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ILLINOIS WATERFOWL HARVEST, HUNTER ACTIVITY, AND ATTITUDES TOWARD DATES FOR TEAL/DUCK/GOOSE SEASONS, ZONE BOUNDARIES, AND GOOSE HARVEST MONITORING SYSTEM, IN 1994-95

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Abstract: Purchasers of the previous year's (1993) Illinois Migratory Waterfowl Stamp were sampled via mail questionnaire to obtain information on waterfowl harvest, hunter activity, and attitudes toward selected issues, during the 1994 season (57,543 stamps were sold in 1994). Of 2,716 respondents (70% response), 463 (17%) did not purchase a stamp again in 1994. Thus, the sample size was reduced to 2,253 respondents, 89% of which hunted waterfowl in Illinois in 1994-95. An estimated 53,226 hunters (4% more than in 1993) expended 816,185 days afield (20% more than in 1993) and harvested 332,803 waterfowl (2% more than in 1993). The ratio of duck hunters to goose hunters was 1.20:1 in 1994. During the September teal season, 8,062 hunters spent 20,341 days afield and harvested 12,436 teal (45% more than in 1993). During the regular duck season (increased from 30 to 40 days), 44,447 hunters expended 475,264 days afield and harvested 246,949 ducks (13% more than in 1993) and 3,880 coots. Duck hunters spent 40% of their days afield on public hunting areas, 5% on municipal/county areas, 21% on private clubs, and 34% on other areas. During the regular goose season, 37,090 hunters devoted 320,580 days afield to harvest 67,790 Canada geese (27% less than in 1993) and 1,753 other geese. The Canada goose harvest included 25,956 taken in the Southern Illinois Quota Zone, 6,573 taken in the Rend Lake Quota Zone, 6,444 taken in North Quota Zone Counties, and 10,465 taken in Central Quota Zone Counties, which collectively accounted for 73% of the statewide harvest. The estimated goose harvest in the North and Central Quota Zone Counties was within 1% of the harvest recorded for these counties via a newly-established phone-in monitoring system. In the Southern Illinois Quota Zone, 54% of the Canada goose harvest occurred on commercial hunting clubs, 28% on non-commercial clubs/private areas, and 18% on public areas. A majority (65%) of the hunters thought that the dates for the September teal season (September 10-18) were about right, and 68% preferred that shooting time begin 1/2 hour before sunrise during this season. A plurality (40%) of the hunters preferred that the regular duck season begin on Wednesday/end on Sunday. Majorities

(51-61%) of duck and goose hunters were satisfied with the boundaries that divide the North, Central, and South Waterfowl Zones. Majorities (68-76%) of goose hunters were supportive of the newly-established phone-in system for monitoring Canada goose harvest in selected counties in the North and Central Zones. Mean duck harvest and hunter activity were computed by county and administrative region for the 5-year period from 1989 through 1993 (Appendix A).

The purpose of this study was to collect information via mail questionnaire from a systematic sample of waterfowl hunters in Illinois following the 1994-95 hunting season. Data were obtained for waterfowl harvest, hunter activity, and attitudes of hunters toward selected hunting regulations and other subjects. The questionnaire used for the 1994-95 season (Fig. 1) was similar to those employed in previous years (Anderson 1983, 1984, 1985, 1986, 1987, 1988, and 1989; Anderson and Williamson 1990, 1991, 1992, 1993, 1994; Anderson et al. 1995).

METHODS AND MATERIALS

The mailing list for the 1994-95 questionnaire was compiled by systematically selecting stubs from the sales of 36,500 of the previous year's (1993) Illinois Migratory Waterfowl Stamps. The stamps were printed with matching (i.e., same I.D. numbers) stubs attached. Vendors were instructed to write each stamp purchaser's name and mailing address on the stub, and to return the stubs to the Department of Conservation (DOC--largest agency forming the current Department of Natural Resources [DNR]) Permit Office in Springfield. Persons on the mailing list were notified via letter postmarked 25 October 1994 that they would receive a

questionnaire at the close of the hunting season. The notice included a form for keeping records of hunting activity and waterfowl harvested (Fig. 5).

Methods used to mail the 1994-95 Illinois Waterfowl Hunter Survey questionnaire and to process data from returned questionnaires were similar to those employed in previous years (Anderson 1983). On 19 January 1995, the questionnaire and a cover letter (Figs. 1 and 2) were mailed to 3,905 purchasers (3,508 residents and 397 non-residents) of the Illinois Migratory Waterfowl Stamp. Non-respondents were mailed 2nd and 3rd copies of the questionnaire and accompanying letters (Figs. 3 and 4) on 1 March and again on 13 April, respectively. As of 25 May 1995, 2,716 usable questionnaires were returned for a response rate of 70%. In 1986-1993, when the mailing lists were comparable to the 1994-95 list, response rates were 70-75%.

Procedures used to estimate numbers of hunters, days afield, waterfowl harvested, cripples lost, and confidence intervals were as described in the final report for the 1984 survey (Anderson 1986), with the following exceptions. The adjustment factors for stamp-exempt hunters were changed from 1.182 to 1.085 for duck hunters, from 1.218 to 1.087 for goose hunters, and from 1.200 to 1.086 for all waterfowl hunters (Anderson 1986:7). These changes were necessary because, beginning in 1994, senior (≥ 65 years) hunters were no longer exempt from purchasing the Illinois Migratory Waterfowl Stamp. The adjustment factors accounted for the number of stamp-exempt hunters relative to the number of stamp-purchasing hunters. Thus, the latter covered hunters 16-64

years of age in 1981-1993 and hunters ≥ 16 years (i.e., included seniors) in 1994. The 1994-95 estimates of waterfowl harvest and hunter activity were based on a sales of 57,543 of the 1994 Illinois Migratory Waterfowl Stamps.

The mean hunter of duck hunters, their days afield, and ducks harvested were computed by county and administrative region for the 5-year period 1989 through 1993. These data are presented in Appendix A.

SEASON LENGTHS AND BAG LIMITS

Illinois' early teal season took place on 10-18 September 1994, and the daily bag limit was any aggregate of 4 blue-winged or green-winged teal. Shooting hours were from sunrise to sunset.

The regular duck season was increased from 30 days in 1993 to 40 days in 1994. The bag limit was 3 ducks (2 mallards) per day using the Conventional System (same as in 1993), and shooting time was 1/2 hour before sunrise to sunset (Fig. 6).

For Canada geese, the 1994 season length was 51 days (46 days in 1993) in the North Zone and Central Zone. These seasons were split into two segments. The DOC implemented a Canada goose harvest monitoring system in 18 counties in the North and Central Zones beginning with the 1994 season (Fig. 6). Goose hunters in these counties had to obtain a special permit (Fig. 7), issued free with purchase of the Illinois Migratory Waterfowl Stamp, and they had to report daily the Canada geese they harvested via a toll-free phone number (1-800-WETLAND). The quotas were 13,000

Canada geese for the North Quota Zone Counties and 22,400 for the Central Quota Zone Counties. Procedures for calculating the quotas are described in a document prepared by the DOC's Waterfowl Program (Anonymous 1994).

The Canada goose season extended for 51 days (also 51 days in 1993) in the South Zone. In the Southern Illinois and Rend Lake Quota Zones, the seasons were 51 days or when 39,800 and 11,400 Canada geese were harvested, respectively. The statewide quota was 109,600 Canada geese. The bag limit was 2 Canada geese per day statewide.

There was no early (September) Canada goose season, nor were extra days added to the regular goose season, in northeastern Illinois in 1994.

FINDINGS

Of the 2,716 respondents to the questionnaire, 463 (17%) did not purchase an Illinois Migratory Waterfowl Stamp again in 1994. The other 2,253 respondents purchased an average of 1.10 stamps each: 92% purchased 1 stamp, 7% purchased 2 stamps, 1% purchased 3-5 stamps, and <0.1% purchased ≥ 6 stamps. Of the 2,253 stamp purchasers, 2,005 (89%) hunted waterfowl in Illinois during the 1994 season.

Waterfowl Harvest and Hunter Activity

An estimated 53,226 waterfowl hunters (4% more than in 1993) were active in Illinois during the 1994 season (Table 1). They spent 816,185 days afield (20% more than in 1993) and harvested

332,803 waterfowl (2% more than in 1993).

Of the 53,226 hunters who were active in 1994, 30% hunted ducks only, 17% hunted geese only, and 53% hunted both ducks and geese (Table 2). It is noteworthy that the proportion of waterfowl hunters who pursued ducks decreased from an average of 88% in 1981-1987 to an average of 77% in 1988-1994. Conversely, the proportion of waterfowl hunters who pursued geese increased from an average of 42% in 1981-1987 to an average of 70% in 1988-1994 (Table 2).

September Teal Season. An estimated 8,062 hunters spent 20,341 days afield, and harvested 12,436 teal during Illinois' 9-day teal season in 1994 (Table 3). There were more teal hunters (1,962), more days afield (4,721), and more teal harvested (2,578) in Administrative Region 3A than in any other region. Region 1B ranked 2nd in all three categories. The 1994 estimates for teal hunters, days afield, and teal harvested were 22-45% greater than comparable estimates for 1993 (Table 4). However, teal harvest and hunting activity were, on the average, 47-60% less in 1992-1994 than in 1985-1987. The U.S. Fish and Wildlife Service (FWS) suspended the September season during the 4 years from 1988 to 1991.

Hunter success rates during the September season in 1994 were 0.61 teal per hunter per day afield and 1.54 teal per hunter per season. Success rates in previous years ranged from 0.51 to 0.83 teal per hunter per day afield and from 1.32 to 2.31 teal per hunter per season (Table 5).

The FWS estimated that Illinois' September teal harvest

increased from 3,690 birds in 1993 to 6,900 birds in 1994 (Martin and Padding 1995). The Great Flood of 1993, which ravaged wetland habitats, undoubtedly had a major negative impact on teal hunting activities in Illinois in that year.

Regular Duck Season. An estimated 44,447 individuals hunted ducks during the regular duck season in Illinois in 1994 (Table 6). These hunters harvested 246,944 ducks in 475,264 days afield. Although there were more duck hunters and more days spent afield in Region 1B than in any other region, the duck harvest was greatest in Region 3A (74,311). Compared to the previous year, the number of duck hunters increased 9%, days afield increased 30%, and duck harvest increased 13% in 1994 (Table 7).

The 246,944 ducks harvested in Illinois in 1994 included an estimated 137,263 mallards, 44,683 wood ducks, and 64,998 other ducks (including 3,760 canvasback). The FWS estimated that 198,204 total ducks were harvested in the state during the regular duck 1994 season, which included 99,538 mallards, 30,603 wood ducks, and 68,063 other ducks (including 2,319 canvasback) (Martin and Padding 1995). The FWS estimates indicated that duck harvest increased 9% in Illinois, 27% in the Mississippi Flyway, and 17% in the United States, from 1993 to 1994.

Statewide, hunter success rates were 0.51 duck per hunter per day afield and 5.47 ducks per hunter per season during the regular duck season in 1994 (Table 8). From 1981 to 1993, success rates ranged from 0.48 to 0.72 duck per hunter per day afield and from 4.30 to 8.00 ducks per hunter per season.

Two-thirds (66%) of the duck hunters were active in a single county, 25% were active in 2 counties, and 9% were active in ≥ 3 counties. Similarly, 55% of the duck hunters were active in their county of residence: 32% were active only in their county of residence and 23% were active in their county of residence plus one or more other counties.

Statewide in 1994, 48% of the duck hunters were active on public hunting areas, 7% were active on municipal/county areas, 26% were active on private clubs, and 50% were active on other areas (Table 9). For days afield, 40% occurred on public hunting areas, 5% occurred on municipal/county areas, 21% occurred on private clubs, and 34% occurred on other areas. Based on comparable data collected in 1981, public hunting areas attracted 40% of the days afield, private clubs attracted 18%, and other areas attracted 42% of the days afield (Anderson 1983).

Coot Hunting. The coot harvest was estimated at 3,880 birds in Illinois in 1994, 169% greater than the estimated harvest for 1993 (Tables 6 and 7). The FWS estimated the Illinois coot harvest at 1,013 birds for the 1994 season, down 5% from that agency's estimate for 1993 (Martin and Padding 1995).

