# ALABAMA WATERFOWL SURVEY

## ANNUAL REPORT, 2011-2012

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May, 2012


Federal Aid Project

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ALABAMA DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

WILDLIFE RESTORATION PROGRAM

Grant Number W-35, Study 1

# 2011-2012 ANNUAL WATERFOWL REPORT

STATE: Alabama

Grant Number: W-35
Time Period: July 1, 2011-June 30, 2012

GRANT TYPE: Surveys and Inventories

GRANT TITLE: Statewide Wildlife Research and Surveys

STUDY I: WATERFOWL RESEARCH AND SURVEYS

Study Objective: To determine waterfowl population characteristics and harvest information needed to plan management of ducks and geese in Alabama.

Job I-A. Title: Cooperative Waterfowl Banding

Job Objective: To band waterfowl in accordance with assigned quotas.

Activity: Attempts to trap and band wood ducks were carried out during the summer of 2011 at the following locations in Alabama:

- Swan Creek W.M.A. in Limestone County – None banded
- Near Mud Creek W.M.A. in Jackson County – 14 AHYM, 6 AHYF, 13 HYM, 3 HYF
- Near the Mobile River in Mobile County – 0 AHYM, 1 AHYF, 1 HYM, 1 HYF
- Near Barbour W.M.A in Barbour County – 5 AHYM, 1 AHYF, 10 HYM, 7 HYF

A total of 62 wood ducks were banded this year with most birds being collected at the Jackson County site. The banding quota recommended for our agency in the Banding Needs document is 500. The classification of birds banded during the 2011 banding season is outlined in Table 1.

Table 1. Number of Wood Ducks Banded by Sex and Age During the 2011 Banding Season

| Age | Sex | Number |
|---|---|---|
| | | |
| AHY | M | 19 |
| AHY | F | 8 |
| HY | M | 24 |
| HY | F | 11 |
| U | M | 0 |
| U | U | 0 |

Remarks: Efforts to trap and band wood ducks were repeated as in past years. Banders in Mobile County and Swan Creek WMA had difficulties on trap sites due to high levels of non-target species such as feral hogs, squirrels, raccoons, and coyotes keeping the wood ducks from the bait site. Banding in Jackson County as well as the other banding sites was hindered due to non-target interference as well as other undetermined reasons (ducks would not utilize bait). Trapping efforts will be expanded to other sites in Alabama for the 2012 trapping season.

Recommendations: This project needs to incorporate additional banding sites in order to band the quota set for our agency. Additionally, different trapping methods such as floating traps, rocket nets and traps partially submerged in water will be investigated.

Job I-B. Title: Survey of Waterfowl Hunting Activity

Job I-B. Objective: To monitor waterfowl harvest trends and hunter activity on the major waterfowl wintering areas within Alabama.

Activity: Waterfowl hunter bag checks were made at the checking stations on the Tennessee River public hunting areas and at private duck hunting properties and in the Mobile Delta at selected times during the waterfowl season. Information regarding the hunter bag checks conducted during the past 10 years is summarized in Table 2.

Table 2: Duck Hunting Activity Comparison for the Tennessee River and Mobile Bay/Delta Areas for the Past 10 Years.

| | Tennessee River | | Mobile Bay & Delta | |
|---|---|---|---|---|
| Hunting Season | Average Hours/Trip | Average Ducks/Trip | Average Hours/Trip | Average Ducks/Trip |
| 11-12 | 3.2 | 1.8 | 3.3 | 2.1 |
| 10-11 | 3.3 | 1.6 | 3.6 | 1.5 |
| 09-10 | 3.6 | 1.8 | 3.3 | 1.3 |
| 08-09 | 3.8 | 1.3 | 3.1 | 1.6 |
| 07-08 | 4.1 | 1.0 | 2.9 | 1.2 |
| 06-07 | 3.7 | 0.6 | 3.2 | 0.9 |
| 05-06 | 4.5 | 1.6 | 3.8 | 1.9 |
| 04-05 | 3.1 | 1.6 | 3.4 | 1.0 |
| 03-04 | 3.1 | 2.3 | 2.7 | 1.4 |
| 02-03 | 4.1 | 1.0 | 3.2 | 0.9 |

The composition of the Alabama duck harvest by species for 2011-2012 is contained in Table 3. Duck hunting activity for the past 32 years in the Tennessee River, Mobile Bay, and Delta is summarized in Table 4. The composition of the Alabama duck hunting harvest by percent for 1980s, 1990s, 2000s, 2010s is contained in Tables 5, 6, 7, and 8 for Tennessee Valley and 9, 10, 11 and 12 for Mobile Delta.

Table 3. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the 2011-2012 Season on the Tennessee River and Mobile Bay

| | Tennessee River | Mobile Bay and Delta |
|---|---|---|
| | % | % |
| Mallard | 6.4 | 0.5 |
| Black Duck | 0.2 | 0.0 |
| Gadwall | 42.6 | 29.4 |
| Widgeon | 0.7 | 1.9 |
| GW Teal | 2.5 | 12.7 |
| Pintail | 0.4 | 0.3 |
| Canvasback | 0.5 | 0.3 |
| Scaup | 1.8 | 6.3 |
| Ringneck | 26.5 | 0.3 |
| Wood Duck | 14.0 | 2.1 |
| Goldeneye | 0.1 | 0.0 |
| Bufflehead | 1.1 | 7.9 |
| Merganser | 0.4 | 0.6 |
| BW Teal | 0.3 | 0.9 |
| Shoveler | 2.4 | 19.5 |
| Ruddy Duck | 0.0 | 2.7 |
| Redhead | 0.0 | 13.9 |
| Mottled Duck | 0.0 | 0.6 |

Table 4. Duck Hunting Activity Comparison for the Tennessee River and Mobile Bay/Delta Areas for the Past 32 Years.

| **Decade of the 2010's** | Tennessee River | | Mobile Bay and Delta | |
|---|---|---|---|---|
| Season | Average Trip Hours | Average Harvest/Trip | Average Trip Hours | Average Harvest/Trip |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 11-12 | 3.2 | 1.8 | 3.3 | 2.1 |
| 10-11 | 3.3 | 1.6 | 3.6 | 1.5 |
| Low Value for Decade | 3.2 | 1.6 | 3.3 | 1.5 |
| High Value for Decade | 3.3 | 1.8 | 3.6 | 2.1 |
| Average | 3.25 | 1.7 | 3.45 | 1.8 |
| | | | | |
| **Decade of the 2000's** | Tennessee River | | Mobile Bay and Delta | |
| Season | Average Trip Hours | Average Harvest/Trip | Average Trip Hours | Average Harvest/Trip |
| 09-10 | 3.6 | 1.8 | 3.3 | 1.3 |
| 08-09 | 3.9 | 1.1 | 2.7 | 1.6 |
| 07-08 | 4.1 | 1.0 | 2.9 | 1.0 |
| 06-07 | 3.7 | 0.6 | 3.2 | 0.9 |
| 05-06 | 4.5 | 1.6 | 3.8 | 1.9 |
| 04-05 | 3.1 | 1.6 | 3.4 | 1.0 |
| 03-04 | 3.1 | 2.3 | 2.7 | 1.4 |
| 02-03 | 4.1 | 1.0 | 3.2 | 0.9 |
| 01-02 | 4.0 | 0.9 | 3.2 | 1.8 |
| 00-01 | 5.2 | 1.3 | 3.3 | 1.4 |
| Low Value for Decade | 3.1 | 0.6 | 2.7 | 0.9 |
| High Value for Decade | 5.2 | 2.3 | 3.8 | 1.9 |
| Average | 4.0 | 1.3 | 3.3 | 1.3 |
| | | | | |
| **Decade of the 1990's** | Tennessee River | | Mobile Bay and Delta | |
| Season | Average Trip Hours | Average Harvest/Trip | Average Trip Hours | Average Harvest/Trip |
| 99-00 | 4.4 | 0.9 | 3.4 | 2.0 |
| 98-99 | 4.9 | 1.3 | 3.3 | 2.0 |
| 97-98 | 4.7 | 1.0 | 3.4 | 1.9 |
| 96-97 | 5.7 | 1.0 | 3.6 | 2.0 |
| 95-96 | 5.6 | 1.2 | 3.4 | 1.9 |
| 94-95 | 5.0 | 1.1 | 3.8 | 1.5 |
| 93-94 | 4.8 | 0.8 | 3.8 | 1.5 |
| 92-93 | 4.6 | 0.8 | 3.9 | 1.7 |
| 91-92 | 4.6 | 0.6 | 3.8 | 1.5 |
| 90-91 | 4.6 | 0.8 | 4.1 | 1.6 |
| Low Value for Decade | 4.4 | 0.6 | 3.3 | 1.5 |
| High Value for Decade | 5.7 | 1.3 | 4.1 | 2.0 |
| Average | 4.9 | 0.9 | 3.6 | 1.8 |
| Average | 4.8 | .7 | 3.8 | 2.1 |

