# APPARENT STATUS OF THE EUROPEAN WIDGEON IN NORTH AMERICA

#### BY EDWIN M. HASBROUCK

On December 3, 1842, the first recorded American specimen of the European Widgeon (*Mareca penelope*) was purchased in Fulton Market, New York City. It had been killed in the Bay of Long Island.

For many years there appeared occasional records of the occurrence of this bird in widely separated localities both on the Atlantic and Pacific coasts as well as in the interior, generally accompanied by the statement that it was a "straggler," of "rare occurrence," an "occasional visitor from a foreign land," etc.

For many years, also, it was (and by many people still is) considered a visitor on the eastern coast from Iceland by way of Greenland, and on the western coast from Siberia by way of the Aleutian Islands and Alaska. The fact that three of the Atlantic Coast birds had previously been banded in Iceland has lent considerable weight to this hypothesis, as has also the fact that the species has never been known to breed in North America.

As long as the records were comparatively few in number, this theory was quite plausible, but with the multiplication of records beginning along in the 1880's, it became apparent that the bird was more than a casual visitor or straggler. In fact, in one region on the Pacific coast—Portland—it was even said to be common.

After a careful search of the literature I have collected 596 records, both sight and specimen. I feel quite certain that I have missed some, possibly many, as so many have been published in obscure and little-read literature; but admitting this, enough records have been obtained, I think, to show an interesting situation, and I doubt if additional records will alter the picture.

In lists Nos. 1, 2, and 3 for the three main areas mentioned later, sight records have been designated "vis."; birds collected, "sp." Of these 596 records, 94 are without sufficiently complete data for plotting (see list No. 4), except for spotting on the map for locality. It will be readily seen, as stated above, that there are far too many occurrences for them to be accidental, and furthermore it must be borne in mind that many of the specimen records were made in the short period of the gunning season, leaving the rest of the months with but few observers, although during this time the species undoubtedly did occur.

Phillips and Lincoln ('American Waterfowl': 293, 1930) state that "from the capture of at least three specimens on our East coast that were banded in Iceland, it would appear likely that all our eastern

specimens come from that source." A few evidently do so, the same as other birds occasionally turn up in unusual places far from their accustomed haunts.

Probably it was at one time an exclusively Old World species; when it invaded North America will of course never be known, but that it originally came either by way of Greenland from Iceland, or by way of the Aleutian Islands from Siberia, or both, is probably an indisputable assumption. The fact that three specimens banded in Iceland have been taken on the Atlantic coast is prima-facie evidence at least of the Greenland-Iceland route.

Of course, in the early days of American ornithology, observers were far less numerous than since the 1880's and, as a consequence, the Widgeon was considered a rare and unusual bird and, by most writers, a straggler from Iceland and Siberia. Whether or not the multiplicity of records we now have is due entirely to a greater number of observers or to a fixed North American stock whose breeding grounds have yet to be discovered, I am unable to say; but I am inclined to the latter belief for the following reasons. First, the records show a definite southerly migration in fall and winter down both the Atlantic and Pacific coasts, with a corresponding northerly spring migration up the great Mississippi flyway in company with other wildfowl, almost entirely in March and April. Secondly, there is a thin line of records extending north and centrally as far as Fort Rae on Great Slave Lake (observers are very few in these regionspractically none), whose dates suggest that those extreme northern birds were not far from their breeding grounds.

Winter comes early in those northern latitudes, and the Fort Rae bird certainly did not come from Siberia or Iceland. It was taken August 22 and, in my opinion, was on its way south from its not-far-distant breeding ground. The same might be said of the Lake Winnipeg bird taken September 1. Conversely, the birds taken at Big Spirit Lake, Minnesota, on May 16, at Twin Lakes, Minnesota, on June 5, and at Minneapolis on April 6 were on their way north to those same not-too-distant breeding grounds.

For the purpose of the present study, I have divided North America into three main areas—Atlantic Coastal Region, Pacific Coastal Region, and Interior Region, and have attempted to show in Table 1 the regional distribution of the records in those three divisions of North America as follows:

ATLANTIC COASTAL REGION.—That territory extending from Greenland to Florida. Definite records are from Greenland, Labrador.

