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**RESULTS OF THE 1992 ILLINOIS MOURNING**  
**DOVE HUNTER SURVEY**

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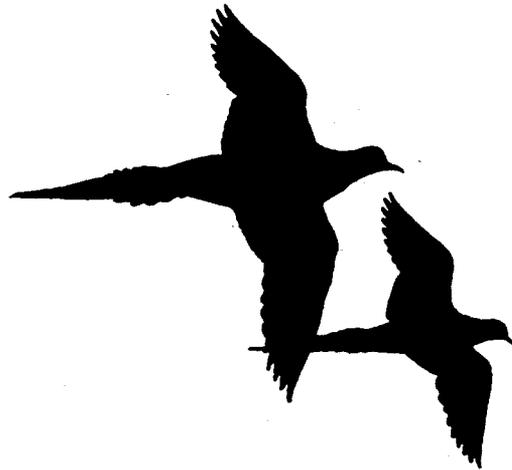
**FEDERAL AID IN WILDLIFE RESTORATION ACT**

**ILLINOIS**

**Federal Aid Project Number: W-112-R**

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**10 March 1994**

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Illinois Department of Conservation  
Division of Wildlife Resources  
Administrative Report  
8 March 1994

RESULTS OF THE 1992 ILLINOIS MOURNING DOVE HUNTER SURVEY

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Abstract: Purchasers of (1990 and 1991) Illinois hunting licenses who hunted mourning doves were surveyed via mail-letter questionnaire to determine their activities, harvest, and attitudes during the 1992 season. The mailing list consisted of 1,469 individuals, 1,111 (76%) of which returned usable questionnaires. Because 372 (34%) of the respondents did not hunt doves in Illinois again in 1992, the effective sample was reduced to 739 active hunters. These hunters spent an average of 4.7 Days afield; they had expended 45%, 62%, and 76% of their days afield by the 7th, 14th, and 21st day, respectively. Only 13% of the days afield were expended during the 2nd half (1-30 October) of the season. The hunters harvested an average of 4.7 doves per day afield and 22.2 doves for the entire season. 65% of the hunters harvested  $\leq 20$  doves, and they took  $\leq 5$  doves on 63% of their days afield. 89% of the days afield and 89% of the dove harvest occurred on private land. Dove hunting activities on private land were most frequently associated with grass or "weeds" and corn or corn stubble. On public land, dove hunting was strongly associated with sunflowers or sunflower stubble. Majorities (or pluralities) of the hunters had no or little difficulty finding a place to dove hunt, supported the current daily bag limit of 15 doves, preferred a 60-day season/15-bird bag limit over a 70-day season/12-bird bag limit, agreed with the idea of hunting doves during the morning hours, would not hunt doves in November if the season extended into that month, had not used nontoxic steel shot to hunt doves, and were unaware of the National Migratory Bird Harvest Information Program. On the average, Illinois dove hunters were 37 years of age, had hunted doves for 17 years, traveled 31 miles (round trip) per day afield, and spent \$138 (total \$10.2 million) on their sport; 26% usually used a dog and 62% usually used reloaded shotgun shells. The management implications of these findings are discussed.

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The mourning dove (Zenaidura macroura), hereafter referred to as dove, is the most abundant and widely distributed game bird in North America (Baskett et al. 1993). Numbering about 475 million nationwide (Sadler 1993:454), doves occur in all 50 states (Aldrich

1993:48). Doves are also present in most Canadian provinces, Mexico, Central America, Bermuda, the Bahamas, and Greater Antilles. In 1987, the dove was classified as a game species in 36 states (Reeves 1993:437). Annually from 1983 to 1987, 2.4 million hunters spent 10.4 million days afield and harvested 45.6 million doves in the United States (Sadler 1993:482).

In Illinois, where doves have been hunted for 75 years, an average of 78,000 hunters expended an average of 407,000 days afield and harvested an average of 1.7 million doves annually in 1987-1991 (Anderson and Campbell 1993). In terms of animals harvested, the dove is the most popular game species in the Prairie State.

To properly manage the dove resource and to establish bio-sociologically acceptable hunting regulations, the Illinois Department of Conservation (DOC) must be familiar with the activities and attitudes of dove hunters in the state. Thus, the purpose of the present study was to survey dove hunters to determine: when and where they are in the field, characteristics of their dove harvest, and their opinions of current and future dove hunting regulations. Surveys such as this one improve the DOC's understanding of the rank-and-file hunter--i.e., the feelings of the "silent majority"--toward the dove resource and the sport of dove hunting.

This survey is one in a series scheduled for upland game hunters in Illinois. A rabbit hunter survey was conducted following the 1989 season, a pheasant hunter survey was conducted following the 1990 season, and a pheasant hunter survey and a quail

hunter survey were conducted after the 1991 season (Anderson and David 1991a, 1991b, 1992a, 1992b). Woodcock hunters and gray partridge hunters will be surveyed following the 1993 season, and rabbit hunters will be surveyed again in 1994 or 1995.

#### METHODS AND MATERIALS

A 6-page, 29-question questionnaire was developed specifically for the 1992 Dove Hunter Survey (Fig. 1). This questionnaire and a letter of explanation (Fig. 2) were mailed to 1,469 dove hunters on 3 November 1992. Non-respondents were sent 2nd and 3rd copies of the questionnaire, and accompanying letters (Figs. 3 and 4), on 9 December and 12 January, respectively. As of 17 March 1993, 1,111 usable questionnaires were returned for a response rate of 76%.

Names (and addresses) making up the mailing list included those individuals who were identified via the annual Hunter Harvest Survey as having hunted doves in Illinois during the 1990 or 1991 season (Anderson and Campbell 1991 and 1992). The people on the list were notified by letters postmarked 27 August 1992 that they would receive a questionnaire at the close of the dove hunting season. The notice included a form for keeping records of hunting activity and doves harvested (Fig. 5). For those interested in sampling procedures, the success experienced in making contact with and obtaining replies from people whose names and addresses were 1 year old versus those whose names and addresses were 2 years old are presented in Appendix A.

Data were transferred from the filled-out questionnaires to a

computer file using a data management program (Ashton-Tate dBASE III+). The data were analyzed with a statistical program (SPSS Inc. SPSS/PC+V2.0). Results were tabulated relative to the northern half of Illinois, the southern half, and the entire state.

The line used to divide the state into north and south halves was US-36 from the Indiana state line west to Springfield, route IL-29 north to Pekin, and route IL-9 west to the Iowa state line. This is the same line that is used to zone the state for purposes of setting the squirrel, rabbit, quail, pheasant, and gray partridge hunting seasons.