Regular Goose Season. An estimated 37,090 goose hunters were active during the regular goose season in Illinois in 1994-95, and they spent 320,580 days afield (Table 10). The Southern Illinois Quota Zone (Alexander, Jackson, Union, and Williamson counties), located in Region 5, accounted for 46% of the goose hunters and 34% of the days afield. The Rend Lake Quota Zone (Franklin and Jefferson counties), also in Region 5, accommodated

13% of the hunters and 8% of the days afield. The remainder of the state accounted for 63% of the hunters and 58% of the days afield. Statewide, the number of goose hunters and their days afield increased 67% and 203%, respectively, from 1985 to 1994 (Table 11).

There were an estimated 69,543 geese harvested during the regular goose season in Illinois in 1994-95, which included 67,790 Canada geese and 1,753 other geese (Table 10). The Canada goose harvest decreased 27% between 1993-94 and 1994-95 (Table 11). The FWS estimated that 77,376 Canada geese, 1,138 other geese, and 78,514 total geese were taken in the state in 1994-95 (Martin and Padding 1995).

Canada goose harvest in the Southern Illinois Quota Zone was tabulated (via daily registration forms) at 25,956 birds during the 1994-95 season (Whitton 1995a). This represents 38% of the statewide harvest of Canada geese during the regular goose season. In the Rend Lake Quota Zone, an estimated 6,574 Canada geese (10% of state's total harvest) were harvested. This estimate was 4% greater than the projected harvest (i.e., projected from the reported harvest on public hunting areas) of 6,326 Canada geese for the entire Rend Lake Quota Zone (Whitton 1995b). The remaining 35,261 Canada geese in the statewide harvest were bagged in the 96 counties located outside the two southern Illinois quota zones.

The Canada goose harvest in the 18 newly-created North and Central Quota Zone Counties was estimated at 16,909 birds (Tables 12 and 13). In comparison, the phone-in monitoring system

tabulated a harvest of 16,687 Canada geese in these counties (Table 13). Thus, the two procedures--i.e., the mail-questionnaire survey and the phone-in monitoring system--produced Canada goose harvest estimates for the 18 Quota Counties that were 99% in agreement.

It is noteworthy that 24 of Illinois' 102 counties were covered by a Canada goose harvest monitoring system during the 1994-95 season. These included 18 counties in the North and Central Zones, the 2 counties comprising the Rend Lake Quota Zone, and the 4 counties comprising the Southern Illinois Quota Zone. Collectively, these 24 counties accounted for 73% of the Canada goose harvest in Illinois in 1994-95 (Table 14).

Statewide, hunters experienced an overall success rate of 0.21 goose per hunter per day afield and 1.82 geese per hunter per season during the 1994-95 season (Table 10). In the Southern Illinois Quota Zone, success was 0.24 and 1.55 geese, respectively. Similarly, hunter success was 0.25 and 1.38 geese at Rend Lake, and 0.19 and 1.48 geese in the remainder of the state. In comparison, statewide success rates ranged from 0.15 to 0.32 goose per hunter per day afield and from 0.95 to 2.63 geese per hunter per season in 1981 through 1993 (Table 15).

According to information reported by goose hunters in the Southern Illinois Quota Zone, 23% of the days afield in that zone occurred on public hunting areas, 47% occurred on commercial hunting clubs, and 30% occurred on non-commercial/private areas (Table 16). Similarly, 18% of the Canada goose harvest took place on public hunting areas, 54% on commercial hunting clubs,

and 28% on non-commercial/private areas. The proportion of goose harvest occurring on public hunting areas was lowest in the vicinity of Horseshoe Lake Refuge and highest at Union County Refuge. However, for commercial hunting clubs, the pattern was reversed. The relative goose harvest on non-commercial/private areas was highest in the vicinity of Crab Orchard NWR and lowest at Union County Refuge.

Crippling Losses. Crippling losses (birds knocked down but not retrieved) were estimated at 65,266 ducks, 16,234 geese, and 1,167 coots in Illinois during the 1994-95 hunting season (Table 17). These estimates, which are considered to be indices and not actual numbers, equate to 26.4 ducks, 23.3 geese, and 30.1 coots lost per 100 harvested. After being somewhat elevated during the mid- and late-1980s, crippling rates have generally declined in Illinois.

Nationwide crippling rates for ducks and geese during the 1994 season, as measured via hunter questionnaire surveys conducted by the FWS, were similar to, or lower than, the rates that prevailed in the 1950's and 1960s (Table 18).

Attitudes and Opinions of Hunters

Dates and Shooting Time for September Teal Season. A majority (65%) of the teal hunters thought the dates selected for the September teal season in 1994 (September 10-18) were "about right" (Table 19). This sentiment prevailed in all waterfowl zones and administrative regions in the state.

A majority (68%) of the teal hunters preferred that legal

shooting time begin 1/2 hour before sunrise during the September teal season (Table 20). This preference predominated in all zones and regions.

Days in Week for Beginning and Ending Regular Duck Season.

According to responses to question #15, a plurality (40%) of the duck hunters preferred that the regular duck season (assuming 40 days) begin on a Wednesday and end on a Sunday (Table 21). The second choice was Saturday/Wednesday, and the third choice was Thursday/Monday, in most regions of the state. Hunters in southern Illinois preferred Thursday/Monday over Saturday/Wednesday for their second choice.

Locations of Waterfowl Zone Boundaries. Majorities (58-61%) of the duck and goose hunters in northern and central Illinois thought the location of the boundary that divided the North and Central Zones in 1994-95 was about right (Tables 22 and 23). Hunters who were active in the boundary counties (i.e., the counties in which the boundary was located) in both the North Zone and Central Zone were also supportive (59-69%) of the present location of the North Zone/Central Zone boundary.

Majorities (51-61%) of the duck hunters and goose hunters in central and southern Illinois thought the location of the boundary that divided the Central and South Zones in 1994-95 was about right (Tables 22 and 23). Hunters in the boundary counties in the South Zone also supported (56-60%) the present location of the Central/South Zone boundary. However, a plurality (33%) of the goose hunters in the boundary counties in the Central Zone thought the boundary should be moved further north.

Goose Monitoring System in North and Central Zones.

Overwhelming majorities (68-76%) of the goose hunters in the North and Central Zones were supportive of the newly-implemented Canada goose harvest monitoring system and reporting requirements in selected counties in northern and central Illinois (Table 24). Only 10-15% of the hunters were not supportive of this new regulation. It appears that most hunters believe that the extra days of goose hunting make the inconveniences of the monitoring system and reporting requirements worthwhile.

Overlap Between Duck and Goose Hunting Seasons. Majorities (51-68%) of the duck hunters and goose hunters in the North and Central Zones felt that the goose season should partially overlap the duck season (Table 25). Pluralities (45-47%) of the hunters in the South Zone also expressed this sentiment. However, many (42-43%) duck hunters and goose hunters in the South Zone believed the goose season should occur totally after the duck season. Southern Illinois has traditionally had a relatively late goose hunting season.

The last question on the questionnaire was hypothetical: "For the moment, assume that the goose season will overlap the duck season by 20 days and that 5 of these days will occur at the beginning of the duck season. The other 15 days could take place during the first half of the duck season or during the second half. Which do you prefer?" In responding to this question, goose hunters throughout the state overwhelmingly (67-89%) chose the second option (Table 25).

DISCUSSION

Compared to the previous year, duck production in 1994 was much greater in the northcentral United States and prairie Canada. The predicted fall flight was 71 million ducks, a value greater than that predicted for 1993 (59 million) and similar in size to fall flights of the early 1980s (Canadian Wildlife Service and U.S. Fish and Wildlife Service 1994). As a result, the duck season was extended from 30 days in 1988-1993 to 40 days in 1994 in Illinois and other Mississippi Flyway states. However, the restrictive 3-duck daily bag limit was retained.

Presumably because of the longer season, the number of duck hunters increased 9%, their days afield increased 30%, and duck harvest increased 13%, from 1993 to 1994 (Table 7). The increase in duck harvest was caused by an increase in hunting activity and not by an increase in hunter success (Table 8).

To put the 1994-95 goose hunting season in proper perspective, it should be pointed out that the 1993-94 season was characterized by a high harvest and exceptionally high hunter success rates (Tables 11 and 15). Thus, compared to the 1993-94 goose season, the 1994-95 season was disappointing. Nevertheless, a respectable 67,790 Canada geese were harvested in the state in 1994-95, and hunter success was 0.21 goose per hunter per day afield. In the previous 10 years (1984-1993), an average of 61,877 Canada geese was harvested and an average of 0.23 goose was bagged per hunter per day afield.

The DOC (currently DNR) implemented a Canada goose harvest monitoring system in 18 counties in the North and Central

Waterfowl Zones for the 1994-95 season (Fig. 6). Goose hunters in these counties had to obtain a special permit (issued free with purchase of the Illinois Migratory Waterfowl Stamp), which was used to record each goose harvested immediately after it was reduced to the bag. In addition, the hunters had to daily report the number of Canada geese they harvested via a toll-free phone number. With this monitoring system, harvests of 6,657 and 10,030 Canada geese were recorded for the North and Central Quota Zone Counties, respectively. This reported Canada goose harvest agreed closely with the estimates produced by the present mail-questionnaire survey for the Quota Counties (Table 13). Based on these findings, the phone-in system was exceptionally reliable for monitoring the Canada goose harvest in the Quota Counties during the 1st year of operation.

The 1994 teal hunting season took place during the 9-day period of 10-18 September. When asked how they felt about these season dates, a majority (65%) of the teal hunters thought they were "about right" (Table 19). This sentiment prevailed statewide. Thus, if hunter opinion is the overriding factor, the dates for the teal season should focus on the 2nd and 3rd week in September.

From time to time, waterfowl hunters in various parts of the state express an interest in having the boundaries that separate the North and Central Zones, and the Central and South Zones, moved further north or south. These hunters believe that, by changing the boundary and thereby "moving" their waterfowling area to a different zone, their hunting will improve. When

polled, majorities or pluralities (43-67%) of the duck hunters in each zone, as well as in the counties where the boundaries were located, thought the present locations of the boundaries were about right (Table 22). Goose hunters expressed the same views, with the exception that a plurality (33%) of those in the Central/South Zone boundary counties in the Central Zone thought the boundary should be moved further north (Table 23). This sentiment falls on the heels of a change that was made in the Central/South Zone boundary in 3 counties beginning with the 1994-95 season. For goose hunting in Bond, Fayette, and Effingham counties, the boundary was moved from I-70 north so that the entirety of each of these counties was included in the South Zone. For duck hunting, the boundary remained along I-70. This change may have served as a motivation for some goose hunters to support moving the boundary further north elsewhere in the Central Zone.

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Table 1. Summary of Illinois Migratory Waterfowl Stamps purchased, hunter activity, and waterfowl harvest in Illinois from 1981 through 1994 hunting seasons.

| Season (Year) | Stamps Purchased | Hunters | Days Afield | Waterfowl Harvest ^a |
|-------------------|-----------------------------|---------|-------------|--------------------------------|
| 1981 | 61,929 | 63,652 | 874,730 | 413,264 |
| 1982 | 57,691 | 58,766 | 795,807 | 392,897 |
| 1983 | 56,162 | 58,240 | 815,523 | 475,601 |
| 1984 | 55,250 | 56,533 | 748,390 | 420,357 |
| 1985 | 55,670 | 56,899 | 699,113 | 392,253 |
| 1986 | 59,734 | 61,876 | 887,446 | 467,164 |
| 1987 | 58,803 (5,550) ^b | 60,371 | 814,918 | 354,194 |
| 1988 ^c | 53,498 (4,350) | 53,450 | 644,056 | 264,316 |
| 1989 ^c | 55,693 (3,570) | 55,709 | 749,033 | 322,359 |
| 1990 ^c | 55,009 (2,390) | 55,152 | 708,391 | 270,796 |
| 1991 ^c | 58,421 (2,130) | 59,038 | 855,279 | 406,854 |
| 1992 | 51,261 (1,395) | 51,274 | 714,550 | 292,535 |
| 1993 | 50,976 (995) | 51,340 | 682,498 | 326,446 |
| 1994 | 57,543 (955) | 53,226 | 816,185 | 332,803 |

^aTeal, ducks, coots, and geese combined. The U.S. Fish and Wildlife Service suspended the September teal season in 1988 through 1991.

