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# Atlantic Flyway waterfowl banding

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Here I present a summary of 2 reports of the Atlantic Waterfowl Council on the progress of waterfowl banding in the Atlantic Flyway. Banding was done co-operatively by the Provincial Game Departments of Ontario, Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland; state wildlife agencies in the Atlantic Flyway; the U.S. Fish & Wildlife Service; Canadian Wildlife Service; the Wildlife Management Institute; and various private agencies.

**Background:** The Atlantic Flyway Cooperative Banding Program was initiated in 1965 by the Atlantic Waterfowl Council to determine population dynamics of selected waterfowl species in eastern Canada. This information is required to formulate waterfowl hunting regulations and to have some knowledge of waterfowl population levels in the Atlantic Flyway. These data are important to the states because much of their hunted waterfowl originates in Canada. The last 5-year study period ended in 1980. The Atlantic Waterfowl Council (July 1980) approved another 5-year extension of this program, through 1985. Revised banding quotas were established and distributed by the U.S. Fish & Wildlife Service in 1980. Emphasis has been and will continue to be on Black Ducks, Wood Ducks, and Mallards.

Since 1965, totals of 272,992 ducks and 48,178 Canada Geese have been banded pre-season in eastern Canada. During the same period, 258,417 ducks and 31,489 Canada Geese have been banded pre-season in the Atlantic Flyway states.

**Objectives:** 1) To determine distribution of harvest from breeding and wintering areas, and to define the breeding area source of harvest based on band recovery information; 2) To determine changes in harvest pressure on various populations of migratory game birds as measured by recovery and/or harvest rates; 3) To determine annual and/or long term survival rates for important breeding and wintering population segments of migratory birds.

**Procedures:** Provincial Wildlife Departments and the Canadian Wildlife Service have been instrumental in making necessary arrangements and conducting the co-operative banding in Canada.

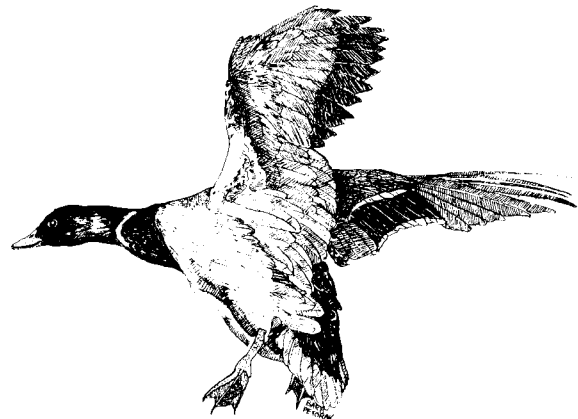
Approximately 26 banding stations were operational during 1981 pre-season program in eastern Canada. The stations were, approximately, Ontario 6, Quebec 3,

Nova Scotia 1, Prince Edward Island 2, Newfoundland 2, and New Brunswick 13.

Black Duck banding activity was intensified in Newfoundland. Surveys were flown in Quebec to locate new Black Duck banding sites.

Pre-season banding was conducted in the Atlantic Flyway states also, under the quotas established by the U.S. Fish & Wildlife Service. The stations were, approximately, ME 4, VT 2, MA 2, CT 2, RI 2, NY 12, PA 10, NJ 5, WV 1, VA 2, DE 2, MD 5, NC 3, SC 4, GA 3, & FL 2.

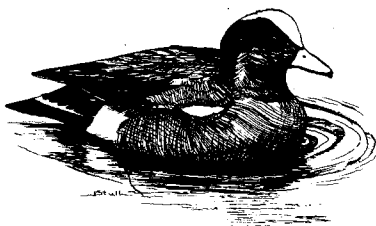
The Wildlife Management Institute continues to provide administrative and financial assistance.



**Findings:** *Eastern Canadian Provinces:* A minimum number of 10,895 ducks and 1,121 Canada Geese were banded pre-season 1981 at approximately 25 banding stations. Fewer ducks but more Canada Geese were banded in pre-season 1981 than in 1980. Of the 10,895 ducks 3,083 were Black Ducks. The total number of ducks banded was 1,943 (12%) less than in 1980. Duck species banded in 1981 as compared with 1980: Black Duck -38% (down 1,909); Mallard +23% (up 809); Wood Duck remained the same; Blue-winged Teal -21% (down 392); Green-winged Teal +18% (up 149); Pintail -13% (down 30); and Ring-necked Duck -43% (down 115).

*Atlantic Flyway States:* A known total of 21,779 ducks and 4,939 Canada Geese were banded pre-season 1981.