#### HUNTING REGULATIONS IN 1992

The 1992 dove hunting season began on 1 September, the earliest date allowed by federal regulations and international treaties (Migratory Bird Treaty Act), and ended on 30 October. These dates applied statewide. The bag limit was 15 birds per day and 30 in possession. As in previous years since 1958, legal shooting time began at 12 noon and ended at sunset.

#### FINDINGS

Of the 1,111 individuals who filled out and returned questionnaires, 95% purchased an Illinois resident hunting license again in 1992, 67% hunted doves again in Illinois in 1992, and 2% hunted doves in another state in 1992 (Table 1). Thus, the effective sample for this survey was reduced to 739 active dove hunters.

## Hunter Activities

Of the 739 active dove hunters, 56% were afield on opening day of the season and 37% were afield on the second day (Table 2). Viewed another way, 30% of the hunters were afield on opening day and on the second day and 62% were afield on opening day and/or the second day. Furthermore, 90% of the dove hunters had been afield  $\geq 1$  days by 7 September, but only 19% of the hunters pursued doves after 30 September.

The active hunters spent an average of 4.7 days afield in pursuit of doves in 1992 (Table 2). Hunters <16 years of age were afield an average ( $\pm$ SE) of  $5.92 \pm 0.58$  days ( $n=118$ ) and older hunters were afield an average of  $4.47 \pm 0.15$  days ( $n=621$ ). The difference between these averages was significant ( $t=2.42$ ,  $P<0.05$ ).

About one-half (51%) of the hunters were afield  $\leq 3$  days and nearly three-fourths (71%) were afield  $\leq 5$  days. The active hunters had expended 45% of their days afield by 7 September, 62% of their days afield by 14 September, and 87% of their days afield by 30 September (Table 2). Only 13% of the days afield occurred during 1-30 October. The temporal distributions of hunter activity in the north and south halves of the state were similar.

For purposes of comparison, the annual Hunter Harvest Survey indicated that dove hunters spent an average of 5.3 days afield, and that 71% of the hunters were afield  $\leq 5$  days, during the 1992 season (Anderson and Campbell 1993).

## Characteristics of Dove Harvest

Active hunters reported harvesting an average of 22.2 doves in

Illinois during the 1992 season. The harvest per hunter was appreciably greater in the south half of the state (28.2 birds) than in the north half (18.4 birds). Hunters <16 years of age harvested an average ( $\pm$ SE) of  $22.34 \pm 2.61$  doves ( $n=118$ ) and older hunters harvested an average of  $22.07 \pm 1.04$  doves ( $n=621$ ). The difference between these averages was not significant ( $t=0.10$ ,  $P>0.05$ ).

The number of doves taken per day afield averaged 3.9 birds in the north half of the state, 5.9 birds in the south half, and 4.7 birds statewide (Table 3). About one-fifth (19%) of the entire 1992 dove harvest took place on opening day and 29% had occurred by the second day. The accumulative harvest totaled 54% by 7 September, 71% by 14 September, and 92% by 30 September. Only 8% of the dove harvest occurred during 1-30 October. It appears that the temporal distribution of dove harvest has not changed appreciably in Illinois since 1949-1958 (Hanson and Kossack 1963:109).

For the entire state, 9% of the active hunters took 0 dove, 16% took 1-5 doves, 17% took 6-10 doves, 14% took 11-15 doves, 8% took 16-20 doves, and 26% took  $\geq 21$  doves. In comparison, the annual Hunter Harvest Survey indicated that the dove harvest averaged 20.5 birds annually per hunter in 1992; 11% of the hunters took 0 dove, 20% took 1-5 doves, 17% took 6-10 doves, 16% took 11-19 doves, and 36% took  $\geq 20$  doves (Anderson and Campbell 1993).

The active hunters harvested  $\leq 5$  doves on 63% of their days afield during the 1992 season (Table 4). They harvested 0 doves on

25% of their days afield. At the other extreme, dove hunters managed to harvest 15 birds, the bag limit, on only 9% of their days afield. These data suggest that the average dove hunter in Illinois obtains his daily bag limit about once in 10 trips afield, or about 1 day every 2 years.

#### Types of Areas and Habitats Hunted

About 91% of the dove hunters were active on private land, and 19% of them were active on public land (Table 5). Similarly, 89% of the days afield and 89% of the dove harvest took place on private land, whereas 11% of the days and 11% of the harvest occurred on public land. The percentages of days afield and dove harvest on public areas were greater in the south half of the state (14% and 13%) than in the north half (8% and 9%). A 1987 national survey of state wildlife agencies indicated that <10% of the dove hunting in Illinois occurred on public land (George 1993:460).

Based on the hunters sampled during the present survey, an estimated 15,000 hunters spent 42,000 days afield and harvested 180,000 doves on public areas in Illinois in 1992. However, according to DOC's records, dove hunters expended 15,280 days afield and harvested 59,853 doves on DOC-regulated (check station) public areas in 1992 (Willms et al. 1993). These data do not account for dove hunting on unregulated DOC areas or on federal lands such as the Shawnee National Forest and national wildlife refuges.

On private areas, dove hunting activities were most frequently associated with grass or "weeds" (46%) and corn or corn

stubble (45%) (Table 6). The latter is no doubt a reflection of the fact that 31% of Illinois' surface area was planted to corn in 1992 (Illinois Agricultural Statistics Service 1993). Other habitats where dove hunting frequently occurred included timber edge or hedgerows (37%), water (31%), sunflowers or sunflower stubble (29%), and wheat or wheat stubble (25%). Baskett et al. (1993:486) reported that cropfields rank as the most important habitat type for dove hunting in eastern Midwestern states.

On public areas, dove hunting was, by a wide margin, most frequently associated with sunflowers or sunflower stubble (82%) (Table 6). Grass or "weeds" (19%) was a distant second and was followed by corn or corn stubble (15%) and timber edge or hedgerows (15%). Since dove management practices on public areas emphasize sunflowers, the strong association between dove hunting and sunflowers on these areas is not surprising.

#### Attitudes and Opinions

Finding and Leasing Places to Hunt. When asked to rate the level of difficulty they experienced in finding a place to dove hunt in Illinois in 1992, 44% of the active hunters said "none" (Table 7). At the other extreme, 13% of the hunters indicated they had "much" difficulty finding a place. Hunters were no more apt to experience "much" difficulty in the north half of the state (13%) than in the south half (12%). Statewide, dove hunters apparently had somewhat less difficulty than quail hunters, and much less difficulty than pheasant hunters, in finding a place to pursue their respective sport (Anderson and David 1992a and 1992b).