**Table 4 continued on following page.**

| **Decade of the 1980's** | Tennessee River | | Mobile Bay and Delta | |
|---|---|---|---|---|
| Season | Average Trip Hours | Average Harvest/Trip | Average Trip Hours | Average Harvest/Trip |
| 89-90 | 4.8 | 1.1 | 3.5 | 1.8 |
| 88-89 | 4.9 | .6 | 2.8 | 1.5 |
| 87-88 | 4.8 | .8 | 3.6 | 2.0 |
| 86-87 | 4.7 | .6 | 4.4 | 1.1 |
| 85-86 | 4.7 | .7 | 3.8 | 2.4 |
| 84-85 | 4.5 | .7 | 4.8 | 3.5 |
| 83-84 | 5.0 | 1.0 | 3.6 | 1.4 |
| 82-83 | 4.9 | .6 | 4.0 | 2.7 |
| 81-82 | 4.5 | .6 | 4.0 | 3.0 |
| 80-81 | 4.8 | .6 | | 1.6 |
| Low Value for Decade | 4.5 | .6 | 2.8 | 1.1 |
| High Value for Decade | 5.0 | 1.1 | 4.8 | 3.5 |
| Average | 4.8 | .7 | 3.8 | 2.1 |

Table 5. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 2010's on the Tennessee River.

| Season | 19-20 | 18-19 | 17-18 | 16-17 | 15-16 | 14-15 | 13-14 | 12-13 | 11-12 | 10-11 | 2 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # hunters checked | | | | | | | | | 747 | 1054 | 900 |
| # ducks checked | | | | | | | | | 1346 | 1707 | 1527 |
| | | | | | | | | | | | |
| Mallard | | | | | | | | | 6.4 | 17.7 | 12.1 |
| Black Duck | | | | | | | | | 0.2 | 0.9 | 0.6 |
| Gadwall | | | | | | | | | 42.6 | 46.8 | 44.7 |
| Widgeon | | | | | | | | | 0.7 | 1.5 | 1.1 |
| GW Teal | | | | | | | | | 2.5 | 2.5 | 2.5 |
| Pintail | | | | | | | | | 0.4 | 0.6 | 0.5 |
| Canvasback | | | | | | | | | 0.5 | 2.1 | 1.3 |
| Scaup | | | | | | | | | 1.8 | 1.1 | 1.45 |
| Ringneck | | | | | | | | | 26.5 | 10.6 | 18.6 |
| Wood Duck | | | | | | | | | 14.0 | 8.6 | 11.3 |
| Goldeneye | | | | | | | | | 0.1 | 0.3 | 0.2 |
| Bufflehead | | | | | | | | | 1.1 | 1.5 | 1.3 |
| Merganser | | | | | | | | | 0.4 | 2.0 | 1.2 |
| BW Teal | | | | | | | | | 0.3 | 0.3 | 0.3 |
| Shoveler | | | | | | | | | 2.4 | 3.2 | 2.8 |
| Ruddy Duck | | | | | | | | | 0.0 | 0.2 | 0.1 |
| Redhead | | | | | | | | | 0.0 | 0.1 | 0.1 |
| Mottled Duck | | | | | | | | | 0.0 | 0.0 | 0.0 |
| Oldsquaw | | | | | | | | | 0.0 | 0.0 | 0.0 |

Table 6. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 2000's on the Tennessee River.

| Season | 09-10 | 08-09 | 07-08 | 06-07 | 05-06 | 04-05 | 03-04 | 02-03 | 01-02 | 00-01 | 10 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # hunters checked | 1870 | 1677 | 1732 | 1526 | 2256 | 1786 | 830 | 1232 | 1817 | 1314 | 1537 |
| # ducks checked | 3366 | 1844 | 1915 | 936 | 2734 | 2887 | 1868 | 1195 | 1611 | 1763 | 1856 |
| | | | | | | | | | | | |
| Mallard | 21.5 | 25.3 | 9.2 | 19.0 | 22.4 | 13.8 | 8.6 | 30.0 | 32.4 | 48.2 | 23.0 |
| Black Duck | 1.9 | 2.0 | 0.6 | 1.8 | 1.1 | 0.9 | 1.0 | 2.4 | 2.5 | 2.6 | 1.6 |
| Gadwall | 29.9 | 23.5 | 40.8 | 29.5 | 25.5 | 34.1 | 32.2 | 14.1 | 19.1 | 25.4 | 27.6 |
| Baldpate | 1.5 | 2.4 | 1.9 | 1.5 | 1.9 | 5.1 | 1.6 | 1.0 | 2.3 | 1.9 | 2.2 |
| GW Teal | 5.2 | 7.0 | 2.9 | 5.2 | 8.0 | 6.0 | 1.2 | 15.5 | 7.0 | 8.6 | 6.8 |
| Pintail | 1.1 | 4.4 | 0.3 | 1.5 | 1.5 | 2.1 | 0.6 | 0.4 | 1.1 | 1.7 | 1.2 |
| Canvasback | 1.1 | 0.0 | 2.9 | 0.8 | 0.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.4 | 0.6 |
| Scaup | 2.5 | 0.3 | 0.8 | 0.5 | 2.9 | 3.3 | 12.6 | 0.8 | 1.1 | 1.4 | 2.9 |
| Ringneck | 25.3 | 9.2 | 26.1 | 29.9 | 14.0 | 8.5 | 28.9 | 17.1 | 8.3 | 3.7 | 17.1 |
| Wood Duck | 4.8 | 16.2 | 4.6 | 4.6 | 14.0 | 14.0 | 2.8 | 16.2 | 19.9 | 2.4 | 9.8 |
| Goldeneye | 0.9 | 0.9 | 0.1 | 1.1 | 0.6 | 0.2 | 0.3 | 0.0 | 0.3 | 0.0 | 0.3 |
| Bufflehead | 1.5 | 2.0 | 0.0 | 1.2 | 1.2 | 1.4 | 1.0 | 0.4 | 1.2 | 0.8 | 0.9 |
| Merganser | 2.0 | 1.4 | 1.2 | 2.4 | 0.5 | 2.6 | 2.9 | 0.2 | 1.2 | 1.0 | 1.5 |
| BW Teal | 0.0 | 1.0 | 2.5 | 0.0 | 0.7 | 0.1 | 2.0 | 0.4 | 0.2 | 0.2 | 0.8 |
| Shoveler | 0.0 | 2.9 | 3.9 | 0.0 | 3.5 | 7.1 | 3.5 | 1.4 | 2.5 | 1.5 | 2.9 |
| Ruddy Duck | 0.0 | 0.1 | 0.1 | 0.0 | 0.6 | 0.1 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 |
| Redhead | 0.8 | 1.4 | 0.6 | 0.2 | 1.5 | 0.7 | 0.4 | 0.1 | 0.7 | 0.1 | 0.5 |
| Mottled Duck | 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 |

