316	2552	1235	153	68	45	26	13
11/18/90	34	11	66	198	20	1417	31	1430	176	2419	397	321	2866	2494	206	1	95	861	2
11/24/91	38	36	174	246	30	1959	67	1199	1059	8723	438	611	1902	2345	100	25	304	1497	4
11/22/92	30	17	281	102	29	1516	141	1297	448	5438	1848	1017	3162	3039	324	13	265	863	11
11/14/93	33	67	363	309	28	1467	44	1288	127	264	828	528	2077	2444	113	301	33	394	18
11/20/94	33	27	206	560	23	1454	332	1145	95	5908	789	325	2093	2050	4	4	37	1112	15
11/19/95	35	105	209	279	7	1476	135	1311	54	5432	2266	263	1836	1899	525	29	221	1084	9
Averages	33	37	203	364	16	1386	89	1460	590	4888	901	486	2085	1968	129	101	231	654	7

TABLE 1

	Departure from normal October temperature	Departure from normal November temperature	Factors affecting count
	(degrees F)	(degrees F)	
11/23/80	-3.20	-3.90	Missing some current sites
11/29/81	-3.60	-1.30	Missing some current sites, very rough seas
11/13/82	-0.60	2.10	Missing some current sites, heavy rain, Hull and Weymouth not done
11/19/83	0.40	0.90	Missing some current sites
11/13/88	-4.00	1.50	Nahant and 75% of Hull not done
12/10/89	0.50	-2.40	No access to Deer Island
11/18/90	3.50	3.30	No access to Deer Island, rough seas
11/24/91	1.60	0.00	Drizzle, rough seas, 85% of Hull not done
11/22/92	-2.30	-2.30	
11/14/93	-2.50	0.30	
11/20/94	0.70	3.70	Rough seas
11/19/95	3.60	-3.40	

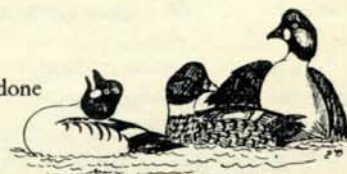


Illustration by Denise Braunhardt Cabral

November Summary *(continued from page 3)*

southern New England. Seals in the Gulf of Maine were decimated by an influenza epidemic in the '70's to early '80's. The sharp population increase during the '80's was a normal rebound.

Nighttime Roosts

A mixed flock of 1000 to 3000 goldeneyes, mergansers, Buffleheads, scoters and grebes roosts off the old bath house on Carson Beach every night. It appears that most of the

birds in Dorchester Bay and northern Quincy Bay move in during the half-hour before dark. It is quite a sight.

Likewise, most of the Red-breasted Mergansers in Hull, Hingham and Weymouth appear to fly north past Deer Island late in the afternoon to roost off Revere Beach. Eider in Hingham and Hull Bays fly out of the harbor at dusk to join the larger flocks off the harbor islands. Both species can be observed moving through Hull Gut (Pemberton Point).

Maury Hall

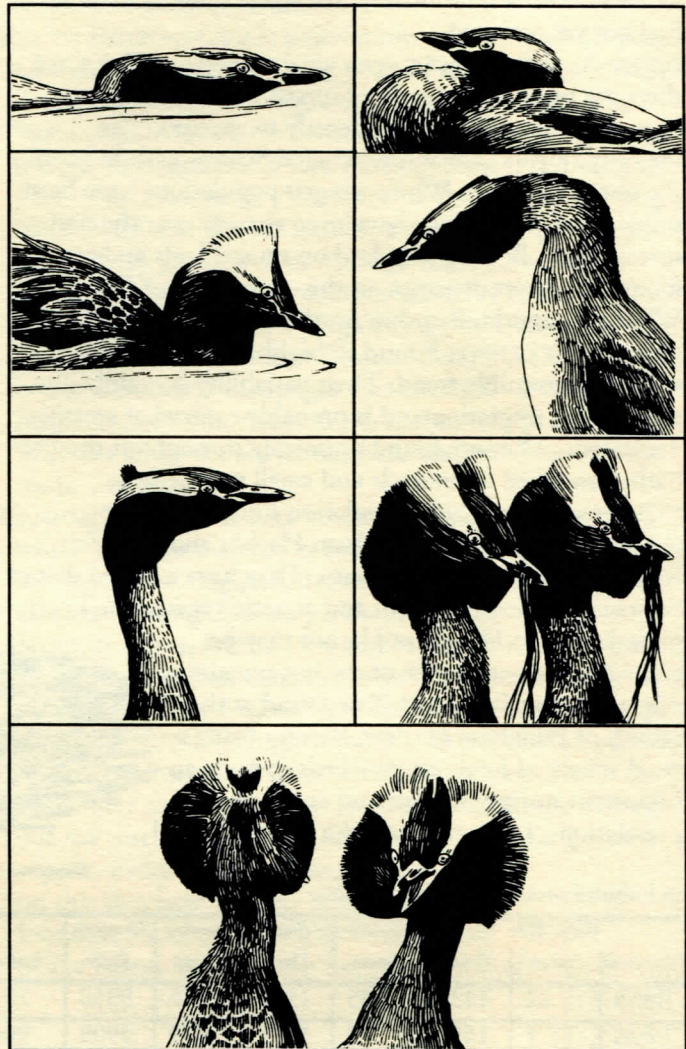
Loners *(from page 1)*

We rarely see Horned Grebes otherwise arrayed. Arriving in November, they move about discretely in their winter plumage through December, January and February. Still wearing the whites and blacks and grays of quiet business competence, they leave us in March for their nesting grounds west of the Great Lakes across Canada into Alaska.

Of a sudden in mid-April you may encounter an apparition. Belated, a Horned Grebe on its way north will be in the spring plumage we so rarely see, dressed as for a Caribbean carnival in white, black, red, reddish gold and chestnut, a bird of passion rather than of probity, and a bird that could talk to you if it wanted, controlling its facial expressions better than you can control yours. In winter plumage its facial expression is fixed. With its spring plumage it acquires black feathers it can raise to form twin horns on the top of its head. It also acquires black feathers it can raise independently at the back of its head to form a tuft. On each side of its face above the eye, it acquires a reddish gold crest extending back and upward to the rear of its head. Below the eye it acquires a similar set of black feathers forming an extensive fringe. The spring Horned Grebe can raise and lower these sets of feathers independently, giving it the ability to present a variety of startling facial expressions that we can approximate only by putting on a series of masks.

There's a difference. No longer a loner, in springtime the bird puts on a mobile, expressive face like ours when it wants to associate with others of its kind. After its breeding season, it discards that face and assumes a fixed expression, now needing little of conversation or of social interaction. At carnival we put on the fixed facial expression of the mask precisely to block the messages that our mobile, expressive faces send.

J. H. Barton



Breeding-plumaged Horned Grebes in courtship display

Sketches from Cramp & Simmons Handbook of the Birds of Europe, the Middle East and North Africa: The Birds of the Western Palearctic, vol. 1; Oxford University Press, 1977.

What is TASL?

Take a Second Look (TASL) was started in the winter of 1980 by a local group of environmentally concerned birdwatchers; our primary focus has been to survey and census the bird population of Boston Harbor throughout the year, although the winter water bird censuses have been our major activity. A summer/fall series of "shorebird censuses" were initiated in 1993

and continued in 1994 and 1995.

Starting with this issue of TASL News and continuing at least until Fall 1996 we will publish installments of Maury Hall's data analysis for the first sixteen years of winter TASL censuses.

TASL (Take Second Look) is organized and staffed entirely by volunteers. TASL data is compiled by Maury Hall. This newsletter is produced by Soheil Zendehe.