Quebec, Newfoundland, Nova Scotia, Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York (eastern) and Long Island, Pennsylvania (eastern), Delaware, Maryland and District of Columbia, Virginia, North Carolina, South Carolina, Georgia, and Florida.

PACIFIC COASTAL REGION.—That territory lying from Bering Sea to the extreme upper portion of Mexico (Tiajuana) and west of the Sierra Nevada and Cascade ranges.—Definite records are from Alaska, British Columbia, Washington, Oregon, California, and Mexico.

INTERIOR REGION.—All territory, including interior Canada, lying between the fringe of eastern coastal states and the Sierra Nevada and Cascade ranges. Definite records are from New York (central and western), Pennsylvania (western), Ohio, Ontario, Illinois, Kentucky, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Nebraska, Wyoming, Canada (interior), Louisiana, and Texas.

I have also separated the months into two seasonal divisions—October 1 to March 31 (fall and winter) and April 1 to September 30 (spring and summer)—and have attempted to show that the period from October 1 to March 31 is that during which a southward movement is evident in the two coastal areas, while that from April 1 to September 30 includes a decidedly northerly movement up the interior flyway. Of course, there are a few straggling 'off' records. Where the border line is drawn very closely I have placed the record in the nearest appropriate division, as for instance, September 29 or 30 would be placed in October, and April 1 or 2 would be put in March.

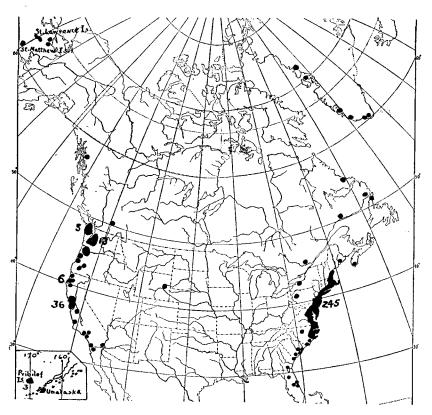
The table shows that on the Atlantic coast the bulk of the birds are southbound migrants; and that on the Pacific coast a southern

MADET TO 1

	IADLE	
$\mathbf{A}$	TLANTIC COASTAL REGION	
October 1 to March 31	April 1 to September 30	Total
251	23	274
F	PACIFIC COASTAL REGION	
October 1 to March 31	April 1 to September 30	Total
74	7	81
	Interior Region	
October 1 to March 31	April 1 to September 30	Total
34	131	165

The above table comprises a total of 520 records. The discrepancy of 76 records between this and the 596 grand total is accounted for by the many records in List No. 2 that could not be used in compiling this table.

migration also takes place in the fall and winter, while an apparent spring migration occurs in the Interior Region, up the great central flyway in company with other wildfowl. Ten records from the two Gulf states, Louisiana and Texas, were apparently of wandering migrants passing the winter and early spring in those localities. They



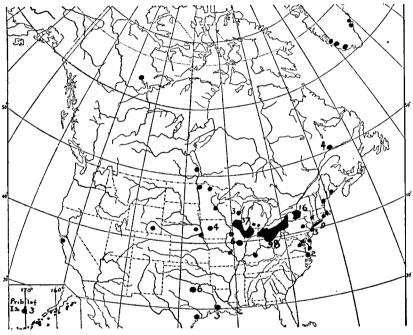
Text-fig. 1.—Fall and winter records of the European Widgeon—the southward migration.

were pretty evenly divided as to seasonal occurrence; six were from October 1 to March 31, and four on April 18, 21, 24, and 26, respectively.

The table is compiled strictly according to the seasonal divisions of October 1 to March 31, and April 1 to September 30, but in the Atlantic Coastal Division there are a few records occurring so early in April—from the 1st to the 7th—that they might rightly be in-

cluded in the winter list, and they have been so placed. A few scattered similar instances occur in the Interior Region.

Of the 596 records, 94 have incomplete data in one form or another as shown in List No. 4. Of these, 19 are definitely shown to come within the "fall and winter" classification, and five are definitely shown to belong under "spring and summer." These have been used only in compiling the seasonal classification in the table. In 29 records the year only is given, while in 23 there are no dates what-



Text-fig. 2.—Spring and summer records of the European Widgeon—the northward migration.

ever. Fortunately, all these records have the localities and have been used for spotting on the map.