Table 7. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 1990's on the Tennessee River.

| Season | 99-00 | 98-99 | 97-98 | 96-97 | 95-96 | 94-95 | 93-94 | 92-93 | 91-92 | 90-91 | 10 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # hunters checked | 1144 | 1833 | 1648 | | | | | | | | |
| # ducks checked | 1015 | 2392 | 1725 | | | | | | | | |
| | | | | | | | | | | | |
| Mallard | 24.3 | 38.4 | 21.0 | 35.3 | 30.8 | 35.7 | 51.9 | 31.7 | 43.0 | 28.4 | 34.1 |
| Black Duck | 1.7 | 2.8 | 1.0 | 1.3 | 2.2 | 2.4 | 4.8 | 3.8 | 7.6 | 2.1 | 3.0 |
| Gadwall | 23.4 | 12.5 | 16.7 | 16.4 | 23.2 | 20.4 | 13.8 | 16.8 | 12.7 | 17.7 | 17.4 |
| Baldpate | 2.3 | 2.1 | 3.1 | 2.0 | 2.5 | 3.1 | 0.9 | 6.6 | 3.7 | 4.5 | 3.1 |
| GW Teal | 15.8 | 15.8 | 9.0 | 5.1 | 8.4 | 7.4 | 6.6 | 3.9 | 5.2 | 8.9 | 8.6 |
| Pintail | 1.2 | 2.7 | 5.3 | 1.9 | 1.5 | 3.5 | 1.7 | 3.2 | 0.8 | 1.3 | 2.3 |
| Canvasback | 0.2 | 0.5 | 0.3 | 0.1 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| Scaup | 3.6 | 2.8 | 3.8 | 1.2 | 1.4 | 0.7 | 1.1 | 4.2 | 0.5 | 1.5 | 2.1 |
| Ringneck | 6.9 | 10.4 | 15.1 | 13.4 | 6.9 | 9.5 | 5.3 | 15.6 | 3.0 | 9.2 | 9.5 |
| Wood Duck | 7.7 | 4.6 | 13.5 | 15.8 | 11.6 | 9.1 | 5.9 | 6.5 | 15.5 | 11.3 | 10.2 |
| Goldeneye | 1.2 | 1.1 | 1.5 | 1.4 | 1.9 | 1.0 | 1.1 | 0.9 | 2.1 | 3.0 | 1.5 |
| Bufflehead | 3.2 | 1.4 | 1.5 | 1.0 | 3.6 | 0.9 | 1.2 | 2.0 | 2.3 | 3.9 | 2.1 |
| Merganser | 1.5 | 2.3 | 2.0 | 1.8 | 1.6 | 2.2 | 1.8 | 3.1 | 2.6 | 3.5 | 2.2 |
| BW Teal | 0.4 | 0.1 | 1.3 | 0.4 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Shoveler | 5.5 | 3.8 | 4.3 | 2.2 | 2.2 | 3.4 | 3.9 | 1.7 | 0.8 | 4.1 | 3.2 |
| Ruddy Duck | 0.6 | 0.2 | 0.7 | 0.9 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.3 |
| Redhead | 0.5 | 0.4 | 0.6 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 |
| Mottled Duck | 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 |

Table 8. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 1980's on the Tennessee River.

| Season | 89-90 | 88-89 | 87-88 | 86-87 | 85-86 | 84-85 | 83-84 | 82-83 | 81-82 | 80-81 | 10 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| Mallard | 32.7 | 40.8 | 23.4 | 41.1 | 28.7 | 41.7 | 64.5 | 44.4 | 32.0 | 34.3 | 38.4 |
| Black Duck | 4.6 | 4.1 | 2.0 | 2.7 | 4.4 | 3.8 | 5.6 | 4.7 | 2.0 | 4.6 | 3.9 |
| Gadwall | 10.1 | 3.9 | 7.2 | 2.8 | 4.6 | 4.0 | 4.4 | 5.9 | 4.1 | 7.9 | 5.5 |
| Baldpate | 5.0 | 3.0 | 5.9 | 3.4 | 7.4 | 9.0 | 7.5 | 4.5 | 6.5 | 9.3 | 6.2 |
| GW Teal | 5.3 | 15.8 | 22.8 | 18.2 | 13.1 | 2.5 | 3.4 | 2.5 | 3.9 | 4.8 | 9.2 |
| Pintail | 2.1 | 4.0 | 5.8 | 1.5 | 5.8 | 2.3 | 1.8 | 2.5 | 5.1 | 8.5 | 3.9 |
| Canvasback | 0.0 | 0.8 | 0.4 | 0.1 | 0.7 | 1.3 | 0.7 | 0.7 | 1.1 | 1.6 | 0.7 |
| Scaup | 4.8 | 5.6 | 4.1 | 3.1 | 5.6 | 3.1 | 1.3 | 3.7 | 1.3 | 0.6 | 3.3 |
| Ringneck | 10.1 | 8.1 | 12 | 14.4 | 16.4 | 19.4 | 5.5 | 7.8 | 17.9 | 13.2 | 12.5 |
| Wood Duck | 9.8 | 1.3 | 2.4 | 2.9 | 5.6 | 8.3 | 1.6 | 17.3 | 17.9 | 9.5 | 7.7 |
| Goldeneye | 3.5 | 2.5 | 2.4 | 1.2 | 1.5 | 1.1 | 0.5 | 1.9 | 2.3 | 0.9 | 1.8 |
| Bufflehead | 1.0 | 3.2 | 1.3 | 2.8 | 1.3 | 0.6 | 0.1 | 0.5 | 3.5 | 2.7 | 1.7 |
| Merganser | 0.7 | 3.3 | 4.7 | 3.0 | 0.9 | 0.6 | 0.4 | 0.8 | 1.4 | 0.5 | 1.6 |
| BW Teal | 0.0 | 0.1 | 0.4 | 1.8 | 0.4 | 0.5 | 0.1 | 0.1 | 0.3 | 0.0 | 0.4 |
| Shoveler | 9.5 | 2.7 | 4.2 | 0.3 | 2.3 | 0.9 | 1.8 | 1.8 | 0.5 | 1.1 | 2.5 |
| Ruddy Duck | 0.6 | 0.7 | 0.7 | 0.3 | 0.7 | 0.5 | 0.1 | 0.1 | 0.0 | 0.2 | 0.4 |
| Redhead | 0.2 | 0.0 | 0.1 | 0.6 | 0.7 | 0.3 | 0.8 | 0.8 | 0.1 | 0.2 | 0.4 |
| Mottled Duck | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Oldsquaw | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Table 9. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 2010's in the Mobile Bay and Delta.