One hunter in 20 (5%) reported paying a landowner for the right to hunt doves in Illinois during the 1992 season (Table 7). The amount they paid averaged \$19.47 per day. However, 29% of the hunters expressed a willingness to pay for the right to hunt doves on an owner's property (Table 7). The daily fee these hunters would be willing to pay averaged \$17.36 and was higher in the north half of the state (\$18.44) than in the south half (\$15.98). In general, dove hunters exhibited about the same level of interest as quail hunters, and less interest than rabbit hunters or pheasant hunters, in paying for the right to hunt (Anderson and David 1991a, 1992a and 1992b).

Daily Bag Limit, Season Length, and Shooting Hours. When asked to express their opinion of the number of doves that should be allowed in the daily bag limit, a plurality of the hunters preferred 15 birds, which is the current limit (Table 8). Hunters expressed more sentiment for smaller (10- or 12-bird) limits than for larger (20-bird) limits. Statewide, 86% of the hunters opted for  $\leq 15$  doves per day.

When asked to choose between a 60-day season/15-bird bag limit and a 70-day season/12-bird bag limit, a majority (52%) of the dove hunters opted for the former (Table 8). The preference for the 60-day season/15-bird bag limit prevailed in both the north half of the state (51%) and in the south half (54%).

Similarly, when asked whether they agreed or disagreed with the idea of hunting doves during the morning hours, majorities of the hunters in the north half of the state (54%), the south half (52%), and the entire state (53%) agreed (Table 8). Statewide,

about two-thirds (66%) of the hunters indicated they would hunt doves during the morning hours if it were legal to do so (Table 8).

Finally, when asked whether they would hunt doves during November if the season extended into that month, one-half (50%) of the hunters said "no" (Table 8). About one-third of the hunters statewide, as well as in the respective halves of the state, were interested in pursuing doves during the eleventh month.

Dove Management Programs. The active hunters were asked to express their opinions as to the relative importance of three DOC dove management activities in Illinois (Table 9). Pluralities of the respondents rated "dove habitat management and hunting on private land" as #1, "dove habitat management and hunting on public land" as #2, and "gather information about dove biology and population trends" as #3. However, it is noteworthy that the spread (5 percentage points) among respondents who rated each of these categories #1 was small. The relatively high priority on habitat management and hunting on private land probably stems from the fact that most dove hunting takes place on private land (Table 5).

Nontoxic Steel Shot. When asked if they had ever hunted doves with nontoxic steel shot, 13% of the active hunters answered in the affirmative (Table 10). 7% of the hunters had used steel shot on doves during the 1992 season, and they harvested an average of 14.3 birds each with the nontoxic pellets. When coupled with information from the Hunter Harvest Survey (Anderson and Campbell 1993), these data indicate that about 74,000 doves--5% of the statewide harvest--were taken with nontoxic steel shot during the

1992 season.

National Migratory Bird Harvest Information Program. After describing the National Migratory Bird Harvest Information Program (HIP), the dove hunters were asked whether they were previously aware that this program was scheduled for implementation in Illinois (Table 11). Only 7% were. When asked whether they thought the HIP was an appropriate or inappropriate action for the federal government to take, the dove hunters were equally divided (Table 11). It appears that Illinois dove hunters are poorly informed as regards to HIP, and that the U.S. Fish and Wildlife Service and the states need to launch an aggressive public education campaign for this program.

Assessment of Dove Abundance. When asked their opinions of the abundance of doves in 1992 compared to 1991, a majority of hunters in the north half of Illinois (52%) thought there were fewer (Table 12). Pluralities of hunters in the south half (44%) and statewide (49%) agreed with this assessment. Statewide, 30% of the hunters thought dove numbers were the same in 1991 and 1992, and 14% thought there were more doves in 1992. Near record low temperatures during August 1992 may have triggered an early migration, thereby leaving the impression that the dove population was down. The call-count survey, which is coordinated by the U.S. Fish and Wildlife Service, indicated a non-significant 1.6% decline in the dove population in Illinois in 1992 (Dolton 1992).

#### Characteristics of Dove Hunters

Active dove hunters who participated in the survey were, on

the average, 35 years of age (Table 13). The hunters had hunted doves for an average of 16 years, and they began hunting (any type of game) at an average age of 13 years.

Dove hunters traveled an average of 31 miles (round trip) per day afield (Table 13). Four hunters in 5 (82.9%) were active in 1 county; 14.5% hunted doves in 2 counties and 2.6% were active in  $\geq 3$  counties (n=737). Similarly, the vast majority (77%) of hunters were active in their county of residence, and nearly two-thirds (63%) of them hunted only in their county of residence (n=737). Dove hunters appear to be more mobile than rabbit hunters, somewhat less mobile than quail hunters, and considerably less mobile than pheasant hunters (Anderson and David 1991a, 1992a, 1992b).

There was an average of 3.4 hunters per dove hunting party (2 or 3 hunters comprised 60% of parties), and they hunted an average of 2.9 hours per day afield (1-4 hours accounted for 89% of the days afield) (Table 13). About one-fourth (26%) of the hunters claimed they usually used a dog for dove hunting; the most common breeds were Labrador retriever (62%), Brittany spaniel (11%), and golden retriever (8%).

Majorities of Illinois dove hunters usually or always used camouflage clothing (90%), stool/chair (84%), and reloaded shotgun shells (61%) (Table 13). Conversely, dove hunters seldom used a portable blind (12%), call (6%), or umbrella (1%). About one-fourth (27%) of the hunters usually or always used decoys.

#### Economics of Dove Hunting

Active dove hunters reported spending an average of \$138 to

pursue their sport in Illinois during the 1992 season (Table 14). More than one-half (61%) of the hunters spent <\$100 and only 3% spent >\$500. When the average (\$138) was applied to the total number of dove hunters in the state, expenditures for dove hunting totaled \$10.2 million for the 1992 season (Table 14). In comparison, rabbit hunters spent a total of \$25.4 million (average of \$156) in 1989, pheasant hunters spent a total of \$30.8 million (average of \$294) in 1990, and quail hunters spent a total of \$24.8 million (average \$289) in 1991 (Anderson and David 1991a, 1991b, 1992b). In a 1991 national survey, migratory bird hunters reported spending \$228 apiece annually on their sport (U.S. Department of the Interior 1993:86).

