



Arkansas Game and Fish Commission
Little Rock, Arkansas
2 Natural Resources Drive

Memorandum

To: Doyle Shook **Date:** 01/31/2007

From: Luke Naylor **CC:** Scott Henderson
David Goad
Brad Carner
Ricky Chastain
Waterfowl Team
Nancy Ledbetter
Keith Stephens

Subject: January Aerial (Midwinter) Waterfowl Survey

AGFC personnel conducted aerial waterfowl surveys January 1 through January 5 in the Northeast (Jason Carbaugh), Grand Prairie and East Central (Sonny Thompson), Southwest (Griffin Park), and Southeast (Luke Naylor) regions and on January 8 in the Northwest Arkansas River Valley (Kiah Gardner). Weather conditions ranged from mostly clear to cloudy during the survey period with cool temperatures ranging from lows in the 20s and lower 30s to highs in the low 50s. Visibility was good during all surveys. This survey was conducted at a similar time as last year.

Habitat conditions were excellent statewide following recent heavy rains. Abundance of flooded habitat increased significantly following the November and December surveys in all regions and remained high throughout the survey period.

A regional listing of survey totals is found in Table 1. Waterfowl numbers this January were higher than last year but still well below the long-term average (Figure 1). The statewide total duck count of 368,398 represents a 37% increase from last year's count of 267,928 but remains well below the 1985–2007 January survey average of 825,088 total ducks.

The mallard count of 165,270 is only a 2% percent increase from last January's count of 161,713 and, like total duck numbers, remains well below the long-term average of 552,230 mallards (Figure 2). The Northeast survey region had been the stronghold for mallards during November and December, but mallard numbers were more evenly distributed in all regions of the Delta during this survey. Abundant rainfall across the state resulted in large amounts of flooded habitats in the East Central and Southeast regions and waterfowl appeared to have responded to this new habitat by spreading southward through the Delta.

Snow goose numbers (270,700, up from 237,155 in December) remain high this year. Numbers of white-fronted geese were much higher than last month, totaling 48,560 compared to December's estimate of 25,325.

The January survey was again flown in conjunction with the Midwinter Waterfowl Survey organized by the U.S. Fish and Wildlife Service and conducted by all states. Staff from USFWS Wildlife Refuges conduct waterfowl ground counts and, when appropriate, these survey numbers may be added to AGFC aerial survey totals. This year ground counts from Bald Knob, White River, and Cache River National Wildlife Refuges were included to produce a final Midwinter total for Arkansas. Table 2 shows these totals along with comparisons to the Midwinter surveys from January 2006 and the 1997-present long-term average. Also shown are totals for Zone 1 (Northwest and Southwest survey regions), Zone 2 (Northeast region), and Zone 3 (East Central and Southeast regions). The increase in survey totals from January 2006 is more pronounced in these data, with mallard and dabbling duck numbers up 35% and 78%, respectively. Even so, total dabblers and total ducks were 17% below the long-term average.

Table 1. Numbers of waterfowl observed during the January 2007 Arkansas Aerial Waterfowl Survey.

| Species | Northwest | Southwest | Northeast | East Central | Southeast | Statewide |
|--------------------|------------------|------------------|------------------|---------------------|------------------|------------------|
| Mallard | 12,675 | 14,287 | 61,460 | 19,485 | 57,363 | 165,270 |
| Black Duck | 0 | 0 | 0 | 0 | 0 | 0 |
| Gadwall | 10,835 | 2168 | 14,680 | 2425 | 25,657 | 55,783 |
| Wigeon | 0 | 0 | 50 | 2050 | 110 | 2210 |
| G.W. Teal | 1340 | 2640 | 19,270 | 25 | 1740 | 25,015 |
| B.W. Teal | 0 | 0 | 0 | 0 | 0 | 0 |
| N. Shoveler | 2675 | 400 | 11,030 | 850 | 25,645 | 40,600 |
| N. Pintail | 300 | 1550 | 21,170 | 1150 | 35,030 | 59,200 |
| Wood Duck | 0 | 0 | 0 | 265 | 20 | 285 |
| ALL DABLERS | 27,825 | 21,045 | 127,660 | 26,250 | 145,583 | 348,363 |