| Season | 19-20 | 18-19 | 17-18 | 16-17 | 15-16 | 14-15 | 13-14 | 12-13 | 11-12 | 10-11 | 2 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # hunters checked | | | | | | | | | 297 | 205 | 251 |
| # ducks checked | | | | | | | | | 632 | 307 | 470 |
| | | | | | | | | | | | |
| Mallard | | | | | | | | | 0.5 | 2.0 | 1.3 |
| Black Duck | | | | | | | | | 0.0 | 0.0 | 0.0 |
| Gadwall | | | | | | | | | 29.4 | 40.2 | 34.8 |
| Widgeon | | | | | | | | | 1.9 | 0.0 | 0.9 |
| GW Teal | | | | | | | | | 12.7 | 2.6 | 7.7 |
| Pintail | | | | | | | | | 0.3 | 0.0 | 0.2 |
| Canvasback | | | | | | | | | 0.3 | 0.0 | 0.2 |
| Scaup | | | | | | | | | 6.3 | 13.1 | 9.7 |
| Ringneck | | | | | | | | | 0.3 | 0.9 | 0.6 |
| Wood Duck | | | | | | | | | 2.1 | 33.6 | 17.9 |
| Goldeneye | | | | | | | | | 0.0 | 2.0 | 1.0 |
| Bufflehead | | | | | | | | | 7.9 | 0.0 | 3.9 |
| Merganser | | | | | | | | | 0.6 | 1.3 | 0.9 |
| BW Teal | | | | | | | | | 0.9 | 0.3 | 0.6 |
| Shoveler | | | | | | | | | 19.5 | 2.0 | 10.8 |
| Ruddy Duck | | | | | | | | | 2.7 | 0.0 | 1.4 |
| Redhead | | | | | | | | | 13.9 | 0.0 | 6.9 |
| Mottled Duck | | | | | | | | | 0.6 | 2.0 | 1.3 |
| Oldsquaw | | | | | | | | | 0.0 | 0.0 | 0.0 |

Table 10. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 2000's in the Mobile Bay and Delta.

| Season | 09-10 | 08-09 | 07-08 | 06-07 | 05-06 | 04-05 | 03-04 | 02-03 | 01-02 | 00-01 | 10 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # hunters checked | 211 | 239 | 153 | 289 | 387 | 348 | 300 | 408 | 368 | 178 | 325 |
| # ducks checked | 338 | 331 | 252 | 260 | 741 | 344 | 415 | 402 | 676 | 243 | 440 |
| | | | | | | | | | | | |
| Mallard | 1.0 | 0.3 | 1.0 | 0.7 | 0.6 | 0.3 | 1.0 | 2.4 | 0.3 | 5.9 | 1.5 |
| Black Duck | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gadwall | 52.8 | 50.8 | 43.5 | 48.5 | 62.1 | 59.2 | 37.8 | 36.2 | 49.9 | 21.8 | 44.9 |
| Baldpate | 3.1 | 3.1 | 3.0 | 1.2 | 0.9 | 0.6 | 2.7 | 0.5 | 0.9 | 3.7 | 1.7 |
| GW Teal | 3.7 | 3.7 | 10.3 | 20.0 | 14.9 | 3.2 | 11.8 | 13.7 | 10.1 | 30.5 | 14.3 |
| Pintail | 0.0 | 0.0 | 0.0 | 0.3 | 1.5 | 0.0 | 0.0 | 0.0 | 1.9 | 1.6 | 0.7 |
| Canvasback | 0.0 | 0.0 | 0.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.2 |
| Scaup | 12.5 | 13.3 | 10.3 | 6.2 | 5.0 | 6.4 | 5.8 | 25.3 | 18.0 | 8.2 | 10.7 |
| Ringneck | 0.0 | 0.3 | 4.0 | 0.7 | 3.1 | 5.2 | 6.3 | 3.0 | 4.6 | 6.6 | 4.2 |
| Wood Duck | 7.3 | 7.3 | 8.6 | 4.2 | 2.6 | 11.9 | 17.3 | 3.2 | 1.8 | 8.6 | 7.3 |
| Goldeneye | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bufflehead | 2.4 | 3.1 | 4.7 | 0.0 | 0.7 | 4.1 | 2.4 | 5.2 | 6.2 | 4.1 | 3.4 |
| Merganser | 2.3 | 2.3 | 0.8 | 0.7 | 0.3 | 0.3 | 0.7 | 0.2 | 0.3 | 0.0 | 0.4 |
| BW Teal | 8.8 | 8.8 | 1.7 | 2.7 | 0.7 | 1.5 | 1.9 | 0.0 | 1.8 | 2.5 | 1.6 |
| Shoveler | 5.9 | 5.9 | 1.3 | 4.2 | 4.9 | 3.5 | 5.1 | 2.7 | 0.7 | 2.0 | 3.1 |
| Ruddy Duck | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.9 | 0.5 | 1.2 | 0.6 | 0.4 | 0.6 |
| Redhead | 0.0 | 0.3 | 8.2 | 6.9 | 0.9 | 0.6 | 5.3 | 0.5 | 2.2 | 0.4 | 3.1 |
| Mottled Duck | 0.2 | 0.1 | 2.2 | 3.0 | 1.5 | 2.3 | 1.4 | 5.9 | 0.7 | 2.9 | 2.5 |
| Oldsquaw | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Table 11. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 1990's in the Mobile Bay and Delta.

| Season | 99-00 | 98-99 | 97-98 | 96-97 | 95-96 | 94-95 | 93-94 | 92-93 | 91-92 | 90-91 | 10 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| # hunters checked | 287 | 201 | 213 | | | | | | | | |
| # ducks checked | 565 | 413 | 411 | | | | | | | | |
| | | | | | | | | | | | |
| Mallard | 3.6 | 0.5 | 0.7 | 3.6 | 5.2 | 5.0 | 7.8 | 3.9 | 6.1 | 10.0 | 4.6 |
| Black Duck | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 0.4 | 3.9 | 0.5 |
| Gadwall | 35.5 | 19.9 | 4.6 | 8.1 | 6.0 | 4.6 | 2.3 | 4.8 | 2.4 | 2.2 | 9.0 |
| Baldpate | 4.1 | 3.7 | 1.9 | 1.1 | 1.8 | 7.4 | 2.0 | 3.3 | 0.8 | 3.1 | 2.9 |
| GW Teal | 28.4 | 48.2 | 25.0 | 15.5 | 35.0 | 32.2 | 34.6 | 32.7 | 32.7 | 27.9 | 31.2 |
| Pintail | 1.6 | 1.0 | 1.2 | 1.3 | 3.4 | 2.0 | 3.8 | 1.5 | 2.9 | 5.2 | 2.4 |
| Canvasback | 1.5 | 1.7 | 1.2 | 1.7 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.8 |
| Scaup | 7.5 | 9.7 | 17.0 | 25 | 4.3 | 5.8 | 4.9 | 19.8 | 5.7 | 3.1 | 10.3 |
| Ringneck | 2.3 | 2.9 | 14.0 | 9.2 | 7.6 | 7.0 | 2.6 | 1.8 | 8.2 | 11.8 | 6.7 |
| Wood Duck | 1.8 | 0.5 | 1.0 | 1.4 | 0.0 | 3.3 | 0.0 | 0.0 | 0.4 | 1.3 | 1.0 |
| Goldeneye | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bufflehead | 4.1 | 2.7 | 1.4 | 1.6 | 1.5 | 0.0 | 0.8 | 3.0 | 0.0 | 0.0 | 1.4 |
| Merganser | 1.8 | 0.5 | 0.7 | 0.9 | 0.2 | 0.8 | 1.1 | 0.6 | 0.0 | 0.0 | 0.7 |
| BW Teal | 0.6 | 3.7 | 15.0 | 16.1 | 11.5 | 17.0 | 13.8 | 17.2 | 22.0 | 23.1 | 14.0 |
| Shoveler | 3.8 | 1.7 | 10.0 | 5.2 | 14.4 | 2.9 | 10.5 | 6.9 | 9.0 | 3.5 | 6.8 |
| Ruddy Duck | 1.6 | 0.3 | 0.2 | 1.2 | 1.1 | 2.9 | 2.0 | 0.0 | 0.8 | 2.2 | 1.2 |
| Redhead | 0.7 | 2.5 | 1.0 | 2.6 | 2.4 | 3.3 | 1.7 | 0.0 | 0.4 | 2.2 | 1.7 |
| Mottled Duck | 1.1 | 1.0 | 2.9 | 6.1 | 4.5 | 5.8 | 11.9 | 4.5 | 8.2 | 0.0 | 4.6 |
| Oldsquaw | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Table 12. Percentage of Ducks by Species in the Alabama Hunter Bag Checks Conducted During the Decade of the 1980's in the Mobile Bay and Delta.