There are two maps. One (Text-figure 1) shows the fall and winter records illustrating the southward migration; the other (Text-figure 2), the spring and summer records marking the northward movement in the interior. They cover all of the 596 records, but where localities are close together the area occupied by them is solidly shaded. These spots also may cover a wide area far beyond the actual locality. The number of records from these complex areas is shown by a large

adjacent numeral. It will be realized that the maps are designed to give only a comprehensive picture of the total number of records and their distribution.

Lists Nos. 1, 2, and 3 give every record collected for the three areas with the accompanying data, and state whether the record is based on sight or a specimen. Occasionally a few citations are made under 'Remarks.'

Referring once more to the maps, it must be explained that it was found necessary to separate both New York and Pennsylvania into two divisions—eastern and western. A glance will show that while the eastern portion of each state belongs to the Atlantic Coastal Region, the western portions clearly come within the Interior Region and are a part of the northward Mississippi Valley migration.

Phillips says: "Undoubtedly the species is far more common in North America than has hitherto been supposed, as the recent multiplication of records and my own experience in Massachusetts has shown. Some of the earlier writers (Turnbull, 1869, for example) speak of it as regular in its appearance . . . specimens were taken by Frank Russell (1898) at Fort Rae on Great Slave Lake on August 22, and at Grand Rapids, Lake Winnipeg, on September 1, and they

# LIST NO. 1

## ATLANTIC COASTAL REGION

GREENLAND.—Fifteen records (all sp.). Sept. 1 to Dec. 17.

Localities:—Anmagsalik, 2; Arsuk, 1; Frederikshaab, 1; Godthaab, 1; Holsteinborg, 1; Nanortalik, 1; Quaersuarssuk, 1; Tasinsak, 1; Umanaq District, 1; east coast (no further data), 4; Julianhaab, 1.

LABRADOR.—Three records (all sp.). Nov. and Oct. One record with no data.

Localities:—Bonne Esperance, 1; Seal Cove, just south of Makkovik, 1; Piashta Bay, 1 (no data).

QUEBEC.—Five records (1 sp.; 4 vis.). Fall of 1926 1, (probably October) to June 13. Localities:—Lochaber, 1; Niapisca Island, six miles west of Esquimaux Point, Mingan Island, 4.

NEWFOUNDLAND.—One record. (sp.). Oct. 5.

Locality:-Stephensville Crossing.

Nova Scotia.—One record (sp.). Dec. 1.

Locality:—Cape Sable Island. In company with two other ducks said to have been the same, but the reporter (H. Piers), says they might have been Baldpates.

MAINE.—Thirty-one records (9 sp.; 22 vis.). Oct. 25 through fall, winter, spring, and summer to Sept. 20.

Localities:—Cape Elizabeth, 1; Falmouth, 2; Jefferson [a flock of 21 birds alighted in a pond near the house (letter from A. L. Carter of Jefferson, Me., dated Nov. 26, 1924, to G. J. Stobie Commissioner F. & G., Augusta, Me., and sent by him to Biological Survey)]; Merrymeeting Bay, 1; Scarborough, 5; Swan Island, 1.

NEW HAMPSHIRE.—Two records (plus), (2 sp.; several vis.). Nov. 14 to 17. (Was

told that a flock of twenty or thirty had been feeding in Great Bay for several days.)

Localities:-Peabrook, 1; Great Bay, several.

MASSACHUSETTS.—One hundred and nine records (34 sp.; 75 vis.). Oct. 6 to May 22. Localities:—Belmont, 1; Beverly, 2; Boston Park System, 1; Bridgewater, 8; Chappaquiddick Island, 1; Great Pond, Cape Cod, 1; Halifax, 1; Jamaica Pond, 8; Ipswich, 1; Leverett Pond, 2; Marblehead, 1; Martha's Vineyard, 43; Nantucket, 3; Nippinickett Pond, near Bridgewater, 6; Northampton, 3; Sengegontacket Pond, Martha's Vineyard, 4; Squibnocket Pond, Martha's Vineyard, 10; Wenham Lake, Boston, 13.