^bStamps purchased for commercial art purposes. These stamps were not included in the numbers to the left.

^cThe estimates of waterfowl hunters and days afield for these years have been reduced to 92.48% - 96.48% of the original estimates. The estimates of waterfowl (teal, ducks, coots, and geese combined) harvested have been reduced to 94.54% - 97.74% of the original estimates. See last paragraph of the METHODS section, in Anderson and Williamson (1994) for explanation.

Table 2. The percentage of waterfowl hunters who hunted ducks, and the percentage who hunted geese, in Illinois from 1981 through 1994 seasons.

| Season (Year) | Percentage Who Hunted: | | | Percentage Who Were: | |
|------------------|------------------------|---------------|-------------------------|----------------------|------------------|
| | Ducks Only | Geese Only | Both Ducks and Geese | Duck Hunters | Goose Hunters |
| 1981 | 63 | 14 | 23 | 86 | 37 |
| 1982 | 59 | 11 | 30 | 89 | 31 |
| 1983 | 55 | 13 | 32 | 87 | 45 |
| 1984 | 60 | 12 | 28 | 88 | 40 |
| 1985 | 61 | 10 | 29 | 90 | 39 |
| 1986 | 51 | 13 | 36 | 87 | 49 |
| 1987 | 47 | 14 | 39 | 86 | 53 |
| 1988 | 36 | 19 | 45 | 81 | 64 |
| 1989 | 29 | 21 | 50 | 79 | 71 |
| 1990 | 27 | 30 | 43 | 70 | 73 |
| 1991 | 26 | 27 | 47 | 73 | 74 |
| 1992 | 31 | 24 | 45 | 76 | 69 |
| 1993 | 30 | 20 | 50 | 80 | 69 |
| 1994 | 30 | 17 | 53 | 83 | 70 |

Table 3. Teal harvest and hunter activity, by administrative region, during the September teal season in Illinois in 1994 (n=2,253).

| Administrative Region ^a | Number of Hunters | Days Afield | | Teal Harvest | | |
|------------------------------------|-------------------|-------------|------------|---------------------|----------------|------------|
| | | Number | Per Hunter | Total | Per Day Afield | Per Hunter |
| 1A | 928 | 2,546 | 2.74 | 1,927 | 0.76 | 2.08 |
| 1B | 1,512 | 3,978 | 2.63 | 2,418 | 0.61 | 1.60 |
| 2 | 822 | 1,644 | 2.00 | 1,023 | 0.62 | 1.24 |
| 3A | 1,962 | 4,721 | 2.41 | 2,578 | 0.55 | 1.31 |
| 3B | 451 | 955 | 2.12 | 452 | 0.47 | 1.00 |
| 4 | 1,008 | 2,572 | 2.55 | 1,940 | 0.75 | 1.93 |
| 5 | 1,114 | 3,395 | 3.05 | 1,767 | 0.52 | 1.59 |
| Unknown | 265 | 530 | | 331 | | |
| Entire state | 8,062 | 20,341 | 2.52 | 12,436 ^b | 0.61 | 1.54 |

^aSee Figure 8.

^bThe 95% confidence interval is $\pm 3,913$.

Table 4. Summary of teal harvest and hunter activity during the September teal season in Illinois in 1981 through 1994.

| <u>Year</u> | <u>Hunters</u> | <u>Days Afield</u> | <u>Teal Harvest</u> |
|-------------------|----------------|--------------------|---------------------|
| 1981 | 14,802 | 38,586 | 22,946 |
| 1982 | 14,863 | 41,856 | 28,785 |
| 1983 | 13,295 | 39,475 | 29,355 |
| 1984 | 14,158 | 39,481 | 32,730 |
| 1985 | 13,852 | 36,521 | 29,260 |
| 1986 | 15,449 | 40,241 | 30,375 |
| 1987 | 12,297 | 32,582 | 23,193 |
| 1988 ^a | | | |
| 1989 ^a | | | |
| 1990 ^a | | | |
| 1991 ^a | | | |
| 1992 | 7,696 | 18,265 | 12,069 |
| 1993 | 6,474 | 16,722 | 8,562 |
| 1994 | 8,062 | 20,341 | 12,436 |

^aThe September teal season was suspended by the U.S. Fish and Wildlife Service during these years.

Table 5. Rates of teal harvest and hunter activity during the September teal season in Illinois in 1981 through 1994.

| Year | Season Length/ Bag Limit | Days Afield Per Hunter | Teal Harvest Per Hunter | |
|-------------------|-----------------------------|---------------------------|-------------------------|------------|
| | | | Per day | Per Season |
| 1981 | 9/4 | 2.61 | 0.59 | 1.55 |
| 1982 | 9/4 | 2.82 | 0.69 | 1.94 |
| 1983 | 9/4 | 2.97 | 0.74 | 2.21 |
| 1984 | 9/4 | 2.79 | 0.83 | 2.31 |
| 1985 | 9/4 | 2.64 | 0.80 | 2.11 |
| 1986 | 9/4 | 2.60 | 0.75 | 1.97 |
| 1987 | 9/4 | 2.65 | 0.71 | 1.89 |
| 1988 ^a | | | | |
| 1989 ^a | | | | |
| 1990 ^a | | | | |
| 1991 ^a | | | | |
| 1992 | 9/4 | 2.37 | 0.66 | 1.57 |
| 1993 | 9/4 | 2.58 | 0.51 | 1.32 |
| 1994 | 9/4 | 2.52 | 0.61 | 1.54 |

^aThe September teal season was suspended by the U.S. Fish and Wildlife Service during these years.

Table 6. Duck and coot harvest and hunter activity, by administrative regions, during the regular duck season in Illinois in 1994 (n=2,253).

| Administrative Region ^a | Number of Hunters | Days Afield | | Duck Harvest | | | Coot Harvest |
|------------------------------------|-------------------|-------------|------------|---|----------------|-------------------------|--------------------|
| | | Number | Per Hunter | Total | Per Day Afield | Per Hunter ^b | |
| 1A | 3,554 | 30,949 | 8.71 | 14,429 (332) ^c | 0.46 | 3.97 | 213 |
| 1B | 11,138 | 128,277 | 11.52 | 61,849 (731) | 0.48 | 5.49 | 757 |
| 2 | 6,444 | 54,764 | 8.50 | 24,301 (1,395) | 0.42 | 3.55 | 306 |
| 3A | 9,786 | 128,198 | 13.10 | 74,311 (0) | 0.58 | 7.59 | 1,554 |
| 3B | 2,042 | 17,264 | 8.45 | 7,095 (53) | 0.41 | 3.45 | 93 |
| 4 | 3,477 | 38,374 | 11.05 | 21,697 (412) | 0.55 | 6.13 | 638 |
| 5 | 7,213 | 69,960 | 9.70 | 39,487 (1,063) | 0.55 | 5.33 | 319 |
| Unknown | 793 | 7,478 | | 3,775 (40) | | | 0 |
| Entire State | 44,447 | 475,264 | 10.69 | 246,944 ^d (4,026) ^e | 0.51 | 5.47 | 3,880 ^f |

^aSee Figure 8.

^bExcludes ducks harvested coincidentally to goose hunting.

^cDucks harvested coincidentally to goose hunting.

^dThe 95% confidence interval is $\pm 27,294$.

^eIncludes 137,263 mallards, 44,683 wood ducks, and 64,998 other ducks (including 3,760 canvasback).

^fThe 95% confidence interval is $\pm 2,686$.

Table 7. Summary of duck and coot harvests and hunter activity during the regular duck season in Illinois from 1981 through 1994.

| Season (Year) | Hunters | Days Afield | Duck Harvest | | | Coot Harvest | |
|-------------------|---------|----------------|--------------|---------------|---------------------|-------------------------------|--------|
| | | | Mallards | Wood Ducks | Other Ducks | | Total |
| 1981 | 54,744 | 703,534 | 170,972 | 72,065 | 94,947 | 337,984 | 4,950 |
| 1982 | 52,220 | 646,394 | 163,439 | 61,706 | 101,989 | 327,134 | 5,905 |
| 1983 | 50,440 | 651,409 | 220,317 | 72,237 | 110,862 | 403,416 | 10,472 |
| 1984 | 49,715 | 606,325 | 182,132 | 52,955 | 120,016 | 355,103 | 7,702 |
| 1985 | 51,362 | 556,800 | 168,549 | 51,216 | 97,155 | 316,920 | 5,773 |
| 1986 | 53,588 | 638,090 | 201,676 | 65,414 | 112,490 | 379,580 | 7,372 |
| 1987 | 51,704 | 558,172 | 155,783 | 58,488 | 74,748 | 289,019 | 2,694 |
| 1988 ^a | 43,233 | 381,985 | 119,149 | 23,743 | 42,836 | 185,728 | 1,936 |
| 1989 ^a | 43,841 | 407,478 | 133,128 | 28,065 | 63,073 | 224,266 | 2,049 |
| 1990 ^a | 38,759 | 350,119 | 112,370 | 33,253 | 51,562 | 197,185 (7,144) ^b | 2,287 |
| 1991 ^a | 42,911 | 393,247 | 177,221 | 49,556 | 80,793 | 307,570 (25,815) | 1,101 |
| 1992 | 39,272 | 362,275 | 124,112 | 34,280 | 58,035 | 216,427 (11,501) | 3,275 |
| 1993 | 40,941 | 366,656 | 134,334 | 39,906 | 43,360 | 217,600 (4,320) | 1,445 |
| 1994 | 44,447 | 475,264 | 137,263 | 44,683 | 64,998 ^c | 246,944 (4,026) | 3,880 |

^aThe estimates of duck hunters, days afield, ducks and coots harvested for these years have been reduced to 92.48% - 96.48% of the original estimates. See last paragraph of the METHODS section in Anderson and Williamson (1994) for explanation.

^bDucks harvested coincidental to goose hunting.

^cIncludes 3,760 canvasback.

Table 8. Rates of duck harvest and hunter activity during the regular duck season in Illinois in 1981 through 1994.

| Year | Season Length/ Bag Limit ^b | Days Afield Per Hunter | Duck Harvest Per Hunter ^a | |
|------|--|---------------------------|--------------------------------------|------------|
| | | | Per Day | Per Season |
| 1981 | 50/10(4) | 12.85 | 0.48 | 6.17 |
| 1982 | 50/10(4) | 12.38 | 0.51 | 6.26 |
| 1983 | 50/10(4) | 12.91 | 0.62 | 8.00 |
| 1984 | 50/10(4) | 12.20 | 0.59 | 7.14 |
| 1985 | 40/5 (3) | 10.84 | 0.57 | 6.17 |
| 1986 | 40/5 (3) | 11.91 | 0.59 | 7.08 |
| 1987 | 40/5 (3) | 10.80 | 0.52 | 5.59 |
| 1988 | 30/3 (2) | 8.84 | 0.49 | 4.30 |
| 1989 | 30/3 (2) | 9.29 | 0.55 | 5.12 |
| 1990 | 30/3 (2) | 9.03 | 0.54 | 4.90 |
| 1991 | 30/3 (2) | 9.16 | 0.72 | 6.57 |
| 1992 | 30/3 (2) | 9.22 | 0.57 | 5.22 |
| 1993 | 30/3 (2) | 8.96 | 0.58 | 5.21 |
| 1994 | 40/3 (2) | 10.69 | 0.51 | 5.47 |

^aExcludes ducks harvested coincidental to goose hunting.

^bThe Point System was used in 1981-1987. A maximum of 10 ducks (4 mallards) was allowed in 1981-1984, and a maximum of 5 ducks (3 mallards) was allowed in 1985-1987. The Conventional (Straight) System was used in 1988-1994.