| Species | Northwest | Southwest | Northeast | East Central | Southeast | Statewide |
|-------------------|------------------|------------------|------------------|---------------------|------------------|------------------|
| Ruddy | 0 | 0 | 0 | 800 | 20 | 820 |
| Redhead | 0 | 15 | 0 | 0 | 0 | 15 |
| Canvasback | 35 | 100 | 1450 | 0 | 0 | 1585 |
| Scaup | 25 | 245 | 0 | 1150 | 920 | 2340 |
| Ring-necked | 1310 | 70 | 4190 | 0 | 9200 | 14,770 |
| Bufflehead | 25 | 125 | 0 | 0 | 30 | 180 |
| Mergansers | 0 | 0 | 0 | 125 | 0 | 125 |
| ALL DIVERS | 1395 | 555 | 5640 | 2225 | 10,170 | 19,985 |

| Species | Northwest | Southwest | Northeast | East Central | Southeast | Statewide |
|------------------------|------------------|------------------|------------------|---------------------|------------------|------------------|
| Snow/Ross' Geese | 0 | 1300 | 134,615 | 28,850 | 105,935 | 270,700 |
| White-fronted Geese | 0 | 200 | 5205 | 15,700 | 27,455 | 48,560 |
| Canada Geese | 987 | 75 | 250 | 0 | 196 | 1508 |
| ALL GEESE | 987 | 1575 | 140,070 | 44,550 | 133,586 | 320,768 |