#### DISCUSSION

To develop the mailing list for this survey, it was necessary to select individuals who indicated on the annual Hunter Harvest Survey that they had hunted doves in Illinois during the 1990 or 1991 season. Thus, the mailing list was 1-2 years old at the time the survey was conducted, and many (33%) of the respondents did not hunt doves again in 1992. Because the on-again-off-again dove hunters were eliminated, the sample may have been biased in favor of the more ardent, more dedicated hunters. Furthermore, as all of the individuals whose names were on the mailing list had previously participated in a survey, additional bias may have been introduced.

Nevertheless, the findings of this survey are useful, and they demonstrate that dove hunting activities are strongly compressed into the early days of the Illinois season. The hunters had

expended 45%, 62%, and 76% of their days afield by the 7th, 14th, and 21st day, respectively (Table 2). Similarly, the cumulative harvest of doves was 54%, 71%, and 83% complete on these days (Table 3). Only 13% of the days afield and 8% of the harvest occurred during the 2nd half (1-30 October) of the season. Evidently, there is a rush to the dove fields early in the season, after which interest in dove hunting tapers off rapidly. This attitude is no doubt manifested by the fact that doves are early migrants and begin departing from Illinois, especially northern portions, with the first cool fronts in late August and early September (Hanson and Kossack 1963:26). In addition, by early October, hunters are turning their attention to the upland game (rabbit, quail, pheasant), waterfowl, and deer seasons, all of which begin in October or November. Among active dove hunters, 85% also hunt upland game, 33% also hunt waterfowl, and 51% also firearms hunt deer (Anderson and Campbell 1991).

Dove hunters appear to be highly satisfied with the current bag limit of 15 birds per day. They took  $\leq 5$  doves on 63% of their days afield and no birds on 25% of their days (Table 4). At the other extreme, the hunters harvested 15 doves--the daily bag limit--on only 9% of their days, or about 1 day every 2 years. Clearly, most dove hunters harvest many fewer doves on most of their days afield than the daily bag limit allows. Furthermore, 86% of the hunters felt that the daily bag limit should include  $\leq 15$  birds (Table 8).

Except for 1952, the legal hours for hunting doves in Illinois extended for the full day from 1918 to 1957. Beginning in 1958 and

continuing through the 1992 season, legal hours were limited to the afternoon (12 noon to sunset). Federal regulations currently permit full-day hunting, and most states select this option for at least a portion of their season (Reeves 1993:442-443). Illinois has retained afternoon-only hours, the theory being that elimination of morning shooting allows local dove populations to "rest", promotes continued use of nearby feeding areas, and delays migration (Kringer 1981:11-12). Half-day hunting has also been implemented in an effort to improve distribution of hunting pressure and enforcement of daily bag limits (Reeves 1993:444). In the 1950s, when all-day hunting was allowed, most dove hunting in Illinois occurred during late afternoon (Hanson and Kossack 1963:108).

However, there is considerable interest among present-day hunters in pursuing doves during the morning hours. When asked to express their opinions, 53% of the hunters agreed with the idea of hunting doves in the morning and 66% said they would do so if it were legal (Table 8). Dog owners, in particular, prefer to hunt during the morning hours when cooler temperatures are more conducive to canine temperaments. Because of the prevailing sentiment among hunters and promotion of morning hunting in some quarters of the DOC, the decision was made to extend dove hunting hours to the full day (sunrise to sunset) for the 1993 season. Since this represents a departure from longstanding policy, the impacts (positives and negatives) associated with morning hunting of doves should be fully evaluated.

International treaties (Migratory Bird Treaty Act) dictate that migratory game birds cannot be hunted before 1 September. Thus, any consideration to changes in dove season dates must be directed to the end of the season, as for example initiating a split season whereby there is a closed period during October and a reopening in November. In other words, the opportunity to hunt doves in October would be traded for the opportunity to hunt doves during November. In the present survey, 19% of the dove hunters went afield in October but 37% said they would go afield in November if the season were open (Tables 2 and 8).

A split season would allow hunters to pursue doves late into the year and in conjunction with rabbit, quail, and pheasant hunting. Although fewer doves would likely be available to hunt (Hanson and Kossack 1963:15), more hunters would be afield in November with the upland game season opening on the first Saturday of that month. Because there are so many of them, upland game hunters could possibly harvest more doves coincidentally in November than "pure" dove hunters purposely take in late October. However, dog owners (45% of quail hunters, Anderson and David 1992a) may not want to shoot doves while working hunting dogs.

In considering a split season, the DOC has responsibilities for safeguarding the mourning dove resource, providing recreational opportunities, and serving as a leader for hunting ethics. With these responsibilities in mind, should the DOC select as its first priority to maximize hunting opportunity, maximize quality hunting, or maximize harvest? In our view, the first two considerations are more important than the last.

Most dove hunting in November would probably occur as opportunistic shooting in conjunction with other types of hunting-- a practice associated with the first stage (Shooter Stage) of hunters (Jackson et al. 1979). The progressive development of hunters and other recreationists through various stages of maturation is a widely accepted concept (Leopold 1938, Kirkpatrick 1966, Bryan 1982). Although the prospects of allowing opportunistic dove shooting may offend some hunters, we point out that within reasonable limits hunter ethics is a highly personal issue. Like many outdoor activities, opportunistic dove shooting would be acceptable to some hunters and unacceptable to others.

The shooting of overwintering doves, which are mostly males, in November could possibly have an impact on early-season reproduction the following spring. Some workers have theorized that overwintering male doves set up territories and mate earlier in spring than migrant males (Armstrong and Noakes 1983).

If dove hunters wanted to hunt later into the year, it is reasonable to assume that they would say so, just like rabbit hunters always do. However, the DOC rarely receives requests to extend the dove season. In contrast, when the season was shortened to 45 days in 1982, there were several complaints from hunters who normally pursue doves during the second half of October in southern Illinois (T. Miller, pers. commun.). A split dove season, part of which overlaps the upland game seasons, would reduce the number of days available to hunt doves and/or upland game birds--a loss of hunting opportunity. Finally, a split season would further complicate dove hunting regulations at a time when the DOC is

attempting to standardize and simplify regulations.

In contemplating a split dove season for Illinois, the positives and negative of such a change should be carefully weighed against each other.