RHODE ISLAND.—Five records (1 sp; 4 vis.). Sept. 20 to Nov. 13.

Localities:-Gardiner's Pond, Middletown, 2; Middletown, 1; Newport, 2.

Connecticut.—One record (sp.). Jan 2.

NEW YORK (eastern) and Long Island.—Thirty-two records (18 sp; 14 vis.). Sept. 2 to April 29.

Localities:—Bay of Long Island (first record for N. A.); Gardiner's Bay, 7; Gardiner's Island, 4; Irondequoit Bay, L. I., 2; "Market" N. Y. City, 1; Mastic, Moriches Bay, L. I., 1; "Long Island," 3; Mecox Bay, L. I., 1; Moriches Bay, L. I., 2; North Inlet, Gardiner's Island, 2; Oakdale, L. I., 1; Peconic Bay, 1; Pelham Bay, 2; Southampton, 3; Cruger's Island, Dutchess Co., 1.

New Jersey.—Twelve records (7 sp.; 5 vis.). Oct. 29 to April 30.

Localities:—Barnegat Bay ("sps."), Delaware Bay, 1; Englewood, 1; Leonia, 1; Little Egg Harbor Inlet, 1; Marshalltown, 1; Point Pleasant Ponds, near New York, 2; Tuckerton, 3; Troy Meadows, 1.

Pennsylvania (eastern).—Four records (all vis.). Feb. 26 to May 8.

Locality:-Lake Ontelaunee, 4.

DELAWARE.—Seven records (all vis.). Jan. 13 to April 11.

Localities:- Delaware City, 3; Rehobeth Beach, 4.

MARYLAND and DISTRICT OF COLUMBIA.—Twelve records (all sp.). Oct. 16 to July 15.

Localities:—Cambridge, Colston Lake, 1; Carroll Island Club, 1; "Chesapeake Bay," 4; Coast Maryland, 1; Havre-de-Grace, 1; Susquehanna Flats, 1; Washington, D. C. Market, 1; Baltimore, 1; Nanjemoy Creek, 1.

VIRGINIA.—Twenty records (all sp.). "Fall" to "Spring."

Localities:—Alexandria, 2; Aquia Creek, 1; Back Bay, 6; Broadwater, Northampton Co., 1; "Coast Virginia," 1; False Cape Club, Princess Anne Co., 2; James River, 2; Neabsco Creek, 1; North Bay, 2; Potomac River, 1; Virginia Beach, 1.

NORTH CAROLINA.—Thirty-five records (31 sp., 4 vis.). Nov. 12 to March 29.

Localities:—Bodie Island Light, 1; Bulls Island, 1; various localities on Currituck Sound, 27; Hatteras, 1; New River Inlet, 2; Pea Island, 2; Raleigh, 1.

South Carolina.—Four records (all sp.). "Winter" to March 4.

Localities:—Middleburg Plantation, Cooper River, 2; Mulberry Plantation, Cooper River, 1; Long View Plantation, Combahee River, 1. (Mulberry Plantation and one record from Middleburg Plantation are without any dates whatever.)

GEORGIA.—Three records (all sp.). Jan. 31, "Sometime" from Jan. to July 1908. One no data.

Localities: - Okefenokee Swamp, 1; Savannah, 1; Chatham Co., 1.

FLORIDA.—Five records (all sp.). Dec. 26 to Feb. 26.

Localities:—"Florida," no locality, 1; near Titusville, 3; Orange Lake, near McIntosh, 1.

## LIST NO. 2

## PACIFIC COASTAL REGION

ALASKA.—Ten records (all sp.). Oct. 12 to Aug. 5.

Localities:—King Island, 2; Pribilof and Aleutians, 1; St. Paul Island, 4; St. Lawrence Island, 1; St. Matthew Island, 1 (based on a single wing found nailed to the wall of a cabin near Cape Glory, Russian Siberia. It might have been brought from somewhere else); Unalaska, 1.

British Columbia.—Six records (5 sp.; 1 vis.). Dec. 9 to Jan. 24.