Table 9. Distribution of duck hunters and days afield in relation to types of areas hunted in Illinois during the 1994 season. Sample sizes (hunters/days afield) are in parentheses.

| Administrative Region | | <u>State/Federal Areas</u> | | <u>Municipal/County Areas</u> | | <u>Private Clubs</u> | | <u>Other Areas</u> | |
|-----------------------|----------------|----------------------------|------|-------------------------------|------|----------------------|------|--------------------|------|
| | | Hunters | Days | Hunters | Days | Hunters | Days | Hunters | Days |
| 1A | (131/1,122) | 34% | 42% | 2% | 2% | 6% | 7% | 67% | 49% |
| 1B | (411/4,714) | 45 | 36 | 4 | 3 | 36 | 30 | 47 | 31 |
| 2 | (236/2,024) | 30 | 22 | 7 | 7 | 21 | 16 | 69 | 55 |
| 3A | (361/4,782) | 51 | 44 | 8 | 5 | 40 | 29 | 34 | 22 |
| 3B | (76/637) | 42 | 34 | 12 | 14 | 8 | 5 | 57 | 47 |
| 4 | (130/1,419) | 55 | 41 | 5 | 8 | 14 | 13 | 56 | 38 |
| 5 | (270/2,630) | 67 | 54 | 8 | 6 | 15 | 10 | 46 | 30 |
| Unknown | (30/246) | 40 | 50 | 3 | 1 | 40 | 26 | 20 | 23 |
| Entire State | (1,643/17,574) | 48 | 40 | 7 | 5 | 26 | 21 | 50 | 34 |

Table 10. Goose harvest and hunter activity, by zones and administrative regions, during the regular goose season in Illinois in 1994-95 (n = 2,253).

| Zone or Administrative Region ^a | Hunters | Days Afield | | Goose Harvest | | | Per Day Afield ^b | Per Hunter ^b |
|--|---------------------|-------------|------------|---------------------------|-------------|-----------------------------|-----------------------------|-------------------------|
| | | Number | Per Hunter | Canada Geese | Other Geese | Total Geese | | |
| Southern Quota Zone | 17,057 | 107,896 | 6.33 | 25,956 (39) ^c | 490 (0) | 26,446 (39) | 0.24 | 1.55 |
| Rend Lake Quota Zone | 4,809 | 26,941 | 5.60 | 6,573 (0) | 77 (0) | 6,650 (0) | 0.25 | 1.38 |
| Remainder of State | | | | | | | | |
| 1A | 1,435 | 8,502 | 5.93 | 1,843 (206) | 129 (51) | 1,972 (257) | 0.20 | 1.19 |
| 1B | 9,459 | 68,680 | 7.26 | 11,161 (464) | 180 (13) | 11,341 (477) | 0.16 | 1.15 |
| 2 | 6,005 | 34,566 | 5.77 | 8,042 (799) | 284 (0) | 8,326 (799) | 0.22 | 1.25 |
| 3A | 3,985 | 23,327 | 5.85 | 4,098 (206) | 296 (13) | 4,394 (219) | 0.18 | 1.05 |
| 3B | 2,338 | 14,241 | 6.09 | 2,101 (26) | 13 (0) | 2,114 (26) | 0.15 | 0.89 |
| 4 | 2,046 | 18,492 | 9.04 | 3,042 (129) | 39 (0) | 3,081 (129) | 0.16 | 1.44 |
| 5 ^d | 2,152 | 17,482 | 8.12 | 4,897 (26) | 245 (0) | 5,142 (26) | 0.29 | 2.38 |
| Unknown | 239 | 453 | | 77 (0) | 0 (0) | 77 (0) | | |
| Total | 23,248 ^e | 185,743 | 7.99 | 35,261 (1,856) | 1,186 (77) | 36,447 (1,933) | 0.19 | 1.48 |
| Entire State | 37,090 ^e | 320,580 | 8.64 | 67,790 (1,895) | 1,753 (77) | 69,543 ^f (1,972) | 0.21 | 1.82 |

^aSee Figure 8.

^bExcludes geese harvested coincidentally to duck hunting.

^cNumber of geese harvested coincidentally to duck hunting.

^dExcludes Southern Quota Zone and Rend Lake Quota Zone.

^eThe totals are less than the sums of the above values because some hunters were active in >1 zone and/or region.

^fThe 95% confidence interval is $\pm 5,911$.

Table 11. Summary of goose harvest and hunter activity during the regular goose season in Illinois from 1981-82 through 1994-95.

| Season (Year) | Hunters | Days Afield | Goose Harvest | | |
|-------------------|---------|----------------|------------------------------|---------------|-----------------|
| | | | Canada Geese | Other Geese | Total |
| 1981 | 23,610 | 132,610 | 44,302 (6,312) ^a | 3,082 (1,719) | 47,384 (8,031) |
| 1982 | 24,058 | 107,557 | 29,574 (4,968) | 1,499 (710) | 31,073 (5,678) |
| 1983 | 26,199 | 124,639 | 31,395 (4,325) | 962 (577) | 32,357 (4,902) |
| 1984 | 22,426 | 102,583 | 23,147 (2,859) | 1,675 (593) | 24,822 (3,452) |
| 1985 | 22,160 | 105,792 | 37,976 (5,248) | 2,324 (753) | 40,300 (6,001) |
| 1986 | 30,327 | 200,291 | 45,535 (11,348) | 2,625 (832) | 48,160 (12,180) |
| 1987 | 32,246 | 224,164 | 36,103 (3,563) | 1,525 (499) | 37,628 (4,062) |
| 1988 ^b | 34,456 | 251,176 | 72,550 (3,871) | 1,832 (350) | 74,382 (4,221) |
| 1989 ^b | 39,459 | 329,369 | 91,379 (2,988) | 1,715 (182) | 93,094 (3,170) |
| 1990 ^b | 40,459 | 346,036 | 67,127 (1,515) | 1,319 (97) | 68,446 (1,612) |
| 1991 ^b | 43,692 | 450,807 | 92,239 (1,245) | 2,434 (70) | 94,673 (1,315) |
| 1992 | 35,253 | 334,010 | 59,352 (2,679) | 1,412 (170) | 60,764 (2,849) |
| 1993 | 35,489 | 299,120 | 93,361 (1,260) | 1,314 (82) | 94,675 (1,342) |
| 1994 | 37,090 | 320,580 | 67,790 (1,895) | 1,753 (77) | 69,543 (1,972) |

^aNumber of geese harvested coincidentally to duck hunting.

^bThe estimates of goose hunters and days afield for these years have been reduced to 92.48% - 96.48% of the original estimates. The estimates for geese harvested have not been reduced. See last paragraph of the METHODS section in Anderson and Williamson (1994) for explanation.

Table 12. Canada goose harvest and hunter activity in quota counties in the North and Central Waterfowl Zones in Illinois during the 1994-95 season.

| Zones and Counties | Hunters | | Days Afield | Canada Goose Harvest |
|-------------------------------|-------------------------|-------|-------------|----------------------|
| | Successful ^a | Total | | |
| North Waterfowl Zone | | | | |
| Dupage | 106 | 159 | 993 | 541 |
| Kane | 425 | 717 | 5,636 | 1,585 |
| Lake | 638 | 1,010 | 5,716 | 1,379 |
| McHenry | 1,010 | 1,568 | 11,433 | 2,591 |
| LaSalle ^b | 53 | 159 | 1,047 | 116 |
| Will ^b | 53 | 266 | 1,664 | 232 |
| Total | 2,285 | 3,879 | 26,489 | 6,444 |
| Central Waterfowl Zone | | | | |
| Calhoun | 239 | 531 | 2,603 | 296 |
| Cass | 133 | 239 | 1,691 | 322 |
| Fulton | 1,725 | 2,817 | 28,904 | 5,026 |
| Jersey | 53 | 292 | 2,067 | 129 |
| Knox | 558 | 1,169 | 9,098 | 992 |
| Mason | 213 | 531 | 4,133 | 554 |
| Morgan | 53 | 133 | 1,422 | 271 |
| Peoria | 266 | 478 | 4,697 | 516 |
| Pike | 133 | 399 | 3,569 | 258 |
| Tazewell | 372 | 478 | 6,844 | 838 |
| Woodford | 80 | 186 | 2,415 | 309 |
| LaSalle ^c | 133 | 292 | 2,120 | 245 |
| Will ^c | 80 | 558 | 3,355 | 464 |
| Grundy | 186 | 585 | 3,489 | 245 |
| Total | 4,224 | 8,688 | 76,407 | 10,465 |

^aHarvested ≥ 1 Canada geese.

^bNorth of I-80.

^cSouth of I-80.

Table 13. Canada goose harvest in the North and Central Quota Zone Counties in Illinois in 1994-95 as determined by a phone-in monitoring system and by mail questionnaire survey.

| Quota Zone Counties | Goose Harvest | | Percentage Difference |
|-----------------------------|----------------------------|---------------------------|-----------------------|
| | Phone-in Monitoring System | Mail Questionnaire Survey | |
| North Quota Zone Counties | 6,657 | 6,444 | -3 |
| Central Quota Zone Counties | 10,030 | 10,465 | +4 |
| Total | 16,687 | 16,909 | +1 |

Table 14. Canada goose harvest by zones in Illinois during the 1994-95 season.

| Zones and Counties | Canada Geese | |
|------------------------|--------------------|------------|
| | Number | Percentage |
| North Waterfowl Zone | | |
| Quota Zone Counties | 6,444 | 71 |
| Other Counties | 2,934 | 29 |
| Total | 9,378 | 100 |
| Central Waterfowl Zone | | |
| Quota Zone Counties | 10,465 | 55 |
| Other Counties | 8,619 | 45 |
| Total | 19,084 | 100 |
| South Waterfowl Zone | | |
| Rend Lake Quota Zone | 6,573 | 17 |
| Southern Quota Zone | 25,956 | 66 |
| Other Counties | 6,722 ^a | 17 |
| Total | 39,251 | 100 |
| Entire state | | |
| Quota Zones | 49,438 | 73 |
| Other Counties | 18,275 | 27 |
| Unknown | 77 | -- |
| Total | 67,790 | 100 |

^aIncludes 2,681 Canada geese taken in Bond, Clinton, and Fayette counties.

Table 15. Rates of goose harvest and hunter activity during the regular goose season in Illinois in 1981-82 through 1994-95.

| Year | Season Length/ Bag Limit ^a | Days Afield Per Hunter | Goose Harvest Per Hunter | |
|------|--|---------------------------|--------------------------|------------|
| | | | Per Day | Per Season |
| 1981 | 50/2 | 5.62 | 0.30 | 1.67 |
| 1982 | 40/1-2 | 4.47 | 0.24 | 1.06 |
| 1983 | 35-40/1-2 | 4.76 | 0.22 | 1.05 |
| 1984 | 20-25/1-2 | 4.57 | 0.21 | 0.95 |
| 1985 | 20-31/1-2 | 4.77 | 0.32 | 1.55 |
| 1986 | 40-50/1-2 | 6.60 | 0.18 | 1.19 |
| 1987 | 40-50/2 | 6.95 | 0.15 | 1.04 |
| 1988 | 50/2 | 7.29 | 0.28 | 2.04 |
| 1989 | 56-60/2 | 8.35 | 0.27 | 2.28 |
| 1990 | 70/3 | 8.55 | 0.19 | 1.65 |
| 1991 | 84-90/3 | 10.32 | 0.21 | 2.14 |
| 1992 | 79/2 | 9.47 | 0.17 | 1.64 |
| 1993 | 46/2 | 8.43 | 0.31 | 2.63 |
| 1994 | 51/2 | 8.64 | 0.21 | 1.82 |

^aFor Canada geese. The bag limit does not take into consideration restrictive regulations that were in effect in the Tri-County Zone (in Fulton, Knox, and Henry counties), or the Fulton-Knox County Zone, in some years.

