

Maine Department of Inland Fisheries and Game



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MERRYMEETING BAY Maine's Waterfowl Haven



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FOREWORD

Game Division Leaflet No. 1 represents our introduction to a series of short publications which we will be issuing from time to time. These Leaflets will supplement our major bulletins and will cover subjects we feel will be of interest to our readers. We are continually faced with wanting to get such information released, yet in many cases the subject material does not fit our more lengthy efforts.

This Leaflet, dealing specifically with Merry-meeting Bay, is an example of what we have in mind. The Bay is important as one of the most attractive shooting grounds along the Atlantic waterfowl flyway. Some day we will know enough about it to warrant a publication as one of our Game Division bulletins. In the meantime, we feel readers will be interested in something of a general nature on the Bay and of some of the management work now under way there.

We wish to give credit to several individuals who have helped us get this material together. Drawings of the waterfowl food plants and map are by Claude Westfall. The photograph on the cover was taken by the Department of Economic Development, the others by personnel of the Department of Inland Fisheries and Game. Stephen Powell has kindly made available most of the information on the history of the Bay.

The Leaflet is a Federal Aid to Wildlife contribution.

Sincerely,



ROLAND H. COBB
Commissioner

Merrymeeting Bay -- Past and Present

Merrymeeting Bay is the northern-most (within the U. S.) true waterfowl concentration area in the Atlantic Flyway. It is justly famed far and wide as a wildfowling area. The people of Maine are blessed in having such a natural waterfowl haven within the bounds of their State, and should guard carefully against its destruction or impairment. This brief pamphlet constitutes an initial effort to provide some interesting and useful information about "the Bay" and the birds which frequent it.

The limits of Merrymeeting Bay are not clearly defined. To most Maine hunters all water between Thorne Head at North Bath, the Richmond-Dresden Bridge, and the Brunswick-Topsham railroad bridge may be included in a reference to "the Bay". This is the area of principal importance to ducks and duck hunters. Special hunting regulations pertaining to Merrymeeting Bay exclude the section from Thorne Head to Chops Point from the Bay proper. Approximately 15 miles long, the Bay varies from one-half to 3 miles in width. Including the Chops area this comprises approximately 10,000 acres of high value duck habitat. The Bay itself is formed by the confluence of two principal rivers, the Kennebec flowing in at the north and the Androscoggin from the southwest. Four lesser rivers; the Muddy, the Cathance, the Abagadasset, and the Eastern also empty into the Bay. The mouths of these rivers are characterized by broad and fertile mud flats which are exposed at low tide. These flats produce lush growths of such important food and cover plants as wild rice, wild celery,

duck potato, bulrush, and many others. At high water the flooded flats constitute acre after acre of excellent feeding and resting area.

The name (*Merrymeeting*) is of interesting origin. When Captain Weymouth sailed up the "Sagadahock" (Kennebec) River on his discovery voyage in 1605, the red men of the Abanaki Nation called the area above the Chops, Quabacook. From the Bay to the falls at Brunswick was known as the Pejepscoot and the "Kennebeck" began above Swan Island. An old record accounts for the renaming of the Bay as follows, "This bay was called Merrymeeting by the English on account of its being the place of rendezvous of the several tribes. Here about this bay, on its points, headlands, and coves, they assembled, deliberated and concerted their plans, feasting, drinking and revelling."

There appears good reason to believe that in the 200 years following discovery, major physical changes occurred in and around the Bay. Early writings indicate that, when discovered, most of the bay was deep water and that sizeable vessels could sail up the Pejepscoot to the falls at Brunswick, mooring "hard by the shore". The surrounding forest is described as beech, birch and oak with some spruce and fir. Following re-settlement after the Indian Wars of the late 1600's evidences of extensive fires were observed and forest lands had come back to pine. Extensive shoals also had apparently developed in the Bay and navigation was much restricted. At the time of discovery the woods are described as abounding with game and mention is made of salmon and sturgeon fisheries of importance. There is no reference to ducks or geese at this time. The following quotation from G. A. Wheeler's 1878 History of Brunswick is interesting:

"Our waterfowl generally are not different from those found in other sections of the State. Our

fresh-water ponds, as well as on the salt water, are found in spring and autumn the wild goose, the black duck, teal, sheldrake, and merganser, while the wood-duck and the pintail or whistler, make their habitat all over our territory; yet they are not abundant.