Localities:—Comox Harbor, 1; Haro Strait near Bare Island, 1; near Victoria, 1; Okanagan, 1; Saanich, 1; Stikine River Flats, 1.

Washington.—Fifteen records (11 sp.; 4 vis.). Oct. 30 to March 31.

Localities:—Everett, 1; Lake Washington, 1; Lower Puget Sound, 1; Nisquilly Flats, near Tacoma, 8; Oakland, near Tacoma, 1; Saanich Bay, 1; Seattle, 2.

Oregon.—Sixteen records (12 sp.; 4 vis.). Oct. 18 to Jan. 18.

Localities:—Eugene, twelve miles northwest of Portland, 1; Government Island, 1; Lane Co., 1; Netarts Bay, 2; Portland, 3; Sauvies Island, 8; one Portland record by Deignan, unpublished.

California.—Fifty records (23 sp.; 27 vis.). Oct. 20 to June 27.

Localities:—Arcata Bay, 2; Bixby, 3; Brawley, Imperial Co., 2; Eureka, 2; Franklin Canyon Reservoir, 1; Gray Lodge Refuge, 1; Grizzly Island, Solano Co., 1; Guadalupe, 1; Humboldt Bay, 3; Lake Merritt, 16; Los Banos, Merced Co., 1; Merced Co., 1; Norman, Glenn Co., 1; Oakland, 8; Rio Vista, Solano Co., 2; San Francisco, 5.

Mexico.—Two records (sp.). Jan. 13.

## LIST No. 3

## INTERIOR REGION

NEW YORK (central and western).—Twenty-two records (4 sp.; 18 vis.). March 7 to May 15. (There are two 'freak' records beyond this period—Dec. 25 and Jan. 28.)

Localities:—Amherst Township, Erie Co., 1; Buffalo, 3; Canandaigua, 2; Clarence, near Buffalo, 1; Cayuga Lake and marshes, 3; Keuka Lake, 5; Montezuma marshes, Seneca River, 1; Niagara Falls, 1; near Lason or Albion, 1; Rochester, 4.

Pennsylvania (western).—Thirty-three records (2 sp.; 31 vis.). March 22 to April 29.

Localities:—Erie Bay, 3; Hartstown, 6; Linesville (several seen); Presque Isle, 3; Port Alleghany, 4; Pymatuning Lake, 15; Williamsville, 1.

Ohio.—Forty-two records (12 sp.; 30 vis.). March 21 to May 4. (There are four 'freak' records beyond this period; Oct. 3 and 6, Oct. 6, and Dec. 30.)

Localities:—Beaver Lake, near Salem, 1; Buckeye Lake, near Columbus, 9; Cleveland, 1; Granville, 2; Huron, 2; Liebs Island, 2; Painesville, 4; Pymatuning Lake, 2; Port Clinton, 1; Salem, 2; Sandusky, 3; Toledo, 7; Waterville, 1; Willoughby, 1; Youngstown, 4.

Ontario.—One record (sp.). In 1916.

Indiana.—Nineteen records (10 sp.; 9 vis.). March 23 to May 5.

Localities: - English Lake, 5; Hobart, 9; Kankakee marshes, near Thayer, 5.

ILLINOIS.—Fourteen records (9 sp.; 5 vis.). March (?) to April (17 or later).

Localities:—Calumet marsh, 1; Chicago, 4; Lake Decatur, 1; Illinois River, 1; near Mt. Zion, 4; Nippersink Lake, 1; Snackwine Lake, 1; nine miles from Decatur, 1.

KENTUCKY.—Three records (1 sp.; 2 vis.). Feb. 22 to Feb. 28.

Locality:—Six miles east of Louisville. (Flock of three seen Feb. 22, and one of them secured on Feb. 28; the only records for Kentucky.)

Michigan.—Fifteen records (5 sp.; 10 vis.). March 27 to April 23.

Localities: Monroe, Monroe marshes, and Monroe Co., 13; Portage Lake, 1; Vicksburg, 1.

WISCONSIN.—Fifteen records (8 sp.; 7 vis.). April 3 to June 12. (Also two records, Oct. 23 and Nov. 11 that, in my opinion, were of birds coming south from their breeding grounds in the far north.)