Table 16. Distribution of goose hunters, days afield, and geese harvested in relation to types of areas hunted in the Southern Illinois Quota Zone during the 1994-95 season. Sample sizes are in parentheses.

| Type of Area | Percentages | | |
|--|-------------|-------------|---------|
| | Hunters | Days Afield | Geese |
| <u>Vicinity of Horseshoe Lake Refuge</u> | | | |
| | (131) | (607) | (267) |
| Public Hunting Area | 18 | 19 | 12 |
| Commercial Hunting Club | 70 | 57 | 62 |
| Non-Commercial Club/Private Area | 12 | 24 | 26 |
| <u>Vicinity of Union County Refuge</u> | | | |
| | (172) | (719) | (369) |
| Public Hunting Area | 37 | 26 | 29 |
| Commercial Hunting Club | 46 | 46 | 49 |
| Non-Commercial Club/Private Area | 17 | 28 | 22 |
| <u>Vicinity of Crab Orchard NWR</u> | | | |
| | (394) | (2,439) | (1,264) |
| Public Hunting Area | 26 | 23 | 15 |
| Commercial Hunting Club | 46 | 45 | 54 |
| Non-Commercial Club/Private Area | 28 | 32 | 31 |
| <u>All Refuges</u> | | | |
| | (697) | (3,765) | (1,900) |
| Public Hunting Area | 28 | 23 | 18 |
| Commercial Hunting Club | 50 | 47 | 54 |
| Non-Commercial Club/Private Area | 22 | 30 | 28 |

Table 17. Summary of the number of ducks, geese, and coots that were crippled (knocked down but not retrieved) in Illinois from 1981 through 1994 seasons.

| Year | Ducks | | Geese | | Coots | |
|-------------------|---------------------|----------------|---------------------|----------------|--------------------|----------------|
| | Total | Per 100 Bagged | Total | Per 100 Bagged | Total | Per 100 Bagged |
| 1981 | 104,216 | 30.8 | 12,573 | 26.5 | 1,717 | 34.7 |
| 1982 | 82,287 | 25.2 | 5,868 | 18.9 | 1,595 | 27.0 |
| 1983 | 96,907 | 24.0 | 7,627 | 23.6 | 2,947 | 28.1 |
| 1984 | 84,665 | 23.8 | 5,711 | 23.0 | 3,236 | 42.0 |
| 1985 | 100,191 | 31.6 | 15,918 | 39.5 | 2,357 | 40.8 |
| 1986 | 145,283 | 38.3 | 20,699 | 41.5 | 2,770 | 37.6 |
| 1987 | 98,155 | 34.0 | 18,375 | 48.8 | 2,013 | 74.7 |
| 1988 ^a | 65,856 | 35.5 | 22,730 | 30.6 | 1,020 | 52.7 |
| 1989 ^a | 66,150 | 29.5 | 21,696 | 23.3 | 1,083 | 52.9 |
| 1990 ^a | 59,007 | 29.9 | 23,895 | 34.9 | 868 | 38.0 |
| 1991 ^a | 74,932 | 24.4 | 27,164 | 28.7 | 301 | 27.3 |
| 1992 | 68,027 | 31.4 | 18,631 | 32.1 | 1,450 | 45.7 |
| 1993 | 62,250 | 28.6 | 21,067 | 22.3 | 813 | 40.0 |
| 1994 | 65,266 ^b | 26.4 | 16,234 ^b | 23.3 | 1,167 ^b | 30.1 |

^aThe estimates of ducks, geese, and coots crippled for these years have been reduced to 92.48% - 96.48% of the original estimates. The estimates for number of geese crippled per 100 bagged have been similarly reduced. See last paragraph of the METHODS section in Anderson and Williamson (1994) for explanation.

^bThe 95% confidence intervals were $\pm 5,144$ for ducks, $\pm 1,948$ for geese, and ± 527 for coots.

Table 18. Summary of the number of waterfowl that were crippled (knocked down but not retrieved) per 100 birds retrieved in the United States from 1952 through 1994 seasons. Data from U.S. Fish and Wildlife Service, Office of Migratory Bird Management, Hunter Questionnaire Surveys.

| Year | Ducks | Geese | Coots |
|------|-------|-------|------------------|
| 1952 | 27.9 | 22.9 | --- ^a |
| 1953 | 22.5 | 16.1 | --- |
| 1954 | 23.0 | 17.1 | --- |
| 1955 | 23.6 | 19.9 | --- |
| 1956 | 23.3 | 16.8 | --- |
| 1957 | 21.8 | 17.6 | --- |
| 1958 | 23.3 | 19.6 | --- |
| 1959 | 20.2 | 19.9 | --- |
| 1960 | 23.0 | 17.9 | --- |
| 1961 | 22.1 | 17.9 | --- |
| 1962 | 22.6 | 17.5 | --- |
| 1963 | 23.8 | 18.6 | --- |
| 1964 | 23.8 | 17.9 | --- |
| 1965 | 23.5 | 18.6 | --- |
| 1966 | 22.4 | 16.1 | --- |
| 1967 | 22.0 | 15.9 | --- |
| 1968 | 23.2 | 16.1 | --- |
| 1969 | 22.5 | 14.4 | --- |
| 1970 | 21.1 | 15.3 | --- |
| 1971 | 22.1 | 15.4 | 28.2 |
| 1972 | 22.4 | 15.5 | 29.6 |
| 1973 | 21.9 | 14.8 | 29.2 |
| 1974 | 21.5 | 14.3 | 29.1 |
| 1975 | 20.3 | 13.0 | 28.9 |
| 1976 | 19.4 | 14.2 | 26.8 |
| 1977 | 20.5 | 14.9 | 28.9 |
| 1978 | 20.2 | 15.7 | 29.0 |
| 1979 | 20.3 | 14.3 | 27.1 |
| 1980 | 19.2 | 12.9 | 30.9 |
| 1981 | 19.4 | 13.2 | 22.7 |
| 1982 | 19.2 | 15.2 | 27.7 |
| 1983 | 19.4 | 14.4 | 23.7 |
| 1984 | 19.5 | 14.2 | 30.4 |
| 1985 | 19.7 | 14.0 | 24.3 |
| 1986 | 20.1 | 15.7 | 32.5 |
| 1987 | 24.5 | 20.5 | 27.5 |
| 1988 | 23.9 | 16.3 | 31.0 |
| 1989 | 22.5 | 15.9 | 32.1 |
| 1990 | 23.4 | 16.4 | 30.4 |
| 1991 | 24.3 | 17.1 | 28.1 |
| 1992 | 24.1 | 17.1 | 30.6 |
| 1993 | 22.7 | 14.9 | 27.6 |
| 1994 | 20.7 | 14.4 | 20.7 |

^aNo data for 1952-1970.

Table 19. Attitudes of teal hunters toward dates for the September teal season in Illinois (1994 season). Sample sizes are in parentheses.

Responses to the question,

*"The dates for the 1994 teal season were September 10-18. How do you feel about using similar dates (September 9-17) for the 1995 teal season?"

| | <u>Responses by Waterfowl Zones</u> | | | |
|-------------|-------------------------------------|-------------------------|----------------------|------------------------------|
| | <u>North</u> (67) | <u>Central</u> (160) | <u>South</u> (61) | <u>Entire State</u> (297) |
| Too early | 26% | 24% | 31% | 25% |
| About right | 61 | 65 | 65 | 65 |
| Too late | 3 | 6 | 2 | 4 |
| No opinion | 10 | 5 | 2 | 6 |

| | <u>Responses by Administrative Regions</u> | | | | | | |
|-------------|--|-------------------|------------------|-------------------|-------------------|------------------|------------------|
| | <u>1A</u> (34) | <u>1B</u> (57) | <u>2</u> (28) | <u>3A</u> (74) | <u>3B</u> (16) | <u>4</u> (37) | <u>5</u> (42) |
| Too early | 20% | 18% | 25% | 27% | 38% | 32% | 29% |
| About right | 65 | 70 | 61 | 61 | 50 | 65 | 69 |
| Too late | 0 | 7 | 7 | 8 | 0 | 0 | 2 |
| No opinion | 15 | 5 | 7 | 4 | 12 | 3 | 0 |

Table 20. Attitudes of teal hunters toward legal shooting time during the September teal season in Illinois (1994 season). Sample sizes are in parentheses.

Responses to the question,

*"Do you prefer that legal shooting time for the September teal season begin at sunrise or 1/2 hour before sunrise?"

| | <u>Responses by Waterfowl Zones</u> | | | |
|-----------------|-------------------------------------|-------------------------|----------------------|------------------------------|
| | <u>North</u> (69) | <u>Central</u> (161) | <u>South</u> (60) | <u>Entire State</u> (299) |
| Sunrise | 35% | 30% | 17% | 29% |
| 1/2 hour before | 58 | 67 | 83 | 68 |
| No opinion | 7 | 3 | 0 | 3 |

| | <u>Responses by Administrative Regions</u> | | | | | | |
|-----------------|--|-------------------|------------------|-------------------|-------------------|------------------|------------------|
| | <u>1A</u> (35) | <u>1B</u> (57) | <u>2</u> (30) | <u>3A</u> (74) | <u>3B</u> (16) | <u>4</u> (37) | <u>5</u> (41) |
| Sunrise | 32% | 37% | 27% | 38% | 13% | 13% | 19% |
| 1/2 hour before | 57 | 60 | 70 | 59 | 81 | 87 | 81 |
| No opinion | 11 | 3 | 3 | 3 | 6 | 0 | 0 |

Table 21. Attitudes of duck hunters toward the days in the week on which duck season should begin and end. Sample sizes are in parentheses.

Responses to the question,

"If 40 days are allowed for the regular duck season in 1995, on which of the following days would you prefer that the season begin and end? (write in "1") for your first choice, "2" for your second choice, and "3" for your third choice)."

| | <u>Responses by Waterfowl Zones</u> | | | |
|--------------------|-------------------------------------|-------------------------|-----------------------|--------------------------------|
| | <u>North</u> (323) | <u>Central</u> (948) | <u>South</u> (331) | <u>Entire State</u> (1,630) |
| Wednesday/Sunday | 41% ^a | 40% | 41% | 40% |
| Thursday/Monday | 22 | 24 | 31 | 25 |
| Saturday/Wednesday | 37 | 36 | 28 | 35 |

| | <u>Responses by Administrative Regions</u> | | | | | | |
|--------------------|--|--------------------|-------------------|--------------------|-------------------|-------------------|-------------------|
| | <u>1A</u> (132) | <u>1B</u> (413) | <u>2</u> (231) | <u>3A</u> (357) | <u>3B</u> (76) | <u>4</u> (129) | <u>5</u> (264) |
| Wednesday/Sunday | 35% | 38% | 46% | 40% | 44% | 40% | 42% |
| Thursday/Monday | 25 | 24 | 21 | 24 | 26 | 24 | 31 |
| Saturday/Wednesday | 40 | 38 | 33 | 36 | 30 | 36 | 27 |

^aPercentage first choice.

Table 22. Attitudes of duck hunters toward the location of the boundaries that divide the North, Central, and South Waterfowl Zones in Illinois. Sample sizes are in parentheses.

Responses to the question,

*"The State of Illinois is divided into a North Zone, Central Zone, and South Zone for purposes of setting the dates for the regular duck and goose hunting seasons (see map on first page). What is your opinion of the boundaries that separate these three zones?"

| Zones and counties where hunted | Present location is about right | Should be moved further north | Should be moved further south | No Opinion |
|---|---------------------------------|-------------------------------|-------------------------------|------------|
| North Zone/Central Zone Boundary | | | | |
| North Zone hunters | | | | |
| In boundary counties ^a (82) | 59% | 13% | 18% | 10% |
| All counties (348) | 58 | 5 | 9 | 28 |
| Central Zone hunters | | | | |
| In boundary counties ^a (109) | 67 | 8 | 7 | 18 |
| All counties (904) | 61 | 3 | 6 | 30 |
| Central Zone/South Zone Boundary | | | | |
| Central Zone hunters | | | | |
| In boundary counties ^b (35) | 43 | 28 | 6 | 23 |
| All counties (893) | 55 | 12 | 4 | 29 |
| South Zone hunters | | | | |
| In boundary counties ^b (89) | 56 | 24 | 4 | 16 |
| All counties (351) | 51 | 12 | 8 | 29 |

^aCook, Will, Kendall, Grundy, LaSalle, Bureau, Henry, and Rock Island.

^bClark, Cumberland, Jasper, Effingham, Fayette, Bond, Madison, St. Clair, Monroe, and Randolph.

Table 23. Attitudes of goose hunters toward the location of the boundaries that divide the North, Central, and South Waterfowl Zones in Illinois. Sample sizes are in parentheses.