Acknowledgements. Appreciation is extended to S.L. Etter for assistance in developing the questionnaire used for this survey; to J.C. Cole, S.L. Etter, R.M. Marshalla, and R.A. Williamson for critically reading a preliminary draft of this report; and to L.K. Campbell and K.L. Benner for data and word processing. This study was funded in part by Federal Aid in Wildlife Restoration Project W-112-R, the DOC, Illinois Natural History Survey, and U.S. Fish and Wildlife Service, cooperating.

## LITERATURE CITED

- Aldrich, J.W. 1993. Pages 47-54 in T.S. Baskett, M.W. Sayre, R.E. Tomlinson, and R.E. Mirarchi, eds. Ecology and management of the mourning dove. Stackpole Books, Harrisburg, PA. 567pp.
- Anderson, W.L., and L.K. Campbell. 1991. Hunter harvest survey, 1990-91. Ill. Dep. Conserv., P-R Project W-112-R-1, Study 101, Job 1, Job Completion Rep. 81pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1992. Hunter harvest survey, 1991-92. Ill. Dep. Conserv., P-R Project W-112-R-2, Study 101, Job 1, Job Completion Rep. 65pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1993. Hunter harvest survey, 1992. Ill. Dep. Conserv., P-R Project W-112-R-3, Study 101, Job 1, Job Completion Rep. 65pp.
- \_\_\_\_\_, and L.M. David. 1991a. Results of the 1989 Illinois rabbit hunter survey. Ill. Dep. Conserv., Div. Wildl. Res., Admin. Rep. (3 May 1991). 35pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1991b. Results of the 1990 pheasant hunter survey. Ill. Dep. Conserv., Div. Wildl. Res., Admin. Rep. (17 October 1991). 36pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1992a. Results of the 1991-92 pheasant hunter survey. Ill. Dep. Conserv., Div. Wildl. Res., Admin. Rep. (15 December 1992) 37pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1992b. Results of the 1991-92 Illinois quail hunter survey. Ill. Dep. Conserv., Div. Wildl. Res., Admin. Rep. (16 December 1992). 41pp.
- Armstrong, E.R., and D.L.G. Noakes. 1983. Wintering biology of mourning doves, Zenaid macroura, in Ontario, Canada. Field Nat. 97(4):434-438.
- Bryan, H. 1982. A social science perspective for managing recreational conflict. Marine Recreation Fisheries. Sport Fishing Institute, Washington, D.C. Pages 15-22.
- Baskett, R.K. 1993. Pages 485-494 in T.S. Baskett, M.W. Sayre, R.E. Tomlinson, and R.E. Mirarchi, eds. Ecology and management of the mourning dove. Stackpole Books, Harrisburg, PA. 567pp.
- Baskett, T.S., M.W. Sayre, R.E. Tomlinson, and R.E. Mirarchi, eds. 1993. Ecology and management of the mourning dove. Stackpole Books, Harrisburg, PA. 567pp.

- Dolton, D.D. 1992. Mourning dove breeding population status, 1992. U.S. Fish and Wildlife Service, Laurel, MD. 15pp.
- George, R.R. 1993. Hunting in the Southwest. Pages 459-474 in T.S. Baskett, M.W. Sayre, R.E. Tomlinson, and R.E. Mirarchi, eds. Ecology and management of the mourning dove. Stackpole Books, Harrisburg, PA. 567pp.
- Illinois Agricultural Statistics Service. 1993. Illinois county estimates: corn, soybeans, and wheat, 1991-92. Sixteen-page supplement to Illinois agricultural statistics, 1992. Bull. 92-1. 124pp.
- Hanson, H.C., and C.W. Kossack. 1963. The mourning dove in Illinois. Ill. Dep. Cons. Tech. Bull. No. 2. 133pp.
- Jackson, R., R. Norton, and R. Anderson. 1979. Improving ethical behavior in hunters. Trans. North Am. Wildl. Nat. Resour. Conf. 44:306-318.
- Kirkpatrick, T.O. 1966. Social values of hunting and fishing. NM Wildl. 11(3):19-20.
- Kringer, F. 1981. The use of sunflower for dove field management. Ill. Dep. Conserv., Bureau of Nat. Res., Upland Game Section. 15pp.
- Leopold, A. 1938. Conservation esthetic. Bird-lure 70(2):101-109.
- Reeves, H.M. 1993. Mourning dove hunting regulations. Pages 429-448 in T.S. Baskett, M.W. Sayre, R.E. Tomlinson, and R.E. Mirarchi, eds. Ecology and management of the mourning dove. Stackpole Books, Harrisburg, PA. 567pp.
- Sadler, K.C. 1993. Pages 449-458 in T.S. Baskett, M.W. Sayre, R.E. Tomlinson, and R.E. Mirarchi, eds. Ecology and management of the mourning dove. Stackpole Books, Harrisburg, PA. 567pp.
- U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, Bureau of the Census. 1993. 1991 national survey of fishing, hunting, and wildlife associated recreation. U.S. Government Printing Office, Washington, D.C. 124pp+appendices.
- Willms, P., W.F. Evans, and C. Wieda. 1993. Illinois public hunting areas report: Department of Conservation land and water hunting effort and harvest, 1992-93 season. Ill. Dep. Conserv., Div. Wildl. Res. Rep. (1 July 1993). 27pp.

Table 1. Percentage of respondents to the 1992 Illinois Dove Hunter Survey who purchased a resident Illinois hunting license, hunted doves in Illinois in 1992, and hunted doves in another state in 1992 (n = 1,111).

Activity	Number	Percentage
Purchased resident Illinois hunting license	1,054	94.9
Hunted doves in Illinois	739	66.5
Hunted doves in another state	19 <sup>a</sup>	1.7 <sup>a</sup>

<sup>a</sup>Of the 739 respondents who hunted doves in Illinois, 16 (2.2%) also hunted doves in another state.

Table 2. Temporal distribution of active dove hunters and their days afield in Illinois in 1992. The season extended from September 1 to October 30 statewide. Sample sizes are in parentheses.

Date(s)	North		South		Entire State	
	Hunters	Days Afield	Hunters	Days Afield	Hunters	Days Afield
September	(436)	(2,062)	(290)	(1,387)	(732)	(3,458)
1	57.8%	12.2%	53.8%	11.3%	56.4%	11.9%
2	36.2	7.7	37.6	7.9	36.7	7.8
3-7	69.3	25.0	65.5	24.9	67.3	25.0
8-14	45.2	16.1	52.8	18.0	47.8	16.8
15-21	38.3	14.7	39.0	14.1	38.4	14.4
22-30	25.2	10.1	27.2	11.8	25.8	10.8
October						
1-30	20.2	14.2	16.9	12.0	18.7	13.3
Mean Days		4.7		4.8		4.7 <sup>a</sup>

<sup>a</sup>16.0% hunted 1 day, 19.9% hunted 2 days, 15.5% hunted 3 days, 19.8% hunted 4-5 days, 21.0% hunted 6-10 days, 4.9% hunted 11-15 days, and 2.9% hunted  $\geq 16$  days.

