

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

US Fish & Wildlife Publications

US Fish & Wildlife Service

1964

Species Composition Within States for the 1962-63 and 1963-64 Hunting Seasons

Glen Smart

Migratory Bird Population Station

Follow this and additional works at: <https://digitalcommons.unl.edu/usfwspubs>



Part of the [Aquaculture and Fisheries Commons](#)

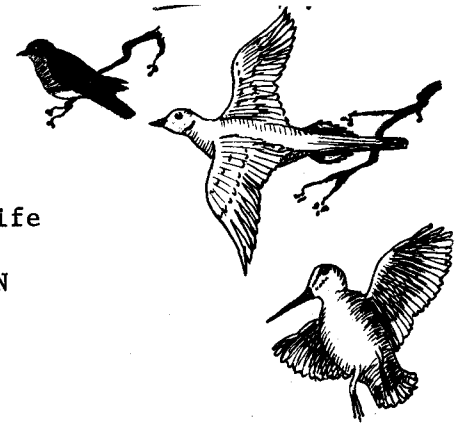
Smart, Glen, "Species Composition Within States for the 1962-63 and 1963-64 Hunting Seasons" (1964).
US Fish & Wildlife Publications. 261.

<https://digitalcommons.unl.edu/usfwspubs/261>

This Article is brought to you for free and open access by the US Fish & Wildlife Service at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in US Fish & Wildlife Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



U.S. Department of the Interior
Bureau of Sport Fisheries and Wildlife
Division of Wildlife Research
MIGRATORY BIRD POPULATIONS STATION
Laurel, Maryland



Administrative Report No. 65

TITLE: Species Composition Within States for the 1962-63 and 1963-64
Hunting Seasons*

ABSTRACT:

This paper considers the species composition of the duck kill in each State as determined by the Duck Wing Collection Surveys during 1962-63 and 1963-64 hunting seasons. Two-thirds of the annual kill was made up of mallards, black ducks, pintails, wood ducks, and green-winged teal. Mallards were the most common species taken in all Flyways except the Atlantic where the black duck was most abundant.

Procedure:

The species composition of the duck kill within each State was determined on the basis of wings received by the Duck Wing Collection Surveys of 1962-63 and 1963-64. Weighted species composition for each Flyway was computed by giving each State a value proportionate to the kill in that State as determined by the Mail Questionnaire Survey. A more detailed weighting procedure will be applied to these data when they are re-analyzed for inclusion in a report summarizing the results of the Duck Wing Collection Survey since 1960. This may slightly alter the values presented in this report.

Results:

The species composition for each State in the Atlantic Flyway is shown in table 1. The black duck was found to be the most common species represented in the bag and it comprised a larger percentage in the Northern States than in the Southern States. The wood duck, on the other hand, was more frequently taken in the Southern States than in Northern States. The wood duck tended to be of lesser importance in the Northern States during 1963 than in 1962. A number of Northeastern States closed much of their waterfowl habitat to hunting early in the 1963 season in order to reduce the danger of forest fires and this may have reduced the kill of species nesting in these areas and early migrants.

*The primary purpose of this report is to facilitate the prompt distribution of timely information. It is intended for administrative use only and is not for publication without the permission of the Director, Bureau of Sport Fisheries and Wildlife.

In the Mississippi Flyway, the mallard was the most important species in the bag. There has been a recent decline in the proportion of mallards in the total kill (see Administrative Report No. 52). The decline between 1962 and 1963 is most evident in the States of Michigan (41.2 and 28.3 percent mallards respectively), Iowa (48.9 and 31.2), and Arkansas (78.0 and 68.0). There were increases in the percent of blue-winged teal in the bag in the northern States of Minnesota, Michigan, Wisconsin and Iowa in 1963. It increased from eighth most important duck in the flyway kill in 1962 to third in 1963. A late autumn coupled with earlier opening dates in the States mentioned above could have caused this increase. The incidence of wood ducks in the bag increased in each of the above States in 1963 although the flyway percentage showed a decline from 1962.

In the Central Flyway, mallards composed almost half of the total bag (table 3) and far exceeded the next most important species, green-winged teal.

The importance of blue-winged teal increased in South Dakota, Nebraska, and Kansas in 1963, as it did in adjacent States in the Mississippi Flyway. The blue-winged teal increased from 2.0 percent of the total flyway bag in 1962 to 4.1 percent in 1963.