Figure 1. Aerial Waterfowl Survey Statewide Totals for All Ducks, 1985-2006

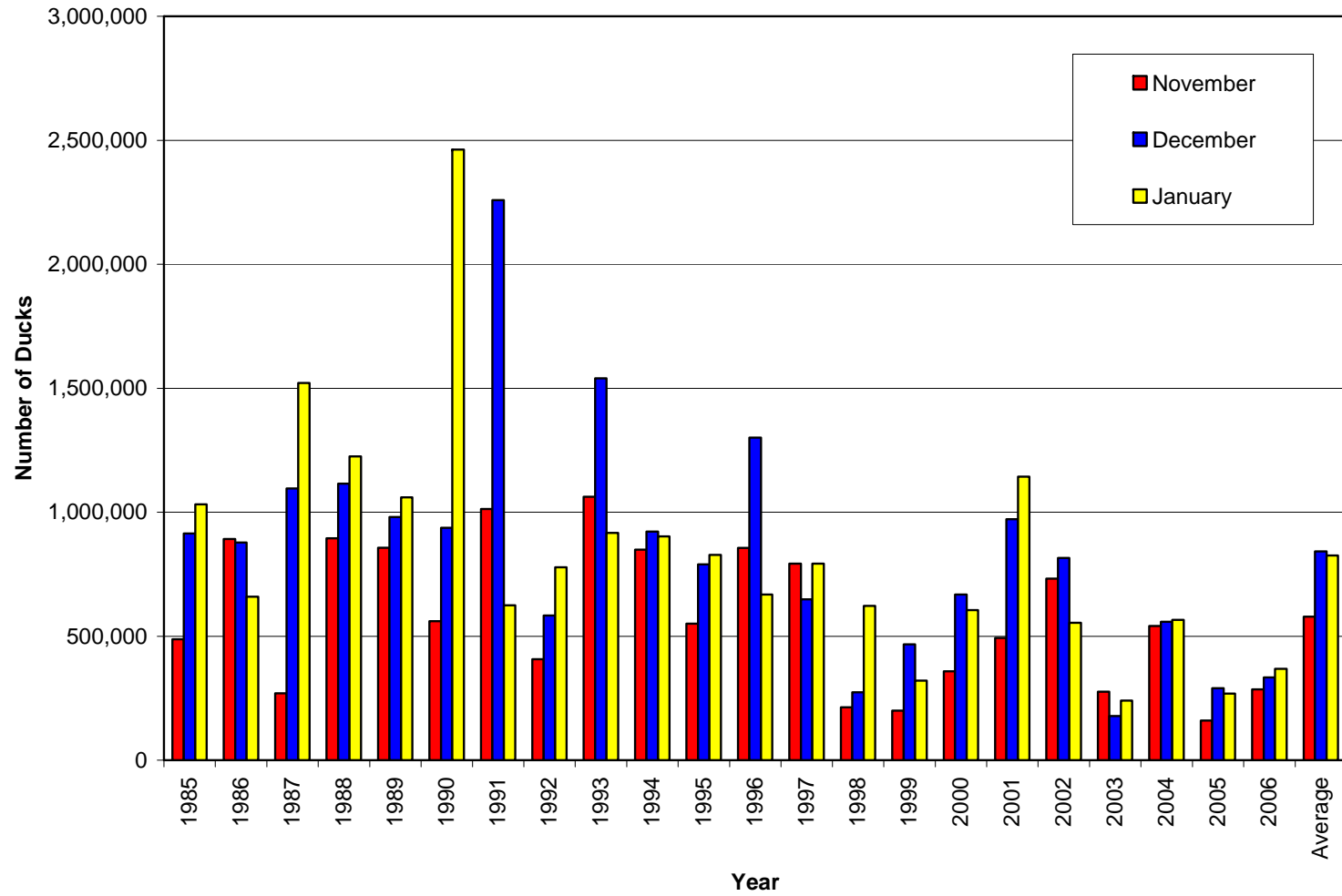


Figure 2. Aerial Waterfowl Survey Statewide Totals for Mallards, 1987-2006

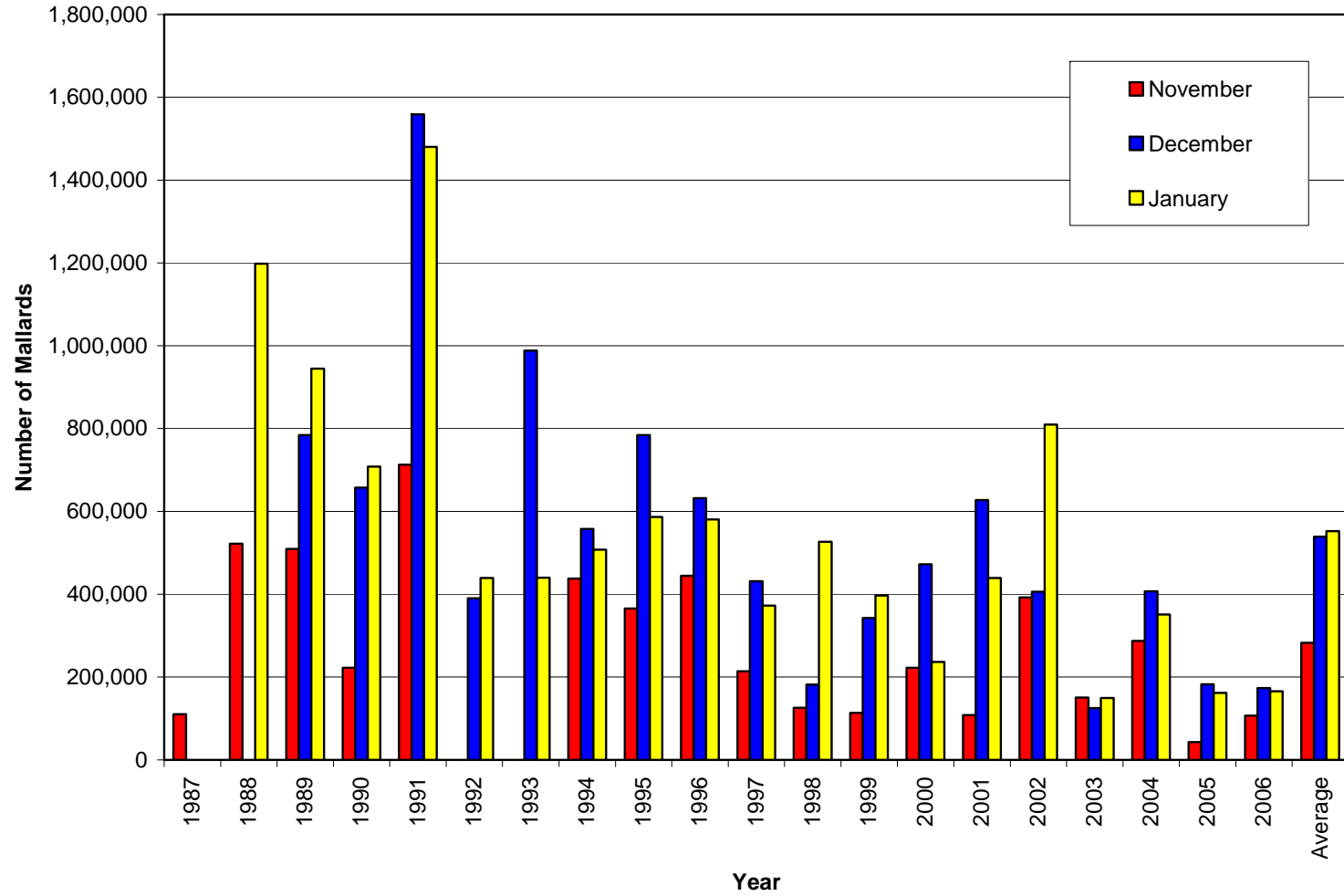


Table 2. Numbers of waterfowl observed during the January 2007 Arkansas Midwinter Waterfowl Survey by Zone and including historical comparisons.