Responses to the question,

*"The State of Illinois is divided into a North Zone, Central Zone, and South Zone for purposes of setting the dates for the regular duck and goose hunting seasons (see map on first page). What is your opinion of the boundaries that separate these three zones?"

| Zones and counties where hunted | | Present location is about <u>right</u> | Should be moved further <u>north</u> | Should be moved further <u>south</u> | No <u>Opinion</u> |
|-----------------------------------|-------|---|---|---|----------------------|
| North Zone/Central Zone Boundary | | | | | |
| North Zone hunters | | | | | |
| In boundary counties ^a | (40) | 65% | 10% | 15% | 10% |
| All counties | (221) | 59 | 6 | 8 | 27 |
| Central Zone hunters | | | | | |
| In boundary counties ^a | (73) | 69 | 8 | 12 | 11 |
| All counties | (490) | 61 | 5 | 7 | 27 |
| Central Zone/South Zone Boundary | | | | | |
| Central Zone hunters | | | | | |
| In boundary counties ^b | (12) | 17 | 33 | 17 | 33 |
| All counties | (477) | 55 | 11 | 4 | 30 |
| South Zone hunters | | | | | |
| In boundary counties ^b | (65) | 60 | 26 | 2 | 12 |
| All counties | (180) | 61 | 18 | 3 | 18 |

^aCook, Will, Kendall, Grundy, LaSalle, Bureau, Henry, and Rock Island.

^bClark, Cumberland, Jasper, Effingham, Fayette, Shelby, Montgomery, Bond, Madison, St. Clair, Monroe, and Randolph.

Table 24. Attitudes of goose hunters toward the Canada goose harvest monitoring system that was implemented in 18 counties in the North and Central Waterfowl Zones in Illinois for the 1994-95 season. Sample sizes are in parentheses.

Responses to the question,

*"The Department of Conservation implemented a Canada goose harvest monitoring system in 18 counties in the North and Central Zones for the 1994-95 season. Goose hunters in these counties must have a special permit (issued free), and they must report the Canada geese they harvest via a toll-free phone number. This system clears the way for longer goose seasons (averaged over several years), and at the same time, prevents over harvest of the goose population. Which of the following statements best describes your attitude toward the monitoring system and permit requirement?"

| | <u>North Zone</u> | | <u>Central Zone</u> | |
|---|--|--|--|--|
| | <u>Quota</u> <u>Counties</u> (149) | <u>All</u> <u>Counties</u> (223) | <u>Quota</u> <u>Counties</u> (330) | <u>All</u> <u>Counties</u> (494) |
| The extra days of goose hunting make the inconveniences of the monitoring system and permit requirements worthwhile. | 74% | 71% | 76% | 68% |
| The monitoring system and permit requirements are more trouble than they are worth. Discontinue them and control the goose harvest with a shorter season. | 15 | 13 | 11 | 10 |
| No opinion | 11 | 16 | 13 | 22 |

Table 25. Attitudes of waterfowl hunters toward having the duck and goose seasons overlap in Illinois. Sample sizes are in parentheses.

Responses to the questions:

*"The Department of Conservation has the option of setting the goose hunting season so that it overlaps the duck season or so that it occurs after the duck season. The first option allows hunters to shoot ducks and geese at the same time but provides fewer total days of waterfowl hunting opportunity. The second option provides more days of waterfowl hunting opportunity but hunters cannot shoot ducks and geese at the same time. The duck migration peaks in mid-November, and the goose migration peaks in mid-December. With these facts in mind, which of the following options do you prefer for setting the goose hunting season in Illinois?"

| | <u>North Zone</u> | | <u>Central Zone</u> | | <u>South Zone</u> | |
|---|------------------------------|-------------------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|
| | <u>Duck Hunters</u> (344) | <u>Goose Hunters</u> (223) | <u>Duck Hunters</u> (925) | <u>Goose Hunters</u> (505) | <u>Duck Hunters</u> (354) | <u>Goose Hunters</u> (184) |
| Goose season totally overlaps duck season | 26% | 19% | 22% | 17% | 9% | 7% |
| Goose season partially overlaps duck season | 61 | 68 | 51 | 53 | 45 | 47 |
| Goose season totally after duck season | 7 | 8 | 20 | 25 | 42 | 43 |
| No opinion | 6 | 5 | 7 | 5 | 4 | 3 |

*"For the moment, assume that the goose season will overlap the duck season by 20 days and that 5 of these days will occur at the beginning of the duck season. The other 15 days could take place during the first half of the duck season or during the second half. Which do you prefer?"

| | <u>North Zone</u> | | <u>Central Zone</u> | | <u>South Zone</u> | |
|--------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|------------------------------|-------------------------------|
| | <u>Duck Hunters</u> (338) | <u>Goose Hunters</u> (223) | <u>Duck Hunters</u> (919) | <u>Goose Hunters</u> (499) | <u>Duck Hunters</u> (351) | <u>Goose Hunters</u> (181) |
| During first half | 18% | 16% | 11% | 12% | 3% | 4% |
| During second half | 67 | 68 | 79 | 79 | 86 | 89 |
| No opinion | 15 | 16 | 10 | 9 | 11 | 7 |

1994-95 ILLINOIS WATERFOWL HUNTER SURVEY

INSTRUCTION

To properly manage Illinois' waterfowl resources, the Department of Conservation needs information about waterfowl hunters, their hunting activities, and their opinions on selected issues.

Please answer the questions on the following pages for your waterfowl hunting activities during the 1994-95 season.

If you did not hunt waterfowl in Illinois during the 1994-95 season, answer the first two questions and return this form.

Report only your kill. DO NOT report the kill of others with whom you may have hunted.

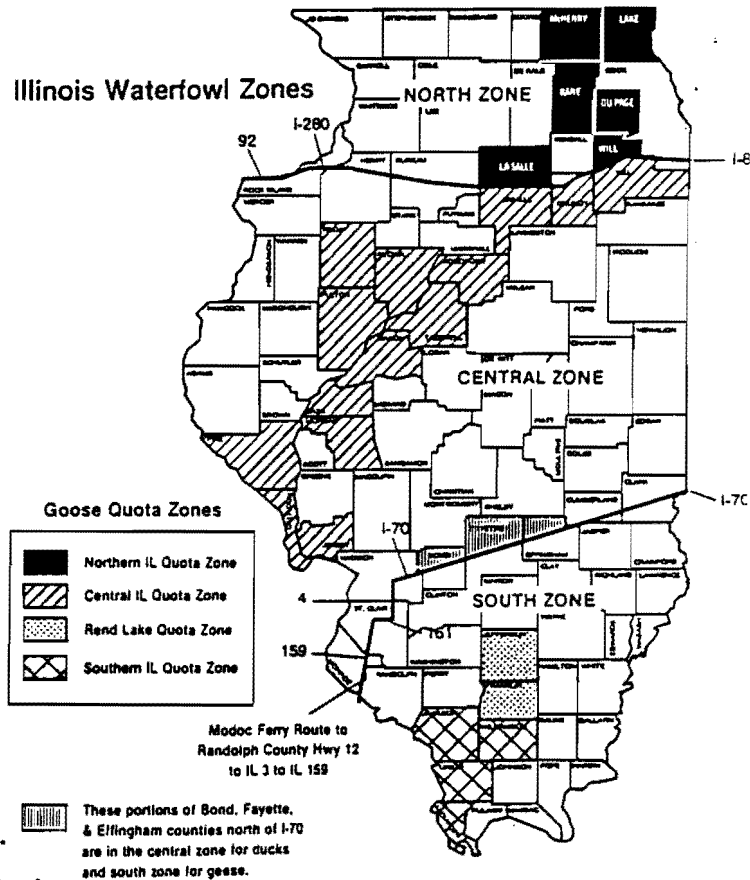
Write in the number of days on which you hunted ducks and the number of days on which you hunted geese. Include your unsuccessful days.

If you hunted both ducks and geese at the same time, count the day toward your primary target -- that is, primarily ducks or primarily geese. DO NOT count the hunt as a day of duck hunting and also as a day of goose hunting.

If you can't remember the exact figures, give your best estimate.

Your responses are strictly confidential and will never be associated with your name. Since you are part of a small, randomly selected group, your participation and your opinions are very important.

When completed, insert questionnaire into the self-addressed envelope and mail. POSTAGE IS PREPAID



Your comments are welcome but please write them on a separate sheet of paper to receive proper attention

Thank you for your cooperation

Figure 1. The questionnaire used for the 1994-95 Illinois Waterfowl Hunter Survey.
Figure 1 - continued.

REGULAR GOOSE SEASON

10. List the number of days you hunted geese and the number of geese you personally harvested during the regular goose season in Illinois in 1994-95. (NOTE: If you killed all your geese coincidental to duck hunting, leave the number of days blank)

| | <u>Days</u> | <u>Canada Geese</u> | <u>Other Geese</u> |
|---|-------------|---------------------|--------------------|
| *In Southern Quota Zone (see map)..... | _____ | _____ | _____ |
| *In Rend Lake Quota Zone (see map).... | _____ | _____ | _____ |
| *Other areas (write in name of each county): a. _____ | _____ | _____ | _____ |
| b. _____ | _____ | _____ | _____ |
| c. _____ | _____ | _____ | _____ |

11. How many geese did you knock down in sight but neither you nor anyone else could retrieve? _____

12. If you hunted Canada geese in the Southern Illinois Quota Zone:

12a. Which refuge were you closest to most of the time? (circle one number)

Horseshoe Lake Refuge..1 Union County Refuge..2 Crab Orchard Refuge..3

12b. How many days did you hunt and how many geese did you harvest on each of the the following types of areas?

| | <u>Days</u> | <u>Geese</u> |
|---|-------------|--------------|
| *Public hunting areas..... | _____ | _____ |
| *Commercial goose hunting clubs where a daily, weekly, seasonal, or other fee was charged..... | _____ | _____ |
| *Non-commercial goose hunting clubs or other private areas where <u>no</u> fee was charged..... | _____ | _____ |

YOUR OPINIONS

13. The dates for the 1994 teal season were September 10-18. How do you feel about using similar dates (September 9-17) for the 1995 teal season?

Too early...1 About right...2 Too late...3 No opinion...4

14. Do you prefer that legal shooting time for the September teal season begin at sunrise or 1/2 hour before sunrise?

At sunrise.....1 1/2 hour before sunrise.....2 No opinion.....3

15. If 40 days are allowed for the regular duck season in 1995, on which of the following days would you prefer that the season begin and end? (write in "1" for your first choice, "2" for your second choice, and "3" for your third choice)

- *Begin on Wednesday and end on Sunday..... _____
- *Begin on Thursday and end on Monday..... _____
- *Begin on Saturday and end on Wednesday.... _____

16. The State of Illinois is divided into a North Zone, Central Zone, and South Zone for purposes of setting the dates for the regular duck and goose hunting seasons (see map on first page). What is your opinion of the boundaries that separate these three zones? (circle number for appropriate answer for each boundary)

| | Present location is <u>about right</u> | Should be moved further <u>north</u> | Should be moved further <u>south</u> | No <u>Opinion</u> |
|--|--|--|--|----------------------|
| Boundary between North and Central Zones. | 1 | 2 | 3 | 4 |
| Boundary between Central and South Zones. | 1 | 2 | 3 | 4 |

16a. In which zone did you hunt ducks and/or geese most during the 1994-95 season? (circle number for appropriate answer for ducks and for geese)

| | | | |
|--------|----------------|------------------|----------------|
| Ducks: | North Zone...1 | Central Zone...2 | South Zone...3 |
| Geese: | North Zone...1 | Central zone...2 | South Zone...3 |

17. The Department of Conservation implemented a Canada goose harvest monitoring system in 18 counties in the North and Central Zones for the 1994-95 season. Goose hunters in these counties must have a special permit (issued free), and they must report the Canada geese they harvest via a toll-free phone number. This system clears the way for longer goose seasons (averaged over several years), and at the same time, prevents over harvest of the goose population. Which of the following statements best describes your attitude toward the monitoring system and permit requirement? (circle number for appropriate answer)

- *The extra days of goose hunting make the inconveniences of the monitoring system and permit requirement worthwhile.....1
- *The monitoring system and permit requirement are more trouble than they are worth. Discontinue them and control the goose harvest with a shorter season.....2
- *No opinion.....3

18. The Department of Conservation has the option of setting the goose hunting season so that it overlaps the duck season or so that it occurs after the duck season. The first option allows hunters to shoot ducks and geese at the same time but provides fewer total days of waterfowl hunting opportunity. The second option provides more days of waterfowl hunting opportunity but hunters cannot shoot ducks and geese at the same time. The duck migration peaks in mid-November, and the goose migration peaks in mid-December. With these facts in mind, which of the following options do you prefer for setting the goose hunting season in Illinois? (circle number for appropriate answer)

- *Set goose season so that it totally overlaps duck season.....1
- *Set goose season so that it partially overlaps duck season.....2
- *Set goose season so that it occurs totally after duck season....3
- *No opinion.....4

19. For the moment, assume that the goose season will overlap the duck season by 20 days and that 5 of these days will occur at the beginning of the duck season. The other 15 days could take place during the first half of the duck season or during the second half. Which do you prefer?