In the Pacific Flyway, the mallard was also the most common species in the duck kill (table 3). The decrease in importance shown for mallards in the two interior flyways was not so evident here. Three-fourths of the total duck kill in Idaho was composed of mallards. Only in California was the mallard surpassed by another species, the pintail. The pintail reached its greatest importance in the Pacific Flyway where it was the second most common species in the bag. There was a slight drop in the percentages of pintails in the bag in each State except Washington where it comprised 10.9 percent of the bag both years.

Two-thirds of the annual U.S. kill of ducks was composed of mallards, black ducks, pintail, wood ducks and green-winged teal. In no flyway were diving ducks as important as the surface-feeding species since they reached a high of only 22 percent of the kill in the Atlantic Flyway and a low of 5.4 percent in the Pacific Flyway.

Prepared by:

Glen Smart, Biologist, Section of Mail Surveys

Date: August 31, 1964

Migratory Bird Populations Station
Laurel, Maryland

Table 1.--Species composition in duck wing collection in the Atlantic Flyway during the 1962-63
1963-64 hunting seasons

Species	Percentage of total kill in--											
	Maine		New Hampshire		Vermont		Mass.		Rhode Island		Connecticut	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	2.2	2.5	1.7	3.1	6.4	10.5	8.0	7.9	9.4	4.9	16.1	16.6
Domestic Mallard	0.3	0.2	1.2	1.4	1.3	0.6	1.1	1.1	1.0	1.3	1.3	1.4
Black Duck	49.8	51.0	48.2	55.8	35.0	30.4	49.4	59.4	72.7	65.4	43.9	34.8
Mottled Duck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gadwall	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
American Widgeon	0.2	0.5	0.2	0.0	0.3	0.6	0.3	1.1	3.1	6.7	0.7	1.2
Green-winged Teal	13.2	15.4	6.1	7.1	11.2	7.6	4.8	6.3	0.0	3.3	8.7	8.3
B.W. & Cinn. Teal	0.9	2.6	1.0	0.6	2.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0
Shoveler	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pintail	0.4	1.3	0.2	1.4	1.0	2.8	0.6	0.5	0.7	0.8	0.1	0.2
Wood Duck	9.4	10.1	30.2	16.8	16.8	12.3	9.8	5.3	0.0	1.8	9.5	6.5
Redhead	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canvasback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greater Scaup	0.4	0.4	0.2	1.1	1.0	0.9	1.1	1.1	3.1	3.6	10.0	15.6
Lesser Scaup	0.2	0.1	0.2	0.6	0.7	0.9	0.3	0.4	0.0	2.1	1.3	1.7
Ringnecked Duck	2.1	2.6	0.2	2.3	3.3	2.9	0.0	0.3	0.0	0.3	0.1	0.5
Goldeneye	5.9	3.9	1.5	1.1	13.0	22.5	4.5	0.9	2.1	3.3	1.7	1.3
Bufflehead	3.1	1.5	2.5	2.8	1.6	1.3	1.8	1.5	4.5	0.8	2.3	1.2
Ruddy Duck	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Scoters	3.5	3.2	2.5	2.1	3.7	0.9	11.3	9.9	0.4	0.5	3.0	8.5
Oldsquaw	1.2	0.5	0.0	0.0	0.1	0.0	0.5	0.1	0.4	0.0	0.1	0.8
Eider	4.3	1.5	0.0	0.0	0.0	0.0	3.2	1.7	0.0	0.0	0.0	0.2
Large Mergansers	1.5	1.3	1.2	0.3	0.1	2.4	1.6	1.6	1.4	4.3	0.4	0.2
Hooded Mergansers	1.5	1.3	2.7	3.4	2.4	1.3	0.8	0.8	1.0	1.0	0.6	0.2
Other Ducks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Totals	100.2	99.9	99.8	99.9	100.1	100.0	100.1	100.1	99.8	100.1	99.8	100.2
Sample Size	1168	1562	407	351	671	780	1176	1075	286	390	698	601

Table 1.--Species composition in duck wing collection in the Atlantic Flyway during the 1962-63 and 1963-64 hunting seasons--continued