Table 3. Temporal distribution of dove harvest in Illinois in 1992. The season extended from September 1 to October 30 statewide. Sample sizes are in parentheses.

Date(s)	North		South		Entire State	
	Mean <sup>a</sup>	Percentage	Mean	Percentage	Mean	Percentage
September		(8,041) <sup>b</sup>		(8,190)		(16,269)
1	6.6	20.6	8.7	16.6	7.4	18.7
2	5.5	10.8	7.2	9.6	6.2	10.2
3-7	3.7	23.5	6.5	27.4	4.8	25.4
8-14	3.9	16.3	5.6	17.1	4.7	16.7
15-21	3.4	12.6	4.6	11.0	3.8	11.8
22-30	3.1	8.0	4.9	9.9	3.9	8.9
October						
1-30	2.2	8.2	4.1	8.4	2.9	8.3
Entire season						
Per day	3.9		5.9		4.7	
Total	18.4		28.2		22.2 <sup>c</sup>	

<sup>a</sup>Mean number of doves per day afield by active hunters.

<sup>b</sup>Doves harvested.

<sup>c</sup>9.4% harvested 0 dove, 15.9% harvested 1-5 doves, 16.9% harvested 6-10 doves, 14.1% harvested 11-15 doves, 8.5% harvested 16-20 doves, 12.1% harvested 21-30 doves, 6.8% harvested 31-40 doves, and 16.3% harvested  $\geq$  41 doves.

Table 4. Percentage of days that active hunters harvested 0, 1-5, 6-10, 11-14, or 15 doves in Illinois in 1992. Sample sizes are in parentheses.

Doves	North		South		Entire State	
	Mean <sup>a</sup>	Percentage	Mean	Percentage	Mean	Percentage
		(2,043)		(1,357)		(3,409)
0	1.4	28.7	0.9	18.3	1.2	24.6
1-5	2.0	41.8	1.6	34.3	1.8	38.8
6-10	0.9	18.5	1.1	23.5	1.0	20.5
11-14	0.3	6.0	0.4	8.0	0.3	6.8
15 <sup>b</sup>	0.2	5.0	0.8	15.9	0.5	9.3

<sup>a</sup>Mean number of days per active hunter.

<sup>b</sup>Daily bag limit.

Table 5. The types of land utilized by active dove hunters in Illinois in 1992. Sample sizes are in parentheses.

Subject	Percentages		
	North	South	Entire State
Type of land	(439)	(292)	(739)
Private-hunters	92.5	90.8	90.8
-days afield	91.9	86.2	89.4
-doves harvested	91.4	86.8	89.0
Public-hunters	18.5	19.2	18.7
-days afield	8.1	13.8	10.6
-doves harvested	8.6	13.2	11.0

Table 6. Types of food and cover that active mourning dove hunters frequented in Illinois in 1992. Sample sizes are in parentheses.

Food and Cover	Percentage of Hunters	
	Private Areas	Public Areas
	(671)	(138)
Sunflower or sunflower stubble	28.5	81.9
Wheat or wheat stubble	25.3	4.3
Millet or millet stubble	5.4	4.3
Corn or corn stubble	44.9	15.2
Grass or "weeds"	45.6	18.8
Water	30.7	10.9
Timber edge or hedgerows	37.0	15.2
Other agricultural crops	11.0*	0.7

\*Included soybeans (5.5%), milo (1.5%), hay/alfalfa (1.3%), clover (0.9%), oats (0.6%), and 3 miscellaneous crops (0.4%).

Table 7. The level of difficulty that active dove hunters experienced in finding a place to hunt, and their attitudes toward paying a landowner for the right to hunt, in Illinois in 1992. Sample sizes are in parentheses.

Subject	Percentage of Hunters		
	North	South	Entire State
Level of difficulty	(433)	(284)	(725)
None	44.4	44.0	44.0
Little	23.3	21.1	22.5
Moderate	19.4	22.5	20.4
Much	12.9	12.4	13.1
Paid landowner in 1992	(435)	(284)	(726)
Yes	5.3	4.6	5.2
No	94.7	95.4	94.8
Amount paid per day in 1992	(21)	(12)	(34)
\$10-\$15	66.7	63.6	67.7
\$16-\$30	23.7	27.3	23.5
\$31-\$50	4.8	0.0	2.9
>\$50	4.8	9.1	5.9
Mean	\$19.33	\$21.05	\$19.47
Willing to pay landowner	(436)	(290)	(734)
Yes	30.3	26.9	29.3
No	56.0	56.2	55.9
No Opinion	13.7	16.9	14.8
Amount willing to pay per day	(128)	(76)	(209)
\$10-15	71.9	81.6	75.6
\$16-30	18.0	11.8	15.3
\$31-50	6.3	5.3	6.2
>\$50	3.8	1.3	2.5
Mean	\$18.44	\$15.98	\$17.36

Table 8. Attitudes of active dove hunters toward bag limits, season lengths, season dates, and shooting hours in Illinois in 1992. Sample sizes are in parentheses.

\*Responses to the question,

"In your opinion, how many mourning doves should be allowed in the daily bag limit in Illinois next season (1993)?"

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(423)	(285)	(716)
10 per day	25.8	17.9	22.6%
12 per day	16.5	13.0	15.4
15 per day	43.7	54.4	47.5
20 per day	8.3	12.6	10.2
No opinion	5.7	2.1	4.3

\*Responses to the question,

"Under Federal guidelines for mourning dove hunting, Illinois has the option of selecting a 60-day season with a daily bag limit of 15 doves or a 70-day season with a 12 dove bag limit. Which option would you prefer for Illinois?"

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(425)	(285)	(718)
60 days & 15 doves	51.3	54.4	52.1%
70 days & 12 doves	42.6	38.9	41.5
No opinion	6.1	6.7	6.4

\*Responses to the question,

"Although Federal guidelines allow mourning doves to be hunted all day, Illinois has traditionally selected the period from 12 noon to sunset as the legal shooting time for doves. Do you agree or disagree with the idea of extending the legal shooting time into the hours before 12 noon?"