| SPECIES | Zones | | | TOTAL/AVG | | | % CHG 2007 FROM | |
|-----------------------|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|------------|
| | 1 | 2 | 3 | 2007 | 2006 | 97-06 avg | 2006 | 97-06 avg |
| Mallard | 26,962 | 107,621 | 84,106 | 218,689 | 161,713 | 377,573 | 35 | -42 |
| Black duck | 0 | 0 | 0 | 0 | 6 | 66 | | -100 |
| Mottled duck | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gadwall | 13,003 | 30,848 | 29,460 | 73,311 | 32,049 | 78,027 | 129 | -6 |
| American wigeon | 0 | 1,670 | 2,460 | 4,130 | 4,876 | 7,520 | -15 | -45 |
| G.W. Teal | 3,980 | 34,990 | 1,865 | 40,835 | 21,674 | 25,795 | 88 | 58 |
| B.W. Teal | 0 | 0 | 0 | 0 | 0 | 679 | 0 | -100 |
| N. Shoveler | 3,075 | 25,701 | 26,445 | 55,221 | 18,184 | 21,591 | 204 | 156 |
| N. Pintail | 1,850 | 30,345 | 36,200 | 68,395 | 18,280 | 44,537 | 274 | 54 |
| Wood duck | 0 | 25 | 303 | 328 | 1,942 | 1,502 | -83 | -78 |
| Whistling duck | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Total Dabblers | 48,870 | 231,200 | 180,839 | 460,909 | 258,724 | 557,289 | 78 | -17 |
| Redhead | 15 | 0 | 0 | 15 | 12 | 114 | 25 | -87 |
| Canvasback | 135 | 1,450 | 0 | 1,585 | 1,235 | 2,620 | 28 | -40 |
| Scaup | 270 | 0 | 2,070 | 2,340 | 1,836 | 5,141 | 27 | -54 |
| Ringneck | 1,380 | 6,990 | 9,750 | 18,120 | 4,616 | 16,530 | 293 | 10 |
| Goldeneye | 0 | 0 | 150 | 150 | 0 | 58 | | 160 |
| Bufflehead | 150 | 0 | 30 | 180 | 840 | 878 | -79 | -79 |
| Ruddy duck | 0 | 0 | 820 | 820 | 0 | 38 | | 2,047 |
| Total Divers | 1,950 | 8,440 | 12,820 | 23,210 | 8,539 | 25,379 | 172 | -9 |
| Eider | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Scoter | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Long-tailed Duck | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Harlequin | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Total Seaducks | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Merganser | 0 | 0 | 133 | 133 | 665 | 315 | -80 | -58 |
| Unidentified Duck | 0 | 0 | 1,250 | 1,250 | 0 | 623 | | 101 |
| Total Ducks | 50,820 | 239,640 | 195,042 | 485,502 | 267,928 | 583,606 | 81 | -17 |
| Brant | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Snow goose | 1,300 | 149,215 | 134,035 | 284,550 | 362,241 | 349,382 | -21 | -19 |
| Ross goose | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Canada Goose | 1,062 | 250 | 196 | 1,508 | 4,595 | 9,507 | -67 | -84 |
| W.F. Goose | 200 | 6,051 | 42,655 | 48,906 | 45,290 | 27,118 | 8 | 80 |
| Total Geese | 2,562 | 155,516 | 176,886 | 334,964 | 412,126 | 386,007 | -19 | -13 |
| Tundra swan | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Trumpeter swan | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Mute Swan | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Unidentified Swan | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Total Swans | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Coot | 3,355 | 10,000 | 1,756 | 15,111 | 2,735 | 12,017 | 453 | 26 |
| Grand Total | 56,737 | 405,156 | 373,684 | 835,577 | 682,789 | 981,630 | 22 | -15 |