| Season | 89-90 | 88-89 | 87-88 | 86-87 | 85-86 | 84-85 | 83-84 | 82-83 | 81-82 | 80-81 | 10 Yr. Avg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| Mallard | 6.1 | 14.5 | 11.8 | 0.8 | 0.0 | 0.9 | 3.8 | 8.4 | 5.1 | 3.0 | 5.4 |
| Black Duck | 1.7 | 2.4 | 0.4 | 2.7 | 1.6 | 0.6 | 0.3 | 0.0 | 0.3 | 0.0 | 1.0 |
| Gadwall | 5.8 | 20.8 | 13.2 | 15.6 | 1.6 | 1.9 | 6.2 | 8.1 | 3.5 | 14.6 | 9.1 |
| Baldpate | 4.7 | 6.8 | 3.2 | 3.1 | 0.0 | 0.3 | 3.5 | 4.1 | 2.7 | 12.9 | 4.1 |
| GW Teal | 35.3 | 29.5 | 29.3 | 7.0 | 1.6 | 20.1 | 33.2 | 38.2 | 41.7 | 24.6 | 26.1 |
| Pintail | 6.1 | 3.4 | 2.0 | 1.6 | 0.0 | 1.3 | 2.2 | 2.5 | 2.9 | 3.9 | 2.6 |
| Canvasback | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 2.5 | 0.7 | 0.2 | 0.0 | 0.4 |
| Scaup | 3.1 | 5.8 | 6.9 | 14.8 | 88.5 | 27.9 | 4.4 | 0.0 | 25.3 | 3.0 | 18.0 |
| Ringneck | 4.2 | 2.9 | 5.1 | 9.4 | 0.0 | 3.8 | 4.9 | 1.0 | 1.4 | 4.5 | 3.7 |
| Wood Duck | 0.6 | 3.9 | 1.4 | 0.0 | 0.0 | 8.3 | .5 | 0.3 | 1.1 | 3.7 | 2.0 |
| Goldeneye | 0.6 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.3 |
| Bufflehead | 0.6 | 1.0 | 1.6 | 7.8 | 0.0 | 0.6 | 0.3 | 0.5 | 0.6 | 0.0 | 1.3 |
| Merganser | 1.1 | 2.4 | 1.0 | 1.6 | 0.0 | 0.6 | 1.4 | 0.0 | 0.3 | 0.0 | .8 |
| BW Teal | 24.4 | 4.8 | 7.5 | 9.4 | 1.6 | 30.1 | 17.4 | 13.5 | 6.7 | 7.7 | 12.3 |
| Shoveler | 2.2 | 1.4 | 11.4 | 7.0 | 0.0 | 5.3 | 9.0 | 5.7 | 3.0 | 7.9 | 5.3 |
| Ruddy Duck | 1.9 | 0.5 | 0.8 | 10.2 | 1.6 | 4.4 | 8.5 | 2.7 | 4.3 | 13.9 | 4.9 |
| Redhead | 1.1 | 0.0 | 3.5 | 11.7 | 3.3 | 1.6 | 1.9 | 0.5 | 0.8 | 0.7 | 2.5 |
| Mottled Duck | 0.6 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Oldsquaw | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

One coot was taken in the Mobile Delta for each 4 hunting trips. The Tennessee Valley averaged only one coot taken for each 83 hunting trips. The coot is not a desirable species for most hunters in Alabama.

The Gulf Coast of Alabama traditionally receives only sparse and sporadic use by geese; this year only 2 geese were reported harvested.

The goose population of the Tennessee Valley contains two distinct segments, resident Canada geese and migrant Canada geese from the Southern James Bay area of Canada. In recent years the resident geese have expanded their numbers to the point of becoming a nuisance in some areas. Alabama has incorporated an early season to improve management of resident geese. This allows hunters more opportunity in the field and the harvest can serve act as a tool to contain a goose population explosion. The 2011-2012 Special Goose Season was 15 days beginning on September 1st and ending September 15th. Success during this season continues to depend on local giant Canada geese populations and increasing hunter participation. Bag checks reflected harvest success estimates during this special season to be 2.7 geese harvested per hunter trip; however, these data are biased considering only a handful of private properties were included in the data set. No Canada geese were reported during the first split of regular Canada goose season, September 24th – October 5th, outside the Southern James Bay Population zone. The 2nd split of the Canada goose season ran from December 3rd through January 29th and resulted in 1 Canada goose recorded in the harvest checks. Goose harvest during the regular season decreased as compared to the 2010-11 season. In recent years, migrant Canada goose numbers, most of which winter at Wheeler NWR, were at levels well below historical averages. The small, but presently stable, group of Snow geese that winter in Alabama congregates at Wheeler Refuge where there is no open season. Most goose hunting opportunity is presently in the form of hunting resident Canada geese, which by their nature are harvested more frequently during special seasons or early segments of the regular seasons. These seasons are currently growing slowly in popularity and are providing the most substantial portion of the goose harvest in Alabama. Since these seasons were implemented early in the population growth stage of resident Canada geese in the state, the harvest is presently serving somewhat successfully as a control measure, yet remaining small by flyway standards. These "resident" season harvests are not normally subjected to the more drastic harvest swings sometimes associated with weather related migrations of "interiors". Therefore, harvest will not tend to vary as greatly from year to year. Harvest of geese in Alabama is expected to continue to track the growth and availability of resident goose harvest opportunity within the state. Table 13 is a comparison of hunter activity measured in the number of trips to harvest one Canada Goose at times outside and concurrent with the duck season.

Table 13. Comparison of Number of Hunter Trips to Harvest One Canada Goose in Tennessee Valley.

| Dates | Geese/Trip |
|---|---|
| 9/1/11-9/15/11 | 2.7 |
| 9/24/11 -10/5/11 | N/A |
| 12/3/10–1/29/12 | 1 goose/ 622 trips |

Recommendations: This project furnishes vital data that is used in developing recommendation on waterfowl season and bag limits for next year. It is recommended that this project continue.

Job I-C. Title: Inventory of Wintering Waterfowl

Job I-C. Objective: To determine periods and variations of distribution or abundance of waterfowl on major waterfowl wintering areas within Alabama.

Activity: Two annual aerial waterfowl inventories were flown on the Tennessee River, Mobile Bay and Delta as in previous years. The first of the surveys is termed the pre-season inventory and the second is conducted in cooperation with the U.S. Fish and Wildlife Service's mid-winter inventory. The results for the complete Tennessee River and the Mobile Bay and Delta inventories are represented in the tables below. The pre-season and mid-winter inventories are compared to historical data in Tables 16 and 18 for the Tennessee River and 17 and 19 for the Mobile area.

The water level on the Tennessee River is presented as average number of feet above normal winter pool level. Normal winter pool represents 157,750 acres. The reservoir areas of the Tennessee River change with fluctuations in water elevation. These are presented in the Tables on page 9. The Mobile Bay and Delta survey covers about 57,600 acres and requires around two hours to survey. The Bay and Delta are tidally influenced; however, the water acreage varies very little under normal tidal conditions.

The 2011 pre-season surveys were up 39% in the Tennessee Valley (northern) region and up 169% in the Mobile Delta (southern) versus the 2010 survey. Goose numbers surveyed for both regions numbered 443, which was a decrease by 47% as compared to 2010.

The 2012 Mid-winter counts reflected an increase in ducks numbers by 5% in the Tennessee Valley and an increase of 61% in the Mobile Bay and Delta versus the 2011 survey. Compared to the 10 year averages, 2012 mid-winter duck survey numbers were +1% in the Tennessee Valley and +24% in the Delta. Mid-Winter goose numbers remained low (1,200) and reflect no significant change from 2011.