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(434)	(291)	(733)
Agree	53.7	51.9	53.1%
Disagree	36.4	39.5	37.7
No opinion	9.9	8.6	9.2

Table 8 - continued.

Table 8. Continued - Page 2.

\*Responses to the question,

"If the legal dove shooting time in Illinois included the hours before 12 noon, would you hunt mourning doves during this time of day?"

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(434)	(286)	(728)
Yes	68.2	63.3	66.1%
No	17.3	21.3	19.1
Undecided	14.5	15.4	14.8

\*Responses to the question,

"If the mourning dove hunting season extended into November, would you hunt doves during that month?"

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(435)	(291)	(734)
Yes	36.6	37.1	36.6%
No	49.9	50.2	50.1
Undecided	13.5	12.7	13.3

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Table 9. Opinions of active dove hunters as to the relative importance of DOC dove management programs. Sample sizes are in parentheses.

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Responses to the question,  
 "In your opinion, which of the following should be more important for the Illinois Department of Conservation mourning dove management programs: (rank in priority order, '1' for your 1st choice, '2' for your 2nd choice, and so on)"

	North			South			Entire State		
	1	2	3	1	2	3	1	2	3
	(413)			(275)			(696)		
*Gather information about mourning dove biology and population trends	32.6%	24.8%	42.6%	34.1%	24.4%	41.5%	33.3%	24.6%	42.1%
*Mourning Dove habitat management and hunting on private land	38.7	34.1	27.2	36.4	32.4	31.2	37.5	33.8	28.7
*Mourning Dove habitat management and hunting on public land	31.2	40.0	28.8	33.5	41.2	24.3	32.2	40.2	27.6

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Table 10. Attitudes of active dove hunters toward using nontoxic steel shot for dove hunting in Illinois. Sample sizes are in parentheses.

Responses to a multi-part question prefaced with the statement,

"The use of nontoxic steel shot has been required for mourning dove hunting on selected areas in Illinois in recent years. The purpose of requiring nontoxic shot on these areas is to protect waterfowl (ducks and geese) from ingesting lead shot and becoming lead poisoned."

\*"Have you ever hunted mourning doves with nontoxic steel shot?"

	(656)
Yes	12.7%
No	87.3

\*"If 'yes', how many mourning doves did you harvest in Illinois with nontoxic steel shot during the 1992 season?"

	(46)
Mean per user	14.3

Doves harvested statewide  
with steel shot

Number	73,833 <sup>a</sup>
Percentage	4.7%

\*"In your opinion, would it be appropriate or inappropriate for the State to require nontoxic steel shot for mourning dove hunting on all State-managed hunting areas to protect mourning doves and other upland birds from exposure to lead?"

	(650)
Appropriate	26.6%
Inappropriate	52.6 <sup>b</sup>
No opinion	20.8

<sup>a</sup>Based on an estimated 1,507,817 doves harvested in 1992 (Anderson and Campbell 1993).

<sup>b</sup>Reasons included: lead poisoning is not a proven problem for doves or upland game birds (42.1%), steel shot is too expensive (25.6%), steel shot is ballistically inferior to lead shot (24.4%), already have too many regulations (3.5%), steel shot is not available in small sizes (2.8%), and cannot reload steel shot (1.6%).

Table 11. Attitudes of active dove hunters toward the National Migratory Bird Harvest Information Program. Sample sizes are in parentheses.

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Responses to a multi-part question prefaced with the statement,  
"A new Federal Migratory Bird Harvest Information Program will be implemented for mourning dove (and other migratory game bird) hunters in Illinois (and most other states) in 1996. Hunters will be required to show proof (for example, carry a card that costs \$2.00 annually) that their name and mailing address is on record with this Federal program. The purpose of the program is to improve management of migratory game birds through more accurate harvest surveys."

\*"Were you previously aware that this new requirement is scheduled for implementation in Illinois?"

	(658)
Yes	6.5%
No	93.5

\*"In your opinion, is implementation of a Federal Migratory Bird Harvest Information Program an appropriate or inappropriate action for the Federal government to take for the purpose of improving the management of migratory game birds."

	(643)
Appropriate	42.1%
Inappropriate	41.8
No Opinion	16.1

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Table 12. Opinions of active dove hunters as to whether there were more, fewer, or the same number of doves available for hunting in Illinois in 1992 compared to 1991. Sample sizes are in parentheses.

Assessment of Dove Numbers	Percentage of Hunters		
	North	South	Entire State
	(434)	(284)	(725)
More	12.0	16.2	13.7
Fewer	52.1	44.0	49.1
Same	29.0	31.0	29.5
Don't know	6.9	8.8	7.7

Table 13. Some characteristics of active dove hunters in Illinois in 1992. Sample sizes are in parentheses.

Characteristics	Value			
Mean age in years	35.2 <sup>a,b</sup>			(659)
Mean years hunted doves	15.7 <sup>a,c</sup>			(658)
Age began hunting (any type of game)	13.1 <sup>d</sup>			(656)
Mean miles traveled (round trip) per day	30.7 <sup>e</sup>			(697)
Mean number of hunters in party	3.4 <sup>f</sup>			(725)
Mean hours hunted per trip	2.9 <sup>g</sup>			(727)
Usually use dog	25.5 <sup>h</sup>			(728)
Equipment used	<u>Never</u>	<u>Sometimes</u>	<u>Always</u>	
Decoys	73.1%	19.0%	7.9%	(617)
Calls	93.6	4.5	1.7	(582)
Stool/Chair	18.4	28.9	52.7	(675)
Camouflage clothing	8.4	13.0	76.6	(705)
Portable blind	88.0	9.9	2.1	(576)
Umbrella	98.9	0.7	0.4	(571)
Reloaded shotgun shells	38.1	23.1	38.8	(659)

<sup>a</sup>Adjusted to account for the fact that the names on the mailing list were 1 or 2 years old at the time the survey was conducted.

<sup>b</sup>9.0% were  $\leq 15$  years, 7.2% were 16-20 years, 20.8% were 21-30 years, 29.5% were 31-40 years, 18.9% were 41-50 years, 11.4% were 51-60 years, 2.4% were 61-64 years, and 0.8% were  $\geq 65$  years. Hunters  $\geq 65$  years of age were exempt from purchasing a hunting license.

<sup>c</sup>26.6% had hunted 1-5 years, 14.7% had hunted 6-10 years, 28.6% had hunted 11-20 years, 19.2% had hunted 21-30 years, and 10.9% had hunted  $\geq 31$  years.