Species	Percentage of total kill in--											
	New York		Pennsylvania		W. Virginia		New Jersey		Delaware		Maryland	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	17.3	26.3	33.7	38.5	26.6	36.4	15.8	15.5	21.9	18.1	22.8	18.2
Domestic Mallard	0.9	1.2	3.9	3.3	2.6	2.5	1.8	1.6	1.7	0.9	1.9	2.4
Black Duck	26.5	26.9	20.2	14.5	34.9	37.0	56.6	53.2	53.0	41.2	39.0	29.4
Mottled Duck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gadwall	0.2	0.2	0.7	0.2	0.5	0.6	0.2	0.6	0.0	0.9	0.5	3.4
American Widgeon	1.5	0.9	1.0	1.6	0.0	1.9	2.3	3.4	1.7	2.1	11.7	14.5
Green-winged Teal	3.6	4.7	2.5	3.1	2.6	1.2	7.0	9.9	11.5	23.0	4.1	7.0
B.W. & Cinn. Teal	0.9	Tr.	0.2	1.0	1.0	0.6	0.1	0.1	0.2	0.1	0.1	0.0
Shoveler	Tr.	0.2	0.1	0.1	0.0	0.0	Tr.	0.4	1.3	2.5	0.5	0.2
Pintail	0.6	0.7	1.4	1.2	1.0	0.0	1.9	5.1	3.5	3.3	2.5	3.8
Wood Duck	18.5	3.1	15.5	22.9	26.0	11.7	2.7	3.2	0.2	4.0	2.2	2.1
Redhead	Tr.	0.2	0.0	0.0	0.0	0.0	0.0	Tr.	0.2	0.0	0.0	0.1
Canvasback	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Greater Scaup	11.7	12.4	10.0	5.0	0.0	0.0	4.6	3.0	0.6	0.9	3.5	2.6
Lesser Scaup	3.3	3.1	5.1	5.0	0.5	4.9	1.4	0.8	0.2	0.1	1.9	1.3
Ringnecked Duck	1.7	1.3	0.8	0.5	1.6	0.0	0.1	0.4	1.9	0.3	2.4	2.2
Goldeneye	3.9	6.9	0.3	0.3	0.0	0.0	0.5	0.1	0.2	0.1	3.1	3.7
Bufflehead	2.4	4.6	2.4	0.9	1.6	0.6	2.7	1.3	1.5	1.2	2.2	4.8
Ruddy Duck	0.2	0.2	0.7	0.9	0.0	0.6	0.3	Tr.	0.0	0.0	1.0	2.4
Scoters	3.4	1.9	0.1	0.4	0.0	0.0	0.4	Tr.	0.2	0.0	0.1	0.1
Oldsquaw	0.6	0.7	0.0	0.2	0.0	0.0	0.1	Tr.	0.0	0.1	0.0	0.1
Eider	0.0	Tr.	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Large Mergansers	1.7	2.9	0.2	0.3	0.0	0.0	0.9	0.6	0.0	0.1	0.1	0.7
Hooded Mergansers	0.8	1.7	0.9	0.4	1.0	1.9	0.6	0.4	0.2	0.9	0.3	0.3
Other Ducks	0.0	0.1	0.4	0.0	0.0	0.0	0.0	Tr.	0.0	0.0	0.0	0.4
Totals	99.7	100.2	100.1	100.4	99.9	99.9	100.1	99.7	100.0	99.8	99.9	99.8
Sample Size	2028	2278	1477	1734	192	162	2126	2175	521	670	1525	1349

Table 1.--Species composition in duck wing collection in the Atlantic Flyway during the 1962-63 and 1963-64 hunting seasons--continued