USFWS personnel reported that the Canada goose numbers continue to decline and only 466 geese were observed during the peak on February 7, 2012. This number is well below the 1,665 birds observed on January 2, 2011 and the historical average. Snow goose numbers peaked at 650 birds, fewer than in 2011, although the annual variation in snow goose numbers seems to correlate with population fluctuations. Greater white front geese numbers peaked on January 24, 2012 at 235 observed, which is more than the 80 observed in 2011. Duck numbers at Wheeler peaked at 51,000, which was an increase from 46,967 during the 2010-11 season.

Table 14. Data from Inventories of the Tennessee River, Mobile Bay and Delta for the 2011-2012 Hunting Seasons

| **Tennessee River** | | Winter Pool = 157,750 acres | | | Summer Pool = 196,900 acres | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| Date | Temperature | Water Level | Ducks Seen | % Change from Previous Flight | Geese Seen | % Change from Previous Flight | Coots Seen | % Change from Previous Flight |
| 11/20/11 | 62 | 0.4 | 32,030 | +39% | 433 | -49.4% | 52,223 | -18% |
| 01/04/12 | 45 | 0.4 | 76,505 | +5% | 1,163 | -69% | 38,610 | -16% |
| | | | | | | | | |
| **Mobile Bay and Delta** | | Winter Pool = 57,600 acres | | | Summer Pool = 57,600 acres | | | |
| | | | | | | | | |
| Date | Temperature | Water Level | Ducks Seen | % Change from Previous Flight | Geese Seen | % Change from Previous Flight | Coots Seen | % Change from Previous Flight |
| 11/21/11 | N/A | normal | 3,047 | +169% | 10 | N/A (0 last) | 10,875 | +247% |
| 01/03/12 | N/A | normal | 2,757 | +61% | 37 | +363% | 4,607 | +36% |

The Tennessee River inventory is composed of four segments which correspond to the four reservoirs located within the state. The area of Wheeler Reservoir east of U.S. highway 31 which encompasses approximately 21,000 acres is in the inventory but is not included in the area of the reservoir in Table 15.

Table 15. Data from Inventories of the 4 Reservoirs Comprising the Alabama portion of the Tennessee River during the 2011-2012 Hunting Season.

| **Guntersville Reservoir** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Winter Pool = 593.0 MSL 62,000 acres | | | Summer Pool = 595.0 MSL 66,000 acres | | | | |
| Date | Approximate Survey Time | Air Temp. | Approximate Reservoir Elevation | Approximate Reservoir Acres | Number of Ducks | Number of Geese | Number of Coots |
| | | | | | | | |
| 11/20/11 | 120 min. | 62 | 593.57 | 64,908 | 28,481 | 160 | 49,335 |
| 01/04/12 | 120 min. | 45 | 593.54 | 64,821 | 23,745 | 297 | 32,065 |
| | | | | | | | |
| **Wheeler Reservoir** | | | | | | | |
| Winter Pool = 550.0 MSL 45,450 acres | | | Summer Pool = 556.0 MSL 67,070 acres | | | | |
| Date | Approximate Survey Time | Air Temp. | Approximate Reservoir Elevation | Approximate Reservoir Acres | Number of Ducks | Number of Geese | Number Coots |
| | | | | | | | |
| 11/20/11 | 45 min. | 60 | 551.40 | 50,461* | 2,943 | 8 | 1,755 |
| 01/04/12 | 45 min. | 42 | 551.70 | 51,535* | 334 | 2 | 475 |
| | | | | | | | |
| *Note: The acreage shown is for the entire reservoir, the inventory area is about 21,000 acres less. | | | | | | | |
| | | | | | | | |
| **Wilson Reservoir** | | | | | | | |
| Winter Pool = 504.7 MSL 15,000 acres | | | Summer Pool = 507.7 MSL 15,600 acres | | | | |
| Date | Approximate Survey Time | Air Temp. | Approximate Reservoir Elevation | Approximate Reservoir Acres | Number of Ducks | Number of Geese | Number Coots |
| | | | | | | | |
| 11/20/11 | 30 min | 60 | 506.8 | 15,406 | 69 | 0 | 411 |
| 01/04/12 | 30 min | 42 | 505.40 | 15,159 | 99 | 0 | 925 |
| | | | | | | | |
| **Pickwick Reservoir** | | | | | | | |
| Winter Pool = 408.0 MSL 37,000 acres | | | Summer Pool = 414.0 MSL 42,700 acres | | | | |
| Date | Approximate Survey Time | Air Temp. | Approximate Reservoir Elevation | Approximate Reservoir Acres | Number of Ducks | Number of Geese | Number Coots |
| | | | | | | | |
| 11/20/11 | 60 min | 60 | 409.10 | 37,220 | 537 | 265 | 722 |
| 01/04/12 | 60 min | 42 | 409.60 | 37,820 | 1,128 | 209 | 507 |

Table 16. Historical Data from Alabama Pre-season Inventories of the Tennessee River.

| **Decade of the 2010's** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | # of Ducks | % Change from Previous Season | # of Geese | % Change from Previous Season | # of Coots | % Change from Previous Season |
| | | | | | | | |
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| | | | | | | | |
| 11/20/11 | 2011-12 | 32,030 | 39% | 433 | -49% | 52,223 | 23% |
| 11/22/10 | 2010-11 | 23,020 | -38% | 855 | 45% | 42,425 | -16% |
| Low Value for Decade | | 23,020 | | 433 | | 42425 | |
| High Value for Decade | | 32,030 | | 855 | | 52,223 | |
| Average for 2010s | | 27,525 | | 644 | | 47,324 | |
| **Decade of the 2000's** | | | | | | | |
| Date | Season | # of Ducks | % Change from Previous Season | # of Geese | % Change from Previous Season | # of Coots | % Change from Previous Season |
| 11/23/09 | 2009-10 | 37,422 | .04% | 588 | 99% | 76,260 | 11% |
| 11/25/08 | 2008-09 | 37,250 | -24% | 296 | -60% | 68,588 | -29% |
| 11/20/07 | 2007-08 | 48,744 | 275% | 748 | 279% | 96,728 | 252% |
| 11/21/06 | 2006-07 | 17,722 | -47% | 268 | -70% | 38,259 | 70% |
| 11/22/05 | 2005-06 | 33,681 | 261% | 910 | 139% | 22,445 | -16% |
| 11/20/04 | 2004-05 | 9,316 | -59% | 380 | -28% | 26,718 | -47% |
| 11/23/03 | 2003-04 | 22,546 | -11% | 529 | -12% | 50,002 | 4% |
| 11/22/02 | 2002-03 | 25,212 | 7% | 600 | 20% | 48,088 | -23% |
| 11/18/01 | 2001-02 | 23,545 | -26% | 502 | -50% | 62,116 | 83% |
| 12/05/00 | 2000-01 | 31,786 | 47% | 1,003 | -3% | 33,919 | -2% |
| Low Value for Decade | | 9,316 | | 380 | | 22,445 | |
| High Value for Decade | | 48,744 | | 1,003 | | 96,728 | |
| Average for 2000s | | 23,401 | | 599 | | 40,221 | |
| **Decade of the 1990's** | | | | | | | |
| Date | Season | # of Ducks | % Change from Previous Season | # of Geese | % Change from Previous Season | # of Coots | % Change from Previous Season |
| 12/07/99 | 99-00 | 21,636 | -26% | 1,036 | -4% | 34,738 | -18% |
| 12/08/98 | 98-99 | 29,126 | 5% | 1,075 | 5% | 42,196 | 3% |
| 11/17/97 | 97-98 | 27,853 | 3% | 1,025 | 66% | 40,809 | 29% |
| 11/29/96 | 96-97 | 27,011 | -20% | 619 | -32% | 31,740 | 41% |
| 11/29/95 | 95-96 | 33,681 | 77% | 910 | 22% | 22,445 | 33% |
| 12/02/94 | 94-95 | 19,041 | -54% | 745 | -44% | 16,886 | -36% |
| 12/16/93 | 93-94 | 41,678 | 12% | 1,331 | 37% | 26,328 | -29% |
| 12/14/92 | 92-93 | 37,330 | 26% | 975 | -29% | 37,120 | 36% |
| | 91-92 | 29,634 | 75% | 1,370 | 116% | 27,330 | 13% |
| | 90-91 | 16,904 | 7% | 633 | 1% | 24,235 | 27% |
| Low Value for Decade | | 16,904 | | 745 | | 16,886 | |
| High Value for Decade | | 41,678 | | 1,370 | | 42,196 | |
| Average for 1990's | | 28,389 | | 972 | | 30,383 | |