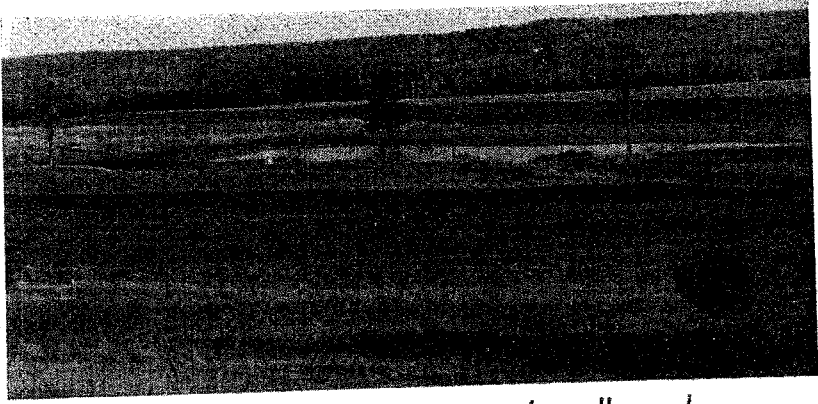
There is a tradition that at the period of settlement, wildfowl sometimes congregated in such numbers, and made so much noise in the night, that the early settlers were unable to sleep until they had driven the intruders away. It is said that to accomplish this they sometimes found it necessary to fling firebrands among them. Merrymeeting Bay was formerly a great resort for wild geese. The middle portion of the bay was, at low water, a sand-bed covered with a species of reed, on the roots of which geese were supposed to subsist from about the first of September until the extreme cold weather sent them southward."

One may thus infer that ducks and geese had their ups and downs even "way back when".

Management Work

Almost since its inception the Department of Inland Fisheries and Game has had a strong and continuing interest in the Bay. Swan Island was set aside as a game preserve in 1935 and acquired by the State in 1940. This island at the head of the Bay supports a sizeable deer herd but management is aimed primarily at the production of rye and clover pastures for geese in an effort to prevent serious depredations on surrounding agricultural crops during the spring migration period. Several small marshes created on the Island serve as refuge areas during the gunning season.

These benefit hunters by holding on the area, birds which would otherwise be driven out by hunting activity. These birds, as they fly in small numbers from these small marshes, provide additional shooting for the hunters.



Swan Island goose pasture and small marsh

Banding Activities

In addition to these management measures various research activities have yielded valuable information over the years. Between 1943 and 1954 over 1,500 Canada Geese were live-trapped and banded at the Bay during the spring migration. Subsequent analysis of band recoveries has shown that this particular segment of the goose population winters in coastal Virginia, No. Carolina and Maryland, and breeds as far north as northern Labrador. Geese passing through were found to spend from a day to a month at the Bay. The average length of stay was $11\frac{1}{2}$ days. As many as 40,000 Canada Geese have been estimated present on the Bay at one time. Unfortunately for the hunter, the number of geese visiting the Bay in the fall is much reduced. Many undoubtedly pass over without stopping while others return to the wintering ground by a different route. In addition to geese, appreciable numbers of the all important black duck have also been banded at Merrymeeting.