Species	Percentage of total kill in--											
	Virginia		N. Carolina		S. Carolina		Georgia		Florida		Flyway weighted	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	23.5	26.9	12.5	13.3	21.6	20.1	17.2	11.5	2.1	1.8	15.6	16.3
Domestic Mallard	0.7	1.6	0.3	0.6	0.0	0.3	0.0	0.3	0.1	Tr.	1.2	1.1
Black Duck	33.3	33.1	11.7	10.9	11.3	11.6	4.7	5.3	1.4	1.5	28.9	24.7
Mottled Duck	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	14.8	10.4	1.9	1.8
Gadwall	1.0	1.9	1.6	3.5	4.2	9.0	0.0	1.0	1.6	3.0	0.9	2.0
American Widgeon	6.3	5.3	8.9	13.6	5.0	5.3	0.0	0.8	6.4	6.0	3.8	4.6
Green-winged Teal	5.0	4.5	7.1	6.3	6.5	5.5	5.3	2.9	6.0	8.0	5.9	7.0
B.W. & Cinn. Teal	0.3	0.0	0.4	0.1	0.8	1.7	0.0	0.0	7.5	10.7	1.4	2.3
Shoveler	0.3	0.1	0.8	0.7	3.4	4.4	0.0	1.3	0.7	2.0	0.5	0.9
Pintail	5.7	5.5	7.0	6.9	0.6	2.8	0.6	0.3	4.9	4.5	2.2	3.1
Wood Duck	11.8	10.0	25.2	19.3	33.6	27.6	38.5	50.4	20.4	15.1	15.8	14.0
Redhead	0.1	0.4	0.1	0.5	0.0	0.1	0.0	0.3	0.3	0.2	0.1	0.2
Canvasback	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	Tr.	Tr.
Greater Scaup	1.0	1.0	2.6	1.1	0.2	0.4	0.0	0.8	0.5	0.3	4.2	3.3
Lesser Scaup	2.9	1.0	4.7	2.3	0.2	1.8	1.2	3.1	1.4	6.4	2.0	2.8
Ringnecked Duck	2.9	2.5	7.8	9.9	6.5	6.6	28.4	16.0	27.0	25.2	6.3	7.3
Goldeneye	0.3	1.3	0.1	0.5	0.0	0.2	0.0	0.0	0.0	Tr.	2.1	2.0
Bufflehead	1.3	2.3	3.9	6.3	0.8	0.5	0.0	1.0	0.2	0.4	1.9	2.2
Ruddy Duck	1.9	1.1	0.6	1.3	0.4	0.1	0.0	0.8	1.0	0.4	0.5	0.6
Scoters	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.0
Oldsquaw	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.1
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1
Large Mergansers	0.1	0.5	2.2	0.9	0.6	0.2	0.0	0.0	0.2	0.4	0.8	0.9
Hooded Mergansers	1.7	1.2	2.3	2.0	3.8	1.5	4.1	4.2	3.0	3.5	1.6	1.7
Other Ducks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1
Totals	100.2	100.2	100.0	100.0	99.7	99.8	100.0	100.0	99.8	100.1	100.1	100.1
Sample Size	788	837	857	958	476	819	169	381	1752	3066		

Table 2.--Species composition in duck wing collection in the Mississippi Flyway during the 1962-63 and 1963-64 hunting seasons

Species	Percentage of total kill in--									
	Minnesota		Wisconsin		Michigan		Iowa		Illinois	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	37.7	38.4	37.7	34.6	41.1	28.3	48.9	31.2	49.6	56.4
Domestic Mallard	0.1	0.3	0.3	0.2	0.6	0.9	0.2	0.4	1.1	0.5
Black Duck	0.9	0.7	4.4	3.0	14.4	10.7	0.7	0.6	4.3	3.2
Mottled Duck	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gadwall	1.0	1.1	2.0	1.1	0.7	0.5	2.8	1.6	2.8	3.2
American Widgeon	3.3	4.8	9.6	6.4	2.6	2.4	5.7	4.5	5.1	3.4
Green-winged Teal	5.8	6.4	5.4	5.9	6.8	7.3	12.5	10.4	7.5	7.6
B.W. & Cinn. Teal	7.9	13.9	6.5	15.4	3.4	7.8	1.0	18.8	1.1	0.4
Shoveler	0.7	2.1	0.4	0.6	0.3	0.6	1.8	1.3	1.2	1.5
Pintail	2.0	3.6	5.1	3.5	2.3	2.1	4.2	5.0	5.6	4.9
Wood Duck	6.9	13.0	15.0	21.5	14.7	17.5	15.2	21.9	17.8	13.2
Redhead	0.3	0.2	0.2	0.3	0.1	0.1	0.7	0.0	0.1	0.1
Canvasback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greater Scaup	0.7	0.1	0.7	0.2	6.5	4.8	0.3	0.1	0.1	0.1
Lesser Scaup	8.7	2.5	2.6	1.5	7.3	6.0	1.7	2.2	0.7	1.3
Ringnecked Duck	19.1	11.2	7.5	3.8	2.8	2.3	3.4	1.3	2.0	2.5
Goldeneye	1.5	0.5	0.4	0.4	1.0	1.1	0.0	0.0	0.2	0.2
Bufflehead	1.9	0.5	1.1	0.6	2.9	5.4	0.0	0.1	0.3	0.7
Ruddy Duck	0.9	0.6	0.4	0.3	0.7	0.3	0.4	0.2	0.3	0.1
Scoters	Tr.	Tr.	Tr.	0.1	0.2	0.5	0.0	0.3	0.1	0.1
Oldsquaw	Tr.	Tr.	0.0	Tr.	0.0	0.0	0.1	0.1	0.0	0.0
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Mergansers	Tr.	Tr.	Tr.	0.0	0.3	0.7	0.0	0.0	0.1	0.0
Hooded Mergansers	0.6	0.1	0.6	0.5	0.8	0.8	0.2	0.2	0.3	0.6
Other Ducks	Tr.	Tr.	Tr.	0.0	Tr.	Tr.	0.0	0.2	0.0	0.0
Totals	100.0	100.0	99.9	99.9	99.5	100.1	99.8	100.4	100.3	100.0
Sample Size	4983	6061	5150	5174	2436	2429	706	1854	1170	1578