Table 16 continued.

| **Decade of the 1980's** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | # of Ducks | % Change from Previous Season | # of Geese | % Change from Previous Season | # of Coots | % Change from Previous Season |
| 12/05/89 | 89-90 | 15,859 | -30% | 628 | -65% | 19080 | -2% |
| | 88-89 | 22,776 | -10% | 1781 | 134% | 19494 | -17% |
| 12/03/87 | 87-88 | 25,397 | 23% | 762 | | 23594 | -4% |
| | 86-87 | 20,700 | 31% | | -100% | 24500 | 25% |
| 12/03/85 | 85-86 | 15,836 | -10% | 1728 | 49% | 19655 | 71% |
| 11/29/84 | 84-85 | 17,544 | 40% | 1163 | 37% | 11491 | -32% |
| 11/29/83 | 83-84 | 12,500 | 51% | 850 | 95% | 16800 | 38% |
| 11/30/82 | 82-83 | 8,299 | -38% | 435 | -66% | 12206 | 8% |
| | 81-82 | 13,406 | -6% | 1271 | 24% | 11265 | 102% |
| 11/25/80 | 80-81 | 14,322 | | 1028 | | 5563 | |
| Low Value for Decade | | 8,299 | | 435 | | 5,563 | |
| High Value for Decade | | 25,397 | | 1,781 | | 24,500 | |
| Average for 1980's | | 16,664 | | 965 | | 16,365 | |

Table 17. Historical Number of Waterfowl Seen During Pre-season Inventories of the Mobile Bay and Delta.

| **Decade of the 2010s** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| | | | | | | | |
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| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 11/21/11 | 2011-12 | 3,047 | 169% | 10 | N/A | 10,875 | 247% |
| 11/23/10 | 2010-11 | 1,132 | -7% | 0 | N/A | 3,132 | 152% |
| Low Value for Decade | | 1,132 | | 0 | 0 | 3,132 | |
| High Value for Decade | | 3,047 | | 0 | 10 | 10,875 | |
| Average for 2000s | | 2,090 | | 0 | 5 | 7,004 | |
| **Decade of the 2000s** | | | | | | | |
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| 11/23/09 | 2009-10 | 1,211 | -48% | 0 | | 1,239 | 196% |
| 11/24/08 | 2008-09 | 2,356 | 62% | 0 | | 418 | -61% |
| 11/19/07 | 2007-08 | 1,453 | 20% | 0 | | 1,065 | 42% |
| 11/20/06 | 2006-07 | 1,166 | -34% | 0 | | 1,850 | 83% |
| 11/21/05 | 2005-06 | 1,790 | 49% | 0 | | 1,007 | -55% |
| 11/22/04 | 2004-05 | 1,200 | -58% | 0 | | 2,253 | -40% |
| 11/25/03 | 2003-04 | 2,889 | 19% | 0 | | 3,781 | 127% |
| 11/24/02 | 2002-03 | 2,421 | -40% | 0 | | 1,664 | -51% |
| 11/20/01 | 2001-02 | 4,054 | -6% | 0 | | 3,390 | -59% |
| 12/04/00 | 2000-01 | 4,331 | -64% | 0 | | 8,214 | -76% |
| Low Value for Decade | | 1,166 | | 0 | | 1,007 | |
| High Value for Decade | | 4,331 | | 0 | | 8,214 | |
| Average for 2000s | | 2,550 | | 0 | | 3,165 | |
| **Decade of the 1990s** | | | | | | | |
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| 12/08/99 | 99-00 | 12,088 | 94% | 0 | | 34,152 | 349% |
| 12/10/98 | 98-99 | 6,241 | 39% | 0 | | 7,613 | -76% |
| 11/10/97 | 97-98 | 4,485 | 53% | 0 | | 31,090 | 245% |
| 11/12/96 | 96-97 | 2,931 | 54% | 0 | | 9,008 | -5% |
| 11/13/95 | 95-96 | 1,908 | 71% | 0 | | 9,446 | 48% |
| 11/14/94 | 94-95 | 1,116 | -33% | 0 | | 6,398 | 34% |
| 11/17/93 | 93-94 | 1,654 | -75% | 0 | | 4,779 | -40% |
| 11/17/92 | 92-93 | 6,498 | 32% | 0 | | 7,916 | -55% |
| 11/22/91 | 91-92 | 4,908 | 29% | 0 | | 17,572 | 314% |
| 11/13/90 | 90-91 | 3,802 | -2% | 0 | | 4,245 | -19% |
| Low Value for Decade | | 1,116 | | 0 | | 4,245 | |
| High Value for Decade | | 12,088 | | 0 | | 34,152 | |
| Average for 1990s | | 4,563 | | 0 | | 13,222 | |

Table 17 continued.

| **Decade of the 1980s** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| 11/13/89 | 89-90 | 3,888 | 99% | 0 | | 5,215 | 63% |
| | 88-89 | 1,955 | -44% | 0 | | 3,200 | -40% |
| | 87-88 | 3,475 | 190% | 0 | | 5,295 | -50% |
| | 86-87 | 1,200 | -54% | 0 | | 10,600 | 64% |
| | 85-86 | 2,610 | -65% | 10 | | 6,480 | 20% |
| | 84-85 | 7,400 | 63% | 0 | | 5,420 | -71% |
| | 83-84 | 4,530 | -42% | 0 | | 19,000 | 86% |
| | 82-83 | 7,785 | 1% | 6 | | 10,200 | -10% |
| | 81-82 | 7,710 | -10% | 0 | | 11,330 | -54% |
| | 80-81 | 8,560 | | 0 | | 24,475 | |
| Low Value for Decade | | 1,200 | | 0 | | 3,200 | |
| High Value for Decade | | 8,560 | | 10 | | 24,475 | |
| Average for 1980s | | 4,911 | | 2 | | 10,122 | |

Table 18. Historical Number of Waterfowl Seen During Mid-winter Inventories of the Tennessee River.