These figures represent a decrease of 3,943 ducks and an increase of 1,929 geese over 1980 pre-season bandings. The duck species showing decreases: Black Duck -28% (746); Mallard -10% (1,265); Wood Duck -25% (2,029); and Blue-winged Teal -6% (80). Approximately the same numbers of Green-winged Teal and Pintail were banded in 1981 as in 1980. Eider bandings were up.



**Post-season efforts:** A follow-up report of the post-season banding is also shown as part of the continuing program. In the post-season efforts, no banding was done in Newfoundland, New Brunswick, Ontario, Quebec, Vermont, or Rhode Island. It should be noted that the pre-season and post-season bandings were done in different areas as the concentrations differed. Pre-season bandings were done 1 July to 1 October 1981; the post-season bandings were done 15 December 1981 to 1 February 1981.

**Data uses:** Data from this program continue to be used to monitor populations. There are plans to use these data to determine distribution of harvest by state and province and to check on over-harvest of specific production areas as they relate to individual states. The increased emphasis being placed on Black Duck research and management will necessitate the use of banding data. The banding program has aided New York and Pennsylvania and perhaps other states in establishing and analyzing the results of zoned hunting seasons. The banding data have been extremely valuable in the preparation of Environmental Impact Statements on waterfowl hunting and on Black Duck, Snow Goose, and Brant regulations. Recently, groups from North Carolina (Canada Goose), North Carolina and Virginia (Wood Duck), and the U.S. Fish & Wildlife Service (Ring-necked Duck and Black Duck) have made use of the data.

The complete report was prepared by the Banding Committee, Technical Section of the Atlantic Waterfowl Council. Assisting me with this report were Andre Bourget, Bill French, John Harcus, George Jonkel, and Bill Whitman.

Copies of the report may be obtained from the author.

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**Table 1. 1981 Pre-season banding totals by species. 1 July 1981 to 1 October 1981**

| Species                | Number of Waterfowl Banded |               |               |
|------------------------|----------------------------|---------------|---------------|
|                        | Canada                     | United States | Total         |
| Canada Goose           | 1,121                      | 4,943         | 6,060         |
| Mallard                | 4,401                      | 11,130        | 15,531        |
| Black Duck             | 3,083                      | 1,936         | 5,019         |
| Black Duck X Mallard   | 81                         | 101           | 182           |
| Gadwall                | 2                          | 100           | 102           |
| Common Pintail         | 195                        | 117           | 312           |
| Mallard X Pintail      | 1                          | 0             | 1             |
| Green-winged Teal      | 989                        | 233           | 1,222         |
| Blue-winged Teal       | 1,433                      | 1,165         | 2,598         |
| American Wigeon        | 154                        | 12            | 166           |
| Northern Shoveler      | 60                         | 6             | 66            |
| Wood Duck              | 326                        | 6,220         | 6,546         |
| Redhead                | 1                          | 0             | 1             |
| Ring-necked Duck       | 151                        | 2             | 153           |
| Common Goldeneye       | 11                         | 26            | 37            |
| Common Eider           | 0                          | 456           | 456           |
| Ruddy Duck             | 0                          | 1             | 1             |
| Hooded Merganser       | 5                          | 75            | 80            |
| Common Merganser       | 0                          | 2             | 2             |
| Red-breasted Merganser | 2                          | 0             | 2             |
| <b>Total</b>           | <b>12,016</b>              | <b>26,718</b> | <b>38,734</b> |

**Table 2. 1981-82 Post-season banding totals by species**

| Species              | Number of Waterfowl Banded |               |               |
|----------------------|----------------------------|---------------|---------------|
|                      | Canada                     | United States | Total         |
| Canada Goose         |                            | 3,957         | 3,957         |
| Brant                |                            | 1,346         | 1,346         |
| Snow Goose           |                            | 1             | 1             |
| Mallard              | 25                         | 6,577         | 6,602         |
| Black Duck           | 1,123                      | 6,609         | 7,732         |
| Common Pintail       | 1                          | 206           | 207           |
| Green-winged Teal    | 1                          | 116           | 117           |
| Blue-winged Teal     |                            | 9             | 9             |
| American Wigeon      |                            | 165           | 165           |
| Northern Shoveler    |                            | 1             | 1             |
| Wood Duck            |                            | 25            | 25            |
| Redhead              |                            | 1,911         | 1,911         |
| Canvasback           |                            | 4,286         | 4,286         |
| Redhead X Canvasback |                            | 1             | 1             |
| Greater Scaup        |                            | 262           | 262           |
| Lesser Scaup         |                            | 6,532         | 6,532         |
| Common Goldeneye     | 7                          | 6             | 13            |
| Bufflehead           |                            | 105           | 105           |
| Hooded Merganser     |                            | 5             | 5             |
| <b>Total</b>         | <b>1,186</b>               | <b>32,602</b> | <b>33,788</b> |