Canada Geese in trap during banding operations at Swan Island

Waterfowl Bag Checks

Since 1948 careful studies have been carried out to determine what kind of ducks are bagged by hunters, crippling loss, success ratios and relative hunting pressure. These studies indicate that the black duck annually comprises over 50 per cent of the total kill. Blacks are followed by the green and blue-winged teals, goldeneyes (whistlers), wood ducks, and blue bills (scaup), though the order of importance varies from year to year. In normal years the teals and wood ducks have moved on to the south by the latter part of October, leaving blacks, goldeneyes and scaup to provide the bulk of the late season shooting. Hunter success varies, of course, and so do the averages between years. In round figures, from 2 to 3 ducks per hunter per day would be a good average. Crippling loss runs from 20-25 per cent. The Bay

is a very popular area for gunners. Particularly is this true on opening day when upward of 1,000 hunters have been estimated present for the occasion. Hunting techniques and rigs are as variable as the hunters. Jump shooting, pass shooting, and gunning over decoys are all practiced. The use of "sneak-boats" or "gunning floats", as shown on the cover of this leaflet is common at the Bay and provides a unique "trade mark" for the area. In such a boat the gunners can remain well camouflaged while sculling into a flock of unwary birds. Careful shooting is essential and a good retriever invaluable in preventing loss of crippled birds. Ducks often fall in dense vegetation or swiftly running tides.

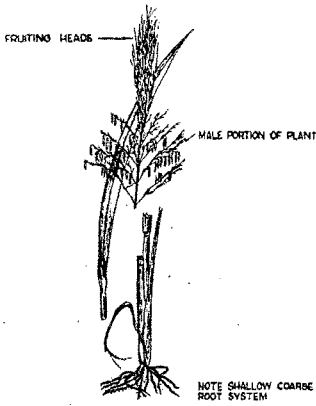


Biologist Spencer (right) checks ducks bagged by two hunters

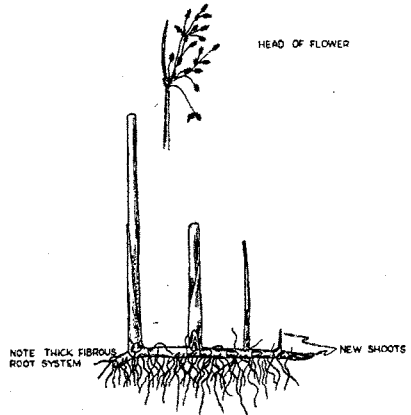
Habitat Studies

During the last few years various people have become concerned over changes they felt were taking place at the Bay which were detrimental to the welfare of the birds. As a result of this interest a preliminary survey was carried out by the Maine Cooperative Wildlife Research Unit in 1954. Waterfowl foods were found to be abundant but it was impossible to determine from the pilot studies whether they were increasing or decreasing. With this in mind, a more comprehensive long range study was initiated by the Inland Fisheries and Game Department. The Bay was completely photographed in color from the air in 1956. From these photos, maps will be compiled delineating beds of aquatic vegetation. It is planned to re-photograph the Bay at 3 to 5 year intervals and compare the size and extent of plant stands. Related studies will be conducted on the area to gather data on plant vigor, soil conditions, and other important information. It is hoped that these studies will reveal: (a) whether the Bay is improving or deteriorating as waterfowl habitat, and (b) what possible management techniques can be applied to assure perpetuation of this habitat.

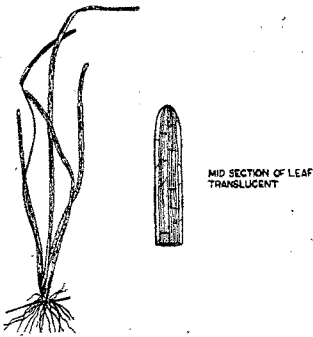
When completed, the findings from this investigation will be made available to all interested persons.