Localities:—Dane Co., 1; Green Bay, 2; Lake Koshkonong, 3; Lake Mendota, 2; Madison, 6; Lake Winnebago, 1.

MINNESOTA.—Three records (all vis.). April 6 to June 5.

Localities:—Big Spirit Lake, 1; Minnesota slough, near Minneapolis, 1; Twin Lakes, Kittson Co., 1.

Iowa.—Four records (1 sp.; 3 vis.). All Oct., 1933.

Locality:-North Twin Lakes, Calhoun Co., 4.

MISSOURI.--One record (sp.). April 10.

Nebraska.—Two records (sp.). No data.

One taken by Bruner "years ago" at West Point. "Formerly seen in Omaha markets on rare occasions."

WYOMING.—Two records (1 sp.; 1 vis?). Oct. 3, 1910.

Locality:—Hat Creek, Converse Co., 1. McCreary and Mickey in a paper (1933) state: "Accidental, casual and rare in South Eastern Wyoming."

CANADA (interior).—Two records (sp.). Aug. 22 to Sept. 1.

Localities:-Grand Rapids, Lake Winnipeg, 1; Fort Rae, Great Slave Lake, 1.

LOUISIANA.—Three records (vis.). Winter, 1915.

Locality:—Cameron Farm, Cameron Parish, fourteen miles south of Victoria, 3. Texas.—Seven records (2 sp.; 5 vis.). Oct. 21 to April 26.

Localities:- Corpus Christi, 1; Dallas, 6.

1897

## LIST NO. 4

## RECORDS WITH INDEFINITE DATA

Currituck Shooting Club, N. C.

Julianhaab, Greenland	
Nanortalik, Greenland	
Godthaab, Greenland	
Frederikshaab, Greenland	
District of Umanaq, Greenland	
Qaersuarssuk, Greenland	
East coast of Greenland (four)	
Long Island	
Gardiner's Island, N. Y.	
Long Island	
Southampton, L. I.	
Southampton, L. I.	
Buffalo Harbor	
Buffalo Harbor	
Gardiner's Island, N. Y.	
Cayuga Marshes, N. Y.	
Long Island	

1887	Currituck Sound
Spring, 1863	Alexandria, Va.
	James River, Va.
	Alexandria, Va.
Fall, 1911	Broadwater, Northampton Co., Va.
1855	Tuckerton, N. J.
March, 1887	Delaware River, N. J.
"Others"	Tuckerton, N. J.
1878-1879	Barnegat Bay, N. J. (several)
Spring, 1880 or 1881	Vicinity of Englewood, N. J.
	Tuckerton and Big Bay, N. J. (several)
Spring, 1880 or 1881	Leonia, N. J.
	Little Egg Hatbor Inlet, N. J. (several)
	Baltimore, Md.
	Piashte Bay, Labrador
Winter, 1926–1927	Middleburg Plantation, Cooper River, S. C.
	Middleburg Plantation, Cooper River, S. C.
	Mulberry Plantation, Cooper River, S. C.
	Savannah, Ga.
1845	"Florida"
Fall, 1926 (October?)	Lochaber, Quebec
May, 1880	Cayuga Lake, N. Y.
Spring, 1881	Cayuga Lake, N. Y.
	Cayuga Marshes, N. Y.
1875	Williamsville, Elk Co., Penna.
	Erie Bay, Penna.
1916	Long Point, Lake Erie, Ont.
1898	Monroe, Mich.
1901–1902	Monroe Marshes, Lake Erie, Mich.
1901–1902	Monroe Marshes, Lake Erie, Mich.
1901-1902	Monroe Marshes, Lake Erie, Mich.
1881 or 1882	English Lake, Indiana
36 4 44 44 44	English Lake, Indiana
March and April, 1931	Near Mt. Zion, Ill.
March and April, 1931	Near Mt. Zion, Ill.
March and April, 1931	Near Mr. Zion, Ill.
March and April, 1931	Near Mt. Zion, Ill.
	Lake Decatur, Ill.
	Near Chicago, Ill.
((\$7))	Illinois River
"Years ago"	West Point, Neb.
"Specimens"	Omaha, Neb.
1074	South Eastern Wyo.
1874	Lake Mendota, Wis.
1877	Lake Koshkonong, Wis.
1877	Lake Koshkonong, Wis.
1875	Lake Koshkonong, Wis.
1876	Lake Mendota, Wis.
1937	Dane Co., Wis.
170/	Oakland, Wash.