Table 2.--Species composition in duck wing collection in the Mississippi Flyway during the 1962-63 and 1963-64 hunting seasons--continued

Species	Percentage of total kill in--									
	Indiana		Ohio		Missouri		Kentucky		Arkansas	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	35.4	47.8	22.9	28.1	54.8	50.2	54.2	62.7	78.0	68.0
Domestic Mallard	0.8	0.6	1.5	1.3	0.3	0.1	1.3	0.5	0.1	0.1
Black Duck	11.1	14.9	8.9	14.1	0.5	0.7	25.3	16.3	0.3	0.7
Mottled Duck	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Gadwall	1.9	1.7	1.1	1.5	3.3	5.2	5.5	4.1	2.4	6.3
American Widgeon	5.5	4.1	2.1	4.4	6.9	7.4	0.5	2.7	1.3	3.7
Green-winged Teal	6.5	9.5	7.8	5.2	8.2	6.6	1.0	2.7	1.5	2.9
B.W. & Cinn. Teal	1.3	0.0	1.9	3.2	0.9	2.6	0.3	0.0	0.0	0.0
Shoveler	0.2	0.9	0.8	0.6	1.3	2.5	0.0	0.7	0.7	1.0
Pintail	1.9	1.0	4.9	3.6	10.1	7.1	0.0	0.2	1.0	0.8
Wood Duck	28.7	12.4	39.4	30.2	10.4	10.0	6.3	3.2	12.7	13.9
Redhead	0.2	0.2	0.0	0.1	0.0	0.2	0.0	0.7	0.0	0.0
Canvasback	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greater Scaup	0.2	0.0	0.4	0.9	0.2	0.0	0.0	0.5	0.0	0.1
Lesser Scaup	0.8	1.9	2.7	2.2	0.9	4.4	0.3	2.7	0.0	0.5
Ringnecked Duck	2.5	1.7	0.8	1.0	1.3	2.2	1.3	0.0	1.9	1.2
Goldeneye	0.0	1.0	0.3	0.4	0.0	0.0	0.3	0.2	0.0	0.0
Bufflehead	1.5	0.3	1.2	1.0	0.3	0.2	0.5	1.5	0.0	0.1
Ruddy Duck	0.6	1.4	2.0	0.7	0.5	0.2	0.0	0.2	0.0	0.0
Scoters	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Oldsquaw	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Mergansers	0.4	0.0	0.0	0.2	0.0	0.0	0.5	0.7	0.0	0.0
Hooded Mergansers	0.4	0.5	0.6	0.7	0.2	0.3	2.6	0.2	0.0	0.7
Other Ducks	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Totals	100.1	99.9	99.7	99.9	100.1	100.0	100.2	99.8	99.9	100.1
Sample Size	523	582	1241	1380	635	1250	384	410	1194	1681

Table 2.--Species composition in duck wing collection in the Mississippi Flyway during the 1962-63 and 1963-64 hunting seasons--continued