| **Decade of the 2010s** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
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| 1/4/12 | 2011-12 | 76,505 | 5% | 1,163 | -69% | 38,610 | -16% |
| 1/4/11 | 2010-11 | 72,800 | 33% | 3,707 | 38% | 45,872 | 68% |
| Low Value for Decade | | | | | | | |
| High Value for Decade | | | | | | | |
| Average for 2010s | | | | | | | |
| **Decade of the 2000s** | | | | | | | |
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| 1/5/10 | 2009-10 | 54,866 | 16.2% | 2,677 | 15.8% | 27,269 | 8.2% |
| 1/6/09 | 2008-09 | 47,228 | 17.7% | 2,312 | 600% | 25,213 | 8.2% |
| 1/7/08 | 2007-08 | 40,113 | 179% | 329 | -69% | 95,307 | 600% |
| 1/7/07 | 2006-07 | 14,384 | -50% | 1,075 | 33% | 13,500 | -69% |
| 1/5/06 | 2005-06 | 29,016 | 25% | 811 | 147% | 43,893 | 11% |
| 1/3/05 | 2004-05 | 23,282 | -25% | 328 | 21% | 39,460 | -16% |
| 1/7/04 | 2003-04 | 31,035 | 8% | 271 | -37% | 47,188 | 5% |
| 1/7/03 | 2002-03 | 28,781 | 19% | 427 | -56% | 44,992 | 59% |
| 1/8/01 | 2001-02 | 24,277 | -40% | 975 | -4% | 28,327 | -28% |
| 1/3/01 | 2000-01 | 40,182 | 52% | 1,020 | 12% | 39,092 | -3% |
| Low Value for Decade | | 14,384 | | 271 | | 13,500 | |
| High Value for Decade | | 40,182 | | 1,075 | | 47,188 | |
| Average for 2000s | | 27,280 | | 701 | | 36,636 | |
| **Decade of the 1990s** | | | | | | | |
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| 1/4/00 | 99-00 | 26,397 | -30% | 910 | -17% | 40,502 | 4% |
| 1/05/99 | 98-99 | 37,670 | 24% | 1,101 | -32% | 38,929 | -3% |
| 1/10/98 | 97-98 | 30,296 | 111% | 1,608 | 50% | 39,966 | 196% |
| 1/7/97 | 96-97 | 14,384 | -45% | 1,075 | -4% | 13,500 | -43% |
| | 95-96 | 26,116 | 11% | 1,123 | 20% | 23,543 | 35% |
| | 94-95 | 23,479 | -29% | 934 | -18% | 17,428 | -44% |
| | 93-94 | 33,078 | 11% | 1,138 | 32% | 31,023 | -7% |
| | 92-93 | 29,906 | -14% | 865 | 37% | 33,275 | 3% |
| | 91-92 | 34,777 | 85% | 632 | 11% | 32,280 | 21% |
| | 90-91 | 18,823 | 34% | 567 | -75% | 26,692 | 26% |
| Low Value for Decade | | 14,384 | | | | 13,500 | |
| High Value for Decade | | 37,670 | | | | 40,502 | |
| Average for 1990s | | 27,493 | | | | 29,714 | |

Table 18 continued.

| **Decade of the 1980s** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| | 89-90 | 14,088 | -20% | 2,274 | | 21,155 | -24% |
| | 88-89 | 17,588 | 5% | 1,336 | | 27,763 | 6% |
| | 87-88 | 16,818 | 11% | 773 | | 26,278 | 10% |
| | 86-87 | 15,100 | 17% | | | 23,800 | 158% |
| | 85-86 | 12,925 | 34% | 3,188 | | 9,232 | -25% |
| | 84-85 | 9,620 | -41% | 822 | | 12,385 | 13% |
| | 83-84 | 16,200 | 19% | 1,800 | | 11,000 | -26% |
| 1/4/83 | 82-83 | 13,589 | -39% | 991 | | 14,931 | 26% |
| 1/5/82 | 81-82 | 22,159 | -13% | 1,053 | | 11,887 | -4% |
| | 80-81 | 25,426 | | 1,470 | | 12,333 | |
| Low Value for Decade | | 9,620 | | | | 9,232 | |
| High Value for Decade | | 25,426 | | | | 27,773 | |
| Average for 1980s | | 16,351 | | | | 17,076 | |

Table 19. Number of Waterfowl Seen During Mid-winter Inventories of the Mobile Bay and Delta for the Past 32 Years.

| **Decade of the 2010s** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
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| 1/3/12 | 2011-12 | 2,757 | 61% | 37 | 362% | 4,607 | 36% |
| 1/4/11 | 2010-11 | 1,710 | -13% | 8 | 100% | 3,400 | 49% |
| Low Value for Decade | | 1,710 | | 8 | | 3,400 | |
| High Value for Decade | | 2,757 | | 37 | | 4,607 | |
| Average for 2010s | | 2,234 | | 23 | | 4,004 | |
| **Decade of the 2000s** | | | | | | | |
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| 1/05/10 | 2009-10 | 1,970 | 411% | 4 | | 2286 | |
| 1/06/09 | 2008-09 | 385 | -312% | 0 | | 0 | |
| 1/08/08 | 2007-08 | 3,709 | 356% | 0 | | 2,286 | -10% |
| 1/9/07 | 2006-07 | 814 | 36% | 0 | | 2,532 | 325% |
| 1/6/06 | 2005-06 | 599 | -52% | 0 | | 596 | -80% |
| 1/4/05 | 2004-05 | 1,259 | 13% | 0 | | 3,017 | 10% |
| 1/8/04 | 2003-04 | 1,118 | 98% | 0 | | 2,751 | 134% |
| 1/8/03 | 2002-03 | 562 | -80% | 0 | | 1,175 | -65% |
| 1/8/02 | 2001-02 | 2,779 | -35% | 0 | | 3,390 | 0% |
| 1/3/01 | 2000-01 | 4,331 | -28% | 0 | | 3,395 | -68% |
| Low Value for Decade | | 562 | | 0 | | 596 | |
| High Value for Decade | | 4,331 | | 0 | | 3,395 | |
| Average for 2000s | | 1637 | | 0 | | 2,408 | |
| **Decade of the 1990s** | | | | | | | |
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| 1/05/00 | 99-00 | 6,046 | -25% | 0 | | 10,657 | -35% |
| 1/07/99 | 98-99 | 8,017 | 167% | 0 | | 16,409 | 175% |
| 1/08/98 | 97-98 | 3,000 | -38% | 0 | | 5,969 | -36% |
| 1/09/97 | 96-97 | 4,832 | -4% | 8 | | 9,372 | 8% |
| 1/05/96 | 95-96 | 5,054 | 99% | 0 | | 8,718 | -46% |
| | 94-95 | 2,538 | 12% | 9 | | 16,018 | 131% |
| | 93-94 | 2,262 | 35% | 4 | | 6,930 | 135% |
| | 92-93 | 1,673 | -63% | 0 | | 2,954 | -36% |
| | 91-92 | 4,496 | -63% | 0 | | 4,631 | -20% |
| | 90-91 | 12,229 | -18% | 0 | | 5,816 | -12% |
| Low Value for Decade | | 1,673 | | 0 | | 2,954 | |
| High Value for Decade | | 12,229 | | 9 | | 16,409 | |
| Average for 1990s | | 5,015 | | 2 | | 8,747 | |

Table 19 continued.

| **Decade of the 1980s** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Date | Season | Ducks | % Change from Previous Season | Geese | % Change from Previous Season | Coots | % Change from Previous Season |
| | | | | | | | |
| | 89-90 | 14,916 | 22% | 0 | | 6,605 | 50% |
| | 88-89 | 12,258 | 209% | 0 | | 4,400 | 161% |
| | 87-88 | 3,972 | 5% | 0 | | 1,685 | -65% |
| | 86-87 | 3,800 | -55% | 0 | | 4,800 | -61% |
| | 85-86 | 8,367 | 61% | 85 | | 12,365 | 56% |
| | 84-85 | 5,188 | -44% | 0 | | 7,910 | -36% |
| | 83-84 | 9,300 | 9% | 0 | | 12,300 | 19% |
| | 82-83 | 8,550 | 8% | 0 | | 10,325 | -27% |
| | 81-82 | 7,895 | -42% | 0 | | 14,200 | -15% |
| | 80-81 | 13,500 | | | | 16,700 | |
| Low Value for Decade | | 3,800 | | 0 | | 1,685 | |
| High Value for Decade | | 14,916 | | 85 | | 16,700 | |
| Average for 1980s | | 8,775 | | 9 | | 9,129 | |

Recommendations: This project furnishes vital data that is used in developing recommendation on waterfowl season and bag limits for next year. It is recommended that this project continue.