During first half...1 During second half...2 No opinion...3

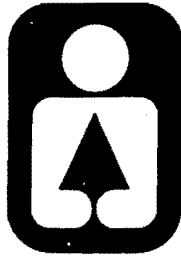
Thank you for your cooperation
POSTAGE IS PREPAID

Brent Manning
Director

John W. Comerio
Deputy Director

Bruce F. Clay
Assistant Director

Illinois



Department of Conservation

life and land together

LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787
CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601

Dear Fellow Sportsman:

You are one of a select group of Illinoisans asked to furnish information on your waterfowl hunting activities during the past hunting season.

The information supplied by you and other selected hunters is vital to the management of our waterfowl resources: (1) to safeguard waterfowl populations, (2) to grant maximum waterfowl hunting opportunity to license holders, and (3) to maintain an attractive level of hunter success.

The information you provide is used to better understand the welfare of the various waterfowl populations. These statistics include distribution of total harvest, number of hunters, and hunting success.

Your reply is very important, even if you did not hunt waterfowl or were not successful. Only a limited number of waterfowl hunters can be contacted, therefore, your response is urgently needed.

Please take a few minutes and fill out the parts of the questionnaire that apply to you. If you do not remember exact figures, please give your best estimate.

Drop the completed questionnaire in the mail. Postage is prepaid.

Yours for better waterfowling.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey M. Ver Steeg".

Jeffrey M. Ver Steeg
Chief

Division of Wildlife Resources

JMV:WLA:lc
Enclosure
W1

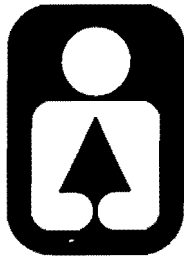
Figure 2. The letter that accompanied the first mailing of the questionnaire.

Brent Manning
Director

John W. Comerio
Deputy Director

Bruce F. Clay
Assistant Director

Illinois



Department of Conservation
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CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601

Dear Fellow Sportsman:

Recently we mailed you a Waterfowl Hunting Questionnaire, and requested that you fill out and return it as soon as possible. We have not received your form at this time -- perhaps because you have misplaced the questionnaire or haven't found time to complete it and return it to us.

We are enclosing another questionnaire which we hope you will complete and return to us. If you have already returned a questionnaire, please destroy this one. The information supplied by you and other waterfowl hunters being sampled will be of great value to the Conservation Department in better directing the management of Illinois' waterfowl resources.

Please fill out the questionnaire completely and return it even if you did not hunt waterfowl, or were not successful.

Postage is prepaid for returning the completed questionnaire. Your prompt attention will be sincerely appreciated.

Thank You.

Sincerely,

Jeffrey M. Ver Steeg
Chief
Division of Wildlife Resources

JMV:WLA:lc
Enclosure
W2

Figure 3. The letter that accompanied the second mailing of the questionnaire.

Brent Manning
Director

John W. Comerio
Deputy Director

Bruce F. Clay
Assistant Director

Illinois



Department of Conservation
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CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601

Dear Fellow Sportsman:

This letter is to remind you that we still would like to receive a report of your waterfowl hunting activities for the past season. We don't like to keep bothering you, but this information is very important which only you can supply.

Another copy of the questionnaire is enclosed. We hope you will complete it and return it as soon as possible. If you have already returned a questionnaire, please destroy this one. Your response is needed--even though you did not hunt waterfowl or had an unsuccessful season.

Postage is prepaid for returning the questionnaire. Just fill it out and drop in the mail. Please help us complete this survey by sending your questionnaire now. Your prompt attention will be greatly appreciated.

Thank You.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey M. Ver Steeg". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

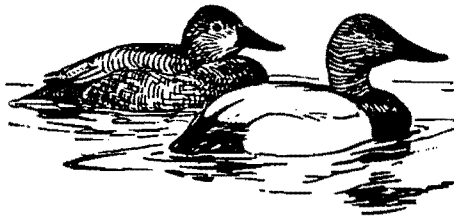
Jeffrey M. Ver Steeg
Chief

Division of Wildlife Resources

JMV:WLA:lc
Enclosure
W3

Figure 4. The letter that accompanied the third mailing of the questionnaire.

1994 WATERFOWL HUNTING INFORMATION



Non-Toxic Shot Required Statewide
New Regulations Other Than Dates Are In Italics and Shaded

| SPECIES | DATES (a) (Inclusive) | HOURS | DAILY LIMIT | POSSESSION LIMIT |
|---|---|-------------------------------------|--|--|
| Teal | Sept. 10 - Sept. 18 (Statewide) | Sunrise to Sunset | 4 | 8 |
| Ducks | North Oct. 20 - Nov. 28 | ½ hour before sunrise to sunset | 3 (See section on Bag Limits) | 2 x daily bag limit |
| Mergansers | Central Oct. 27 - Dec. 5 | | 5 (See section on Bag Limits) | 2 x daily bag limit |
| Coots | South Nov. 3 - Dec. 12 | | 15 | 30 |
| ALL GEESE (b) | North & Northern IL Quota Zone Oct. 20 - Nov. 13 & Nov. 23 - Dec. 18 | ½ hour before sunrise to sunset | 7, only 2 Canada geese and 2 white-fronted geese | 14, only 4 Canada geese and 4 white-fronted geese (d) |
| | Central & Central IL Quota Zone Oct. 27 - Oct. 30 & Nov. 23 - Jan. 8, 1995 | | | |
| | South Dec. 3 - Jan. 22, 1995 | | | |
| Rend Lake Quota Zone & Southern IL Quota Zone | Dec. 3 - Jan. 22, 1995 | ½ hour before sunrise to 3 p.m. (c) | 7, only 2 Canada geese and 2 white-fronted geese | 14, only 10 (d) Canada geese and 4 white-fronted geese |

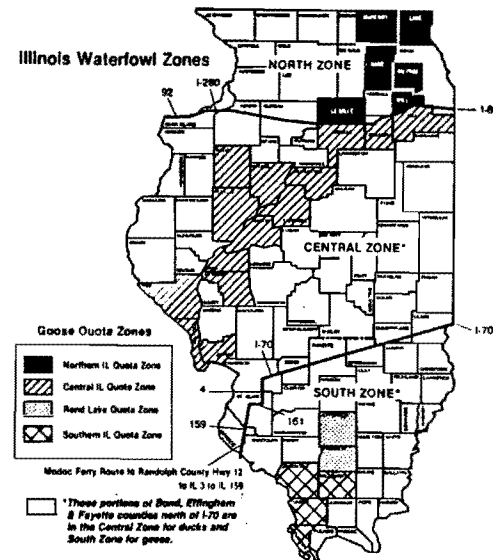
- (a) The Department of Conservation will close the Canada goose season earlier than dates listed above in a quota zone by giving 48 hours notice when quotas established by federal regulations are reached in that quota zone.
 (b) All Geese includes: Canada Geese, Snow/Blue Geese, Ross' Geese, White-Fronted Geese, and Brants.
 (c) Sunset closing last 3 days of season unless season closes early due to reaching quota.
 (d) Persons in possession of Canada geese in excess of twice the daily bag limit (as allowed in the Rend Lake and Southern Illinois quota zones) must identify each individual goose with a tag if transported out of that zone. The tag must contain the hunter's name, signature, and address and the date of kill and the location of the kill.

WATERFOWL HUNTING ZONES

Northern Zone - The portion of the State north of a line running east from the Iowa border along Illinois Route 92 to U.S. Interstate 280, east along U.S. Interstate 280 to U.S. Interstate 80, then east along U.S. Interstate 80 to the Indiana border.

Central Zone - That portion of the State south of the northern zone boundary to the Modoc Ferry Landing on the Mississippi River and east along the Modoc Ferry Road to Randolph County Highway 12 to Illinois Route 3, then north to Illinois Route 159, then north to Illinois Route 161, then east to Illinois Route 4, then north to U.S. Interstate 70. For duck hunting, the Central/South Zone boundary then continues east along I-70 to the Indiana border. *The Central Zone for geese is the same as for ducks, except that all of Bond, Fayette & Effingham counties are excluded from the Central Goose Zone.*

Southern Zone - The south zone for ducks extends from the southern boundary of the central duck zone south to the remainder of the state, which is the same as last year. *The south zone for geese extends from the southern boundary of the central goose zone south to the remainder of the state and, unlike last year, includes all of Bond, Effingham and Fayette counties.*



GOOSE QUOTA ZONES

NEW PERMIT REQUIRED TO HUNT CANADA GEESE IN THE NEW NORTHERN & CENTRAL IL QUOTA ZONES.
(See 94 Waterfowl Hunting Information Card for details.)

- Northern IL Quota Zone:** DuPage, Kane, Lake, McHenry, and those portions of LaSalle and Will counties north of I-80.
Central IL Quota Zone: Calhoun, Cass, Fulton, Jersey, Knox, Mason, Morgan, Peoria, Pike, Tazewell, and Woodford, and those portions of Grundy, LaSalle and Will counties south of I-80.
Southern IL Quota Zone: Alexander, Jackson, Union, and Williamson counties.
Rend Lake Quota Zone: Franklin and Jefferson counties.

BAG LIMIT

Ducks

Bag limits on ducks are established by a conventional bag limit as follows:

The basic daily bag limit shall be 3 ducks, no more than two of which shall be wood ducks or mallards (no more than one hen mallard) and not more than one black duck, one redhead, one pintail, or one canvasback. The daily bag limit for mergansers is 5, only 1 of which may be a hooded merganser. The possession limit for ducks and mergansers is twice the daily bag limit.

Geese

The daily bag limit of geese is 7 per day, which may not include more than two Canada geese or their subspecies and two white-fronted geese.

Refer to the 1994 Waterfowl Hunting Information card and the 1994-95 Digest of Hunting and Trapping Regulations for a summary of State and Federal regulations. NOTE: Each hunter should also consult Title 50, Code of Federal Regulations, Part 20, Chapter 520 of the Illinois Compiled Statutes for a complete listing of regulations, or talk with a local Conservation Police Officer.

Illinois Department of Conservation • Division of Wildlife Resources • Lincoln Tower Plaza
524 South Second Street • Springfield, IL 62701-1787 • 217/782-6384

The Illinois Department of Conservation receives federal financial assistance and therefore must comply with federal anti-discrimination laws. In compliance with the Illinois Human Rights Act, the Illinois Constitution, Title VI of the 1964 Civil Rights Act, Section 504 of the Rehabilitation Act of 1973 as amended, and the U.S. Constitution, the Illinois Department of Conservation does not discriminate on the basis of race, color, sex, national origin, age, or disability. If you believe that you have been discriminated against in any program, activity, or facility, please contact the Equal Opportunity Officer, Department of Conservation, 524 South Second St., Springfield, IL 62701-1787, (217) 782-7616 or the Office of Human Resources, U.S. Fish and Wildlife Service, Washington, D.C. 20204

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LICENSES, STAMPS, AND PERMITS

Hunters must have a current, valid hunting license and Federal and State Migratory Waterfowl Stamps in their possession at all times when afield. All required State stamps must be signed or affixed on the hunting license in the appropriate space. Federal stamps must be signed in ink across the face of the stamp. Please refer to the 1994-95 Digest of Hunting & Trapping Regulations for exemptions and further information.