Species	Percentage of total kill in--									
	Tennessee		Louisiana		Mississippi		Alabama		Flyway Weighted	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	51.9	39.3	29.2	25.9	46.5	45.6	26.6	27.1	39.6	37.1
Domestic Mallard	2.1	1.2	0.2	Tr.	0.0	0.3	0.7	0.0	0.4	0.3
Black Duck	19.9	20.0	0.6	0.5	2.5	1.7	10.4	7.5	3.9	2.9
Mottled Duck	0.0	0.0	4.2	2.9	0.2	0.0	0.0	0.1	0.6	0.8
Gadwall	6.3	10.1	6.7	8.2	2.8	8.1	10.3	12.2	2.8	4.3
American Widgeon	7.9	4.6	4.3	4.6	3.2	2.6	8.4	9.3	4.8	4.7
Green-winged Teal	0.0	6.0	6.9	6.2	3.8	8.0	3.4	7.3	6.2	6.6
B.W. & Cinn. Teal	0.0	0.1	4.6	4.4	0.2	0.2	0.7	0.8	4.1	8.0
Shoveler	1.6	0.6	4.3	2.7	1.5	0.9	1.4	1.7	1.3	1.8
Pintail	1.4	1.9	11.3	6.5	1.1	1.4	10.0	6.5	4.8	4.3
Wood Duck	5.2	11.2	15.6	10.2	34.8	26.9	16.5	11.6	15.3	14.0
Redhead	0.5	0.0	0.1	0.2	0.0	0.0	0.3	0.5	0.2	0.2
Canvasback	0.0	0.1	Tr.	0.0	0.0	0.2	0.3	0.0	Tr.	Tr.
Greater Scaup	0.0	0.1	0.3	0.4	0.0	0.0	2.6	0.6	1.0	0.5
Lesser Scaup	0.5	0.2	4.3	21.5	0.0	1.4	1.2	7.4	4.1	7.5
Ringnecked Duck	1.8	2.2	6.0	4.2	2.8	2.0	4.3	4.2	7.7	5.0
Goldeneye	0.0	0.6	0.0	0.1	0.2	0.0	0.5	0.3	0.6	0.3
Bufflehead	0.2	0.7	0.0	0.2	0.0	0.2	0.4	1.2	1.0	0.7
Ruddy Duck	0.0	0.0	0.1	0.3	0.0	0.0	0.1	0.1	0.5	0.3
Scoters	0.0	0.0	0.0	Tr.	0.0	0.0	0.0	0.0	Tr.	0.1
Oldsquaw	0.0	0.0	Tr.	0.1	0.0	0.0	0.0	0.0	Tr.	Tr.
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Mergansers	0.0	0.1	0.1	0.1	0.0	0.2	0.3	0.1	0.1	0.1
Hooded Mergansers	0.9	0.7	0.8	0.7	0.4	0.6	1.5	1.5	0.6	0.5
Other Ducks	0.0	0.0	0.3	Tr.	0.0	0.0	0.0	0.0	0.4	Tr.
Totals	100.2	99.7	99.9	99.9	100.0	100.3	99.9	100.0	100.0	100.0
Sample Size	443	804	3178	3720	471	654	728	1435		

Table 3.--Species composition in duck wing collection in the Central Flyway during the 1962-63 and 1963-64 hunting seasons

Species	Percentage of total kill in--											
	Montana		North Dakota		South Dakota		Wyoming		Nebraska		Colorado	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	77.0	78.8	62.6	50.7	51.4	40.8	88.9	78.0	55.3	51.3	80.0	74.6
Domestic Mallard	0.0	0.1	0.0	Tr.	0.1	Tr.	0.4	0.0	0.0	0.1	0.0	0.0
Black Duck	0.0	0.0	0.2	0.1	0.0	Tr.	0.0	0.0	0.0	0.1	0.0	0.0
Mottled Duck	0.0	0.0	0.0	Tr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gadwall	0.6	1.0	11.1	15.3	11.6	15.7	1.0	4.3	4.5	4.8	2.2	3.0
American Widgeon	9.7	6.3	4.4	6.6	3.5	7.5	2.0	5.2	5.3	4.9	3.2	4.5
Green-winged Teal	3.9	5.4	4.3	5.6	6.4	9.3	4.8	4.3	14.9	18.4	10.2	10.7
B.W. & Cinn. Teal	0.7	0.8	5.0	5.4	2.2	8.2	0.4	0.4	1.8	8.9	0.0	0.2
Shoveler	0.8	1.0	2.9	5.4	3.7	4.5	0.2	0.4	2.0	2.0	0.8	1.4
Pintail	4.4	2.8	6.9	8.9	14.2	9.2	1.2	1.5	7.6	7.8	2.7	2.7
Wood Duck	0.2	0.4	0.2	0.1	0.6	0.4	0.0	0.0	3.0	0.7	0.2	0.0
Redhead	0.1	0.2	0.1	0.3	0.6	0.4	0.0	0.3	0.0	0.0	0.0	Tr.
Canvasback	0.0	0.0	0.0	Tr.	0.0	Tr.	0.0	0.0	0.0	0.0	0.0	0.0
Greater Scaup	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.1	0.0	Tr.
Lesser Scaup	0.2	0.5	1.2	0.5	3.4	1.8	0.0	0.5	2.0	0.7	0.0	1.1
Ringnecked Duck	0.3	1.0	0.6	0.3	0.9	1.4	0.0	0.2	2.3	0.1	0.0	0.3
Goldeneye	1.3	1.3	0.1	0.0	0.0	0.0	1.2	4.0	0.0	0.0	0.1	1.0
Bufflehead	0.3	0.0	0.4	0.3	0.8	0.5	0.0	0.4	0.3	0.1	0.5	0.2
Ruddy Duck	0.2	0.1	0.2	0.2	0.5	0.2	0.0	0.1	0.5	0.1	0.1	Tr.
Scoters	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oldsquaw	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Mergansers	0.3	0.2	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.1
Hooded Mergansers	0.2	0.1	0.0	0.0	0.0	Tr.	0.0	0.0	0.3	0.0	0.0	Tr.
Other Ducks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Totals	100.2	100.1	100.2	99.7	100.2	99.9	100.1	99.8	100.1	100.2	100.0	99.8
Sample Size	1063	1342	1710	2682	1022	3872	503	968	396	1435	866	2024