1905 (?)	Eureka, Calif.
1936	Oakland, Calif.
1932	Oakland, Calif.
1933	Oakland, Calif.
1934	Oakland, Calif.
1935	Oakland, Calif.
	San Francisco, Calif. (albino)
Winter	San Francisco market (several)
1886	Eureka, Humboldt Co., Calif.
	Humboldt Bay, Calif.
	Humboldt Bay, Calif.
	Bixby, Los Angeles Co., Calif.
Winter, 1884	Humboldt, Co., Calif.
Winter	San Francisco market, Calif.
Winter, 1920-1921	Lake Merritt, San Francisco, Calif.
•	Saanich, British Columbia
Winter, 1921-1922	Wintered in Comox Harbor, B. C.
•	Stikine River Flats, B. C.
	Twin Willows, Sauvies Island, Ore.
1930	St. Lawrence Island, Alaska
•	St. Pauls Island, Alaska
1881	"Pribilof and Aleutians"

are certainly extraordinary. Nevertheless, it is worth recording that Richardson (fide Baird, Brewer, and Ridgway, 1884) long expressed the belief that the species breeds in the wooded region of the fur countries and north to 68 latitude. This statement, taken in conjunction with the fact that the great majority of the records for both coasts are winter occurrences while the majority of the inland records are spring records, would almost suggest the existence of an American stock resident in this continent, and migrating along the same routes as its native relative. The statement has often been made that the species breeds in the Aleutian Islands, but I must confess that after a careful search I have been unable to find any evidence to support it. . . . To my knowledge, there is no evidence that the species has ever bred in North America, though I am inclined to think that it may do so."

My own records, now eighteen years later, are far more numerous than those available to Phillips, but they bear out his statements, and I am forced to agree with his suggestion of the existence of an American stock resident on the North American continent and breeding somewhere in the far north. The breeding area is possibly quite circumscribed as in the case of the Blue Goose and the more recently discovered breeding grounds of the Ross's Goose. The Gavin and Donovan party, in search of Ross's Goose, does not mention it and

it seems almost certain they would have done so had they met with it, as they mention having seen other species of waterfowl, notably Pintails. It must be borne in mind, however, that apparently no actual search was made for anything else.

#### SUMMARY

The species is far more abundant in North America than has been previously supposed.

There have been at least three captures on the Atlantic coast of birds banded in Iceland, with no banding records on the west coast of birds from Siberia. This does not necessarily mean that all birds occurring on the Atlantic seaboard are migrants from Iceland, but rather that a bird of so wide a distribution does occasionally stray from Iceland through Greenland and on to the North American continent.

A definite southerly migration extends along the entire Atlantic coast in the fall and winter months as far as east-central Florida.

A similar southerly movement occurs on the Pacific coast at the same time as far south as extreme northern Mexico (Tiajuana).

A marked northerly spring migration occurs up the Mississippi flyway mostly in April and May in company with other wildfowl. Strange to say, most Alaskan records, with two exceptions, were made in the spring and summer months—April, May, July, and August (three records without full data). This might suggest either that the birds on their northern migration had arrived somewhere near their breeding grounds in North America, or that they were on their way to Siberia.

The species is found not only singly or in pairs, but also in small flocks by itself or often in company with its near relative, M. americana.

The southerly fall and northerly spring migrations strongly suggest a fixed American stock breeding somewhere in Arctic America, the locality yet to be discovered. I am thoroughly in accord with Phillips in this conclusion.

In preparing this paper my thanks are due to the United States National Museum and the Fish and Wildlife Service for the facilities they have so generously placed at my disposal. More especially are my thanks due Dr. Herbert Friedmann, Curator of Birds of the U. S. National Museum, for many suggestions and criticisms, and also to Dr. H. C. Oberholser, Mr. H. G. Deignan and the late Mr. J. H. Riley.

U. S. National Museum Washington, D. C.