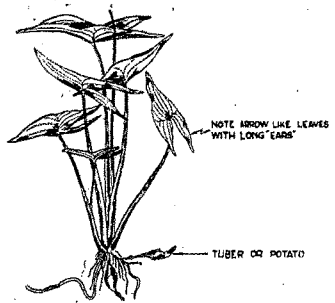
WILD RICE



GIANT BULRUSH



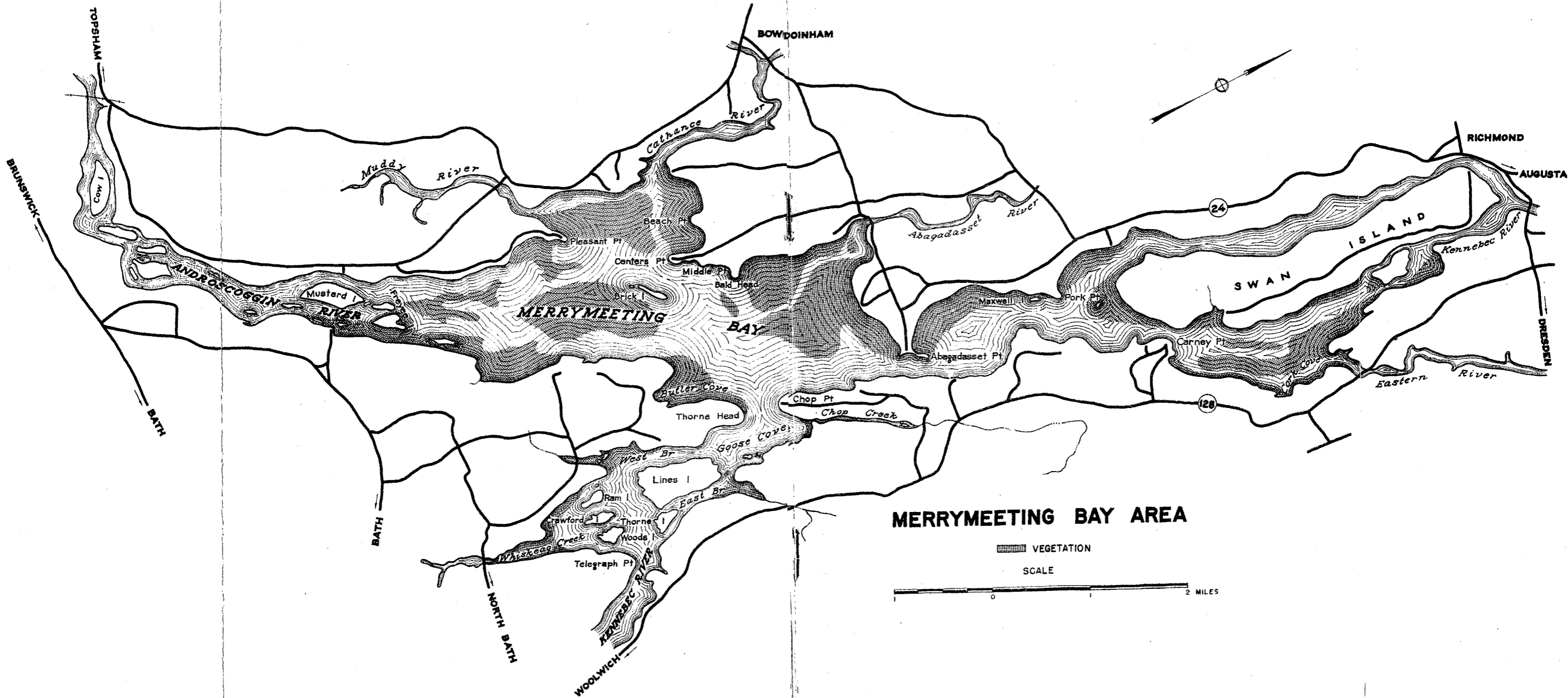
WILD CELERY



DUCK POTATO OR ARROWHEAD

*Some important waterfowl food plants found in
Merrymeeting Bay*





MERRYMEETING BAY AREA

VEGETATION

SCALE