Table 3.--Species composition in duck wing collection in the Central Flyway during the 1962-63 and 1963-64 hunting seasons--continued

Species	Percentage of total kill in--									
	Kansas		New Mexico		Oklahoma		Texas		Flyway Weighted	
	1962	1963	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	32.7	28.4	52.0	46.6	39.4	32.5	20.9	18.7	49.0	42.6
Domestic Mallard	0.0	0.0	0.5	0.2	0.0	0.0	0.1	0.1	0.1	0.1
Black Duck	0.0	0.0	0.0	0.0	0.4	0.1	0.2	0.2	0.1	0.1
Mottled Duck	0.0	0.0	0.5	0.0	0.0	0.0	7.6	6.8	1.9	1.7
Gadwall	7.3	8.7	13.1	14.1	9.5	16.6	9.2	11.4	8.1	10.8
American Widgeon	8.6	8.7	6.6	9.1	5.0	6.3	9.8	10.0	6.2	7.5
Green-winged Teal	26.9	27.1	13.1	15.1	20.3	18.9	12.4	10.7	10.7	11.6
B.W. & Cinn. Teal	0.6	4.5	0.0	0.2	0.2	0.4	1.5	1.1	2.0	4.1
Shoveler	5.0	5.3	3.0	5.0	3.2	4.9	5.9	5.0	3.5	4.1
Pintail	7.2	7.3	1.5	4.9	4.1	2.6	17.9	17.4	10.2	9.5
Wood Duck	2.7	1.0	0.0	0.0	4.1	0.9	4.2	5.6	1.9	1.7
Redhead	0.6	1.1	0.5	0.3	0.6	0.8	0.2	0.4	0.3	0.4
Canvasback	0.0	0.0	0.0	0.0	0.0	0.0	Tr.	0.1	Tr.	Tr.
Greater Scaup	0.1	0.0	0.0	0.0	0.7	0.1	0.2	0.2	0.2	0.1
Lesser Scaup	4.4	5.5	1.5	0.7	7.8	9.2	3.2	8.3	2.5	3.5
Ringnecked Duck	2.3	1.6	0.5	0.5	3.2	4.1	5.7	2.7	2.3	1.4
Goldeneye	0.0	0.0	2.5	1.2	0.4	0.8	0.1	0.1	0.2	0.3
Bufflehead	0.6	0.4	2.5	1.0	0.7	0.9	0.3	0.5	0.5	0.4
Ruddy Duck	0.6	0.4	0.0	0.5	0.4	0.3	0.2	0.2	0.3	0.2
Scoters	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Tr.	0.0
Oldsquaw	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Mergansers	0.1	0.0	1.5	0.6	0.0	0.2	Tr.	0.0	Tr.	0.1
Hooded Mergansers	0.2	0.2	0.0	0.0	0.0	0.3	0.2	0.5	0.1	0.2
Other Ducks	0.1	0.0	0.5	0.0	0.0	0.0	0.1	Tr.	0.1	Tr.
Totals	100.1	100.2	99.8	100.0	100.0	99.9	99.9	100.0	100.2	100.4
Sample Size	1017	1121	198	596	536	853	3183	3331		

Table 4.--Species composition in duck wing collection in the Pacific Flyway during the 1962-63 and 1963-64 hunting seasons