- Annual Fees Are (including agent's fees):
 Resident Hunting License \$ 7.50
 Non-resident Hunting License
 5 day/regular \$28.75/\$50.75
 Resident Senior Hunting License \$ 4.00
 State Waterfowl Stamp \$10.50
 Federal Waterfowl Stamp \$15.00*
 Sportsman's License (hunt-fish) \$19.25
 Canada Goose Hunting Permit for
 Northern and Central IL Quota Zones Free
 *Does not include agent's fee which may be 50¢ or 75¢.
 A State Habitat Stamp is NOT required to hunt waterfowl.

IF YOU WANT TO HUNT WATERFOWL IN ILLINOIS AND YOU ARE:

| YOU NEED: | Under 18 | 18-64 | 65 & Older | Disabled | Service man | Land owner |
|-------------------------|----------|-------|------------|----------|-------------|------------|
| Hunting License | X | X | X* | | | |
| Federal Waterfowl Stamp | | X | X | X | X | X |
| State Waterfowl Stamp | | X | X* | | | |

*For the purpose of this section, "DISABLED" = disabled American veterans with at least 10% service-related disabilities or disabled persons certified under the Illinois Identification Card Act as having a Type 1 or Type 4 Class 2 disability. "SERVICEMAN" = persons on leave from the Armed Services, having entered the military as an Illinois resident. "LANDOWNER" (or tenant) = those persons and their children, parents, brothers, and sisters permanently residing on the land and hunting on that land.

*Senior Citizens are now required to buy a State Waterfowl Stamp and Senior Hunting License.

Figure 6. Hunting regulations during the regular duck and goose hunting seasons in Illinois in 1994-95.

Appendix A. Mean number of duck hunters, days afield, and ducks harvested by county and administrative region (Illinois 1989 through 1993). In all years, the duck season was 30 days in length, and the bag limit was 3 ducks (2 mallards) per day.

| County | Hunters | Days Afield | Duck Harvest | | | Total Ducks |
|---------------------------|---------|-------------|--------------|------------|-------------|-------------|
| | | | Mallards | Wood Ducks | Other Ducks | |
| Administrative Region: 1A | | | | | | |
| Boone | 126 | 833 | 161 | 86 | 16 | 263 |
| Carroll | 1010 | 10448 | 3778 | 780 | 1769 | 6328 |
| DeKalb | 110 | 551 | 173 | 99 | 34 | 306 |
| Jo Daviess | 578 | 3549 | 1055 | 426 | 671 | 2152 |
| Lee | 267 | 1909 | 465 | 202 | 125 | 792 |
| Ogle | 165 | 1075 | 235 | 153 | 77 | 465 |
| Stephenson | 102 | 740 | 122 | 141 | 65 | 328 |
| Whiteside | 760 | 8413 | 3187 | 1040 | 1108 | 5335 |
| Winnebago | 440 | 2568 | 740 | 195 | 88 | 1023 |
| Region Total | 3558 | 30088 | 9917 | 3122 | 3952 | 16990 |
| Administrative Region: 1B | | | | | | |
| Bureau | 770 | 7538 | 3382 | 797 | 923 | 5102 |
| Fulton | 1544 | 12175 | 4444 | 1273 | 2705 | 8422 |
| Henderson | 1065 | 10072 | 3698 | 812 | 1616 | 6126 |
| Henry | 175 | 1169 | 398 | 128 | 116 | 642 |
| Knox | 229 | 1605 | 418 | 65 | 441 | 925 |
| LaSalle | 751 | 7612 | 2668 | 656 | 836 | 4159 |
| Marshall | 1077 | 11587 | 5745 | 1116 | 1775 | 8636 |
| McDonough | 21 | 261 | 38 | 0 | 11 | 49 |
| Mercer | 416 | 4247 | 1221 | 363 | 381 | 1965 |
| Peoria | 392 | 3190 | 1281 | 303 | 557 | 2142 |
| Putnam | 791 | 9257 | 3920 | 725 | 1123 | 5768 |
| Rock Island | 879 | 8749 | 2485 | 1143 | 1076 | 4704 |
| Stark | 44 | 294 | 120 | 8 | 64 | 192 |
| Tazewell | 598 | 5625 | 1858 | 570 | 1176 | 3604 |
| Warren | 5 | 11 | 0 | 0 | 0 | 0 |
| Woodford | 1011 | 10884 | 6331 | 1200 | 1616 | 9147 |
| Region Total | 9768 | 94275 | 38006 | 9161 | 14416 | 61582 |
| Administrative Region: 2 | | | | | | |
| Cook | 248 | 2360 | 619 | 156 | 365 | 1140 |
| DuPage | 191 | 1467 | 428 | 123 | 108 | 659 |
| Grundy | 660 | 5176 | 1755 | 393 | 480 | 2627 |
| Kane | 574 | 3588 | 892 | 352 | 219 | 1463 |
| Kankakee | 526 | 3825 | 1010 | 246 | 212 | 1468 |
| Kendall | 242 | 1842 | 580 | 176 | 104 | 860 |
| Lake | 1155 | 10708 | 2855 | 465 | 1880 | 5199 |
| McHenry | 1208 | 8674 | 2623 | 774 | 890 | 4287 |
| Will | 1618 | 13536 | 4103 | 924 | 886 | 5912 |
| Region Total | 6422 | 51176 | 14864 | 3607 | 5143 | 23615 |

| County | Hunters | Days Afield | Duck Harvest | | | Total Ducks |
|---------------------------|---------|----------------|--------------|---------------|----------------|----------------|
| | | | Mallards | Wood Ducks | Other Ducks | |
| Administrative Region: 3A | | | | | | |
| Adams | 746 | 9122 | 2838 | 618 | 1189 | 4645 |
| Brown | 131 | 1209 | 619 | 165 | 227 | 1011 |
| Calhoun | 1901 | 21734 | 9427 | 2647 | 4838 | 16911 |
| Cass | 1189 | 11923 | 5322 | 1612 | 1719 | 8653 |
| Christian | 222 | 1557 | 508 | 102 | 295 | 905 |
| Greene | 143 | 1532 | 564 | 139 | 365 | 1068 |
| Hancock | 263 | 2666 | 692 | 173 | 573 | 1438 |
| Jersey | 721 | 9145 | 3273 | 926 | 2120 | 6319 |
| Logan | 32 | 207 | 37 | 40 | 5 | 82 |
| Macoupin | 216 | 2605 | 604 | 167 | 360 | 1132 |
| Mason | 1936 | 19829 | 8643 | 2455 | 3806 | 14904 |
| Menard | 5 | 16 | 0 | 0 | 0 | 0 |
| Montgomery | 207 | 2573 | 664 | 126 | 499 | 1289 |
| Morgan | 163 | 2141 | 721 | 83 | 280 | 1084 |
| Pike | 979 | 10778 | 3868 | 1030 | 2167 | 7064 |
| Sangamon | 257 | 1812 | 700 | 142 | 251 | 1094 |
| Schuyler | 271 | 2333 | 1010 | 330 | 267 | 1607 |
| Scott | 17 | 115 | 14 | 38 | 0 | 52 |
| Region Total | 9397 | 101297 | 39503 | 10792 | 18962 | 69257 |

Administrative Region: 3B

| | | | | | | |
|--------------|------|-------|------|------|------|------|
| Champaign | 82 | 361 | 79 | 71 | 49 | 199 |
| Clark | 27 | 212 | 64 | 24 | 29 | 117 |
| Coles | 27 | 336 | 46 | 5 | 33 | 84 |
| Cumberland | 17 | 169 | 56 | 3 | 66 | 125 |
| DeWitt | 180 | 863 | 217 | 36 | 87 | 340 |
| Douglas | 28 | 100 | 17 | 11 | 0 | 28 |
| Edgar | 72 | 898 | 178 | 32 | 165 | 375 |
| Ford | 27 | 130 | 32 | 3 | 8 | 42 |
| Iroquois | 146 | 1151 | 382 | 122 | 90 | 594 |
| Livingston | 106 | 458 | 72 | 59 | 41 | 172 |
| Macon | 266 | 3178 | 1131 | 261 | 435 | 1827 |
| McLean | 92 | 491 | 119 | 57 | 52 | 228 |
| Moultrie | 284 | 2023 | 516 | 252 | 386 | 1153 |
| Piatt | 11 | 69 | 8 | 24 | 3 | 35 |
| Shelby | 309 | 2283 | 683 | 82 | 345 | 1110 |
| Vermillion | 159 | 1319 | 191 | 72 | 148 | 411 |
| Region Total | 1834 | 14041 | 3787 | 1114 | 1938 | 6839 |

Administrative Region: 4

| | | | | | | |
|--------------|------|-------|------|------|------|-------|
| Bond | 305 | 2560 | 1148 | 133 | 514 | 1795 |
| Clinton | 707 | 5352 | 2326 | 704 | 901 | 3931 |
| Madison | 641 | 5380 | 1568 | 519 | 1442 | 3529 |
| Monroe | 359 | 3232 | 1143 | 191 | 713 | 2046 |
| Randolph | 498 | 4639 | 1120 | 285 | 1058 | 2463 |
| St. Clair | 577 | 4574 | 1485 | 429 | 889 | 2803 |
| Washington | 94 | 770 | 249 | 31 | 44 | 324 |
| Region Total | 3181 | 26508 | 9040 | 2291 | 5561 | 16892 |

| County | Hunters | Days Afield | Duck Harvest | | | Total Ducks |
|--------------------------|---------|----------------|--------------|---------------|----------------|----------------|
| | | | Mallards | Wood Ducks | Other Ducks | |
| Administrative Region: 5 | | | | | | |
| Alexander | 268 | 2206 | 776 | 359 | 165 | 1299 |
| Clay | 38 | 340 | 110 | 66 | 72 | 248 |
| Crawford | 28 | 292 | 92 | 30 | 12 | 135 |
| Edwards | 23 | 213 | 112 | 11 | 8 | 132 |
| Effingham | 5 | 32 | 3 | 3 | 0 | 5 |
| Fayette | 1205 | 11557 | 5261 | 1112 | 2075 | 8449 |
| Franklin | 729 | 6523 | 2284 | 746 | 1063 | 4093 |
| Gallatin | 60 | 496 | 180 | 69 | 61 | 309 |
| Hamilton | 11 | 175 | 27 | 13 | 17 | 57 |
| Hardin | 11 | 43 | 6 | 6 | 3 | 15 |
| Jackson | 920 | 7095 | 2146 | 740 | 1018 | 3903 |
| Jasper | 21 | 236 | 45 | 3 | 71 | 118 |
| Jefferson | 976 | 8452 | 3693 | 1044 | 1405 | 6142 |
| Johnson | 49 | 265 | 79 | 80 | 37 | 196 |
| Lawrence | 17 | 65 | 28 | 29 | 3 | 59 |
| Marion | 99 | 580 | 156 | 59 | 58 | 272 |
| Massac | 324 | 3089 | 874 | 528 | 339 | 1740 |
| Perry | 403 | 4193 | 788 | 186 | 1043 | 2017 |
| Pope | 50 | 436 | 258 | 31 | 98 | 388 |
| Pulaski | 119 | 827 | 146 | 224 | 27 | 397 |
| Richland | 16 | 184 | 35 | 11 | 33 | 78 |
| Saline | 65 | 585 | 127 | 79 | 33 | 239 |
| Union | 503 | 3931 | 1312 | 644 | 605 | 2561 |
| Wabash | 109 | 1141 | 363 | 180 | 183 | 726 |
| Wayne | 59 | 351 | 171 | 38 | 16 | 225 |
| White | 76 | 549 | 309 | 89 | 54 | 451 |
| Williamson | 374 | 2297 | 949 | 334 | 535 | 1818 |
| Region Total | 6559 | 56154 | 20330 | 6712 | 9032 | 36074 |
| Unknown | 427 | 2600 | 1030 | 237 | 471 | 1738 |
| State total | 41146 | 376139 | 136477 | 37036 | 59475 | 232988 |