Species	Percentage of total kill in--							
	Washington		Oregon		Idaho		California	
	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	49.6	48.9	35.8	37.0	76.6	74.8	14.2	16.3
Domestic Mallard	Tr.	0.0	0.1	0.1	0.0	0.0	0.1	Tr.
Gadwall	0.9	1.0	1.7	5.2	2.2	3.2	1.8	3.0
American Widgeon	16.8	19.3	21.3	18.2	7.1	7.6	13.0	10.5
Green-winged Teal	10.0	10.9	12.1	11.0	5.4	4.9	15.8	16.1
B.W. & Cinn. Teal	0.3	0.2	0.2	0.7	0.3	0.3	4.8	4.9
Shoveler	2.3	3.3	2.7	4.1	0.6	1.6	9.5	13.7
Pintail	10.9	10.9	16.8	15.4	4.2	4.1	31.1	29.2
Wood Duck	0.2	0.4	1.5	1.1	0.2	0.3	0.7	0.7
Redhead	0.1	0.1	0.1	0.4	0.7	0.5	0.1	0.3
Canvasback	0.1	Tr.	0.0	0.1	0.1	0.1	0.0	0.0
Greater Scaup	1.3	0.3	1.9	0.7	0.1	0.1	2.8	0.5
Lesser Scaup	0.8	0.9	1.0	1.3	0.7	0.2	1.5	1.3
Ringnecked Duck	0.4	0.5	1.1	0.9	0.2	0.5	0.4	0.6
Goldeneye	1.3	0.8	0.2	0.6	1.4	1.3	0.7	0.4
Bufflehead	3.0	1.8	1.9	1.4	0.1	0.4	0.9	0.9
Ruddy Duck	0.5	0.6	0.7	1.2	0.0	Tr.	2.0	1.7
Scoters	1.0	0.0	0.3	0.3	0.0	Tr.	0.3	Tr.
Oldsquaws	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Mergansers	0.1	0.1	0.5	0.1	0.2	0.0	0.1	0.0
Hooded Mergansers	0.3	0.1	0.1	0.2	0.1	Tr.	0.0	Tr.
Other Ducks	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Totals	100.1	100.1	100.0	100.0	100.2	99.9	100.0	100.1
Sample Size	3719	4515	1778	3053	1842	3280	5557	9607

Table 4.--Species composition in duck wing collections in the Pacific Flyway during the 1962-63 and 1963-64 hunting seasons--continued

Species	Percentage of total kill in--							
	Nevada		Utah		Arizona		Flyway weighted	
	1962	1963	1962	1963	1962	1963	1962	1963
Mallard	44.7	44.4	29.5	34.1	24.2	17.4	31.8	31.0
Domestic Mallard	0.0	0.0	Tr.	0.0	0.0	0.2	0.1	Tr.
Gadwall	7.0	10.8	11.1	9.4	4.2	5.5	2.7	3.6
American Widgeon	4.0	5.2	4.7	5.6	10.9	13.1	13.0	11.9
Green-winged Teal	18.8	16.3	12.0	13.2	29.4	31.6	13.1	13.6
B.W. & Cinn. Teal	5.3	5.2	6.6	6.1	7.9	4.4	3.2	3.4
Shoveler	5.6	4.5	10.9	8.7	6.4	5.7	6.5	9.3
Pintail	10.2	8.9	23.3	20.3	12.1	10.0	21.6	21.3
Wood Duck	0.2	0.5	0.0	0.1	0.0	0.0	0.6	0.6
Redhead	1.6	0.8	0.5	0.3	1.5	0.2	0.2	0.3
Canvasback	0.0	0.1	0.0	0.0	0.0	0.0	Tr.	Tr.
Greater Scaup	0.2	0.0	0.1	Tr.	0.4	0.0	1.8	0.4
Lesser Scaup	0.0	0.4	0.2	0.2	0.4	1.9	1.1	1.0
Ringnecked Duck	0.9	0.3	0.1	0.2	1.1	4.4	0.4	0.6
Goldeneye	0.0	0.2	0.3	0.4	0.0	0.2	0.7	0.5
Bufflehead	0.5	0.2	0.2	0.6	0.4	0.2	1.2	1.0
Ruddy Duck	0.7	2.0	0.5	0.8	0.8	4.4	1.2	1.3
Scoters	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.1
Oldsquaw	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Eider	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Mergansers	0.0	0.1	0.0	0.1	0.4	0.6	0.1	0.1
Hooded Mergansers	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Other Ducks	0.2	0.0	0.0	0.0	0.0	0.0	Tr.	0.0
Totals	99.9	100.1	100.0	100.1	100.1	99.8	99.9	100.1
Sample Size	430	1319	2528	3051	265	472		