<sup>d</sup>1.7% were  $\leq 5$  years, 32.1% were 6-10 years, 47.5% were 11-15 years, 12.6% were 16-20 years, and 6.1% were  $\geq 21$  years.

<sup>e</sup>45.9% traveled  $\leq 10$  miles, 18.4% traveled 11-20 miles, 12.7% traveled 21-30 miles, 6.6% traveled 31-40 miles, and 16.4% traveled  $\geq 41$  miles.

Table 13 - continued.

Table 13. Continued - Page 2.

<sup>f</sup>9.0% of parties had 1 hunter, 33.9% had 2 hunters, 26.1% had 3 hunters, 15.7% had 4 hunters, 6.6% had 5 hunters, 7.6% had 6-10 hunters, and 1.1% had  $\geq$  11 hunters.

<sup>g</sup>1.8% hunted <1 hour, 35.1% hunted 1-2 hours, 53.6% hunted 3-4 hours, and 9.5% hunted 5-6 hours.

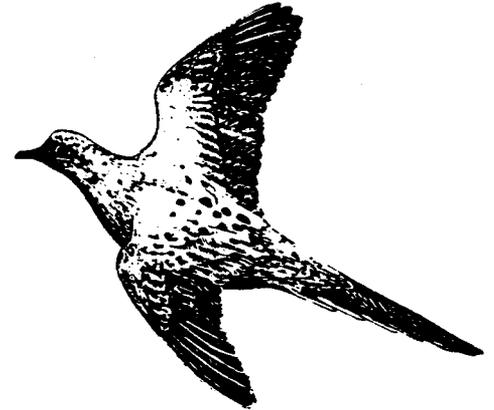
<sup>h</sup>Breeds of dogs included Labrador retriever (61.5%), Brittany spaniel (11.2%), Golden retriever (8.0%), German shorthaired pointer (5.9%), Chesapeake Bay retriever (2.7%), Springer spaniel (2.7%), English setter (2.7%), and 11 others (5.3%).

Table 14. Estimated expenditures by active dove hunters in Illinois in 1992 (n = 735).

Money Spent	Percentage of Hunters
<\$100	61.3
\$100 - \$250	27.5
\$251 - \$500	7.8
\$501 - \$1,000	3.0
\$1,001 - \$2,000	0.3
>\$2,000	0.1
Mean	\$138
Total <sup>a</sup> (in millions)	\$10.2

<sup>a</sup>Based on an estimated 73,631 active dove hunters in Illinois in 1991 (Anderson and Campbell 1993).

1992 ILLINOIS MOURNING DOVE HUNTER SURVEY



INSTRUCTIONS

Please answer the questions on the following pages for your mourning dove hunting activities in Illinois during the 1992 season.

If you did not hunt mourning doves in Illinois in 1992, answer only the questions that apply to you (PART I and PART III). Your opinions are important even if you did not hunt.

Report only your kill. DO NOT report the kill of others with whom you may have hunted. Your responses are strictly confidential and will never be associated with your name. Since you are a part of a small, randomly selected group, your participation is very important.

If you can't remember exact figures, give your best estimate. When completed, insert questionnaire into the self-addressed envelope and mail. Comments are welcome but please write them on a separate sheet of paper to receive proper attention.

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PART I:

1. Did you purchase a resident Illinois hunting license for the 1992 season?  
(circle number of appropriate answer)

Yes.....1                      No.....2

2. Did you hunt mourning doves in Illinois during the 1992 season?  
(circle number of appropriate answer)

Yes.....1                      No.....2

3. Did you hunt mourning doves in another state during the 1992 season?  
(circle number of appropriate answer)

Yes.....1                      No.....2

Figure 1. The 1992 Illinois Dove Hunter Survey questionnaire (continued).

IF YOU DID NOT HUNT MOURNING DOVES IN ILLINOIS DURING THE 1992 SEASON.  
SKIP TO PART III. - Question 18.

PART II.

4. If you answered "yes" to question 2, please complete the following statements concerning the number of days you hunted mourning doves and the number of doves you harvested on the opening day, on second day, and during other periods in Illinois during the 1992 season: (write in the appropriate number of days and number of doves)

	<u>No. Days Hunted</u>	<u>No. Mourning Doves Harvested</u>
First day, Tuesday, September 1.....	_____ day	_____ mourning doves
Second day, Wednesday, September 2.....	_____ day	_____ mourning doves
September 3-7, 1992.....	_____ days	_____ mourning doves
September 8-14, 1992.....	_____ days	_____ mourning doves
September 15-21, 1992.....	_____ days	_____ mourning doves
September 22-30, 1992.....	_____ days	_____ mourning doves
October 1-30, 1992.....	_____ days	_____ mourning doves

5. On how many different days during the 1992 season did you harvest (kill and retrieve): (answer all that apply)

- a. no mourning doves?.....\_\_\_\_\_ days
- b. 1-5 mourning doves?.....\_\_\_\_\_ days
- c. 6-10 mourning doves?.....\_\_\_\_\_ days
- d. 11-14 mourning doves?.....\_\_\_\_\_ days
- e. 15 mourning doves?.....\_\_\_\_\_ days

6. How many mourning doves did you knock down in sight but neither you nor anyone else could retrieve?.....\_\_\_\_\_

7. In which county, or counties, did you hunt mourning doves in Illinois in 1992?

	<u>County</u>	<u>Number of Days</u>
Hunted most	_____	_____
Second most	_____	_____
Third most	_____	_____

8. Please rate the level of difficulty you experienced in finding a place to hunt mourning doves in Illinois in 1992?  
(circle number of appropriate answer)

No difficulty.....1      Little difficulty.....2

Moderate difficulty....3      Much difficulty.....4

9. On what type(s) of lands did you hunt mourning doves in Illinois in 1992 and on how many days did you hunt and how many doves did you harvest on each type of land?

(circle number of all that apply and write in the number of days and doves)

Privately owned lands?....1      Number of days \_\_\_\_\_      No. of doves \_\_\_\_\_

Publicly owned lands?.....2      Number of days \_\_\_\_\_      No. of doves \_\_\_\_\_  
(State and Federal)

10. Over what type of food and cover did you hunt mourning doves on private land and on public land in Illinois in 1992? (circle number of all cover types that apply for both private and public land)

	Private Areas	Public Areas
Sunflower or sunflower stubble.....1.....	1	11
Wheat or wheat stubble.....2.....	2	12
Millet or millet stubble.....3.....	3	13
Corn or corn stubble.....4.....	4	14
Grass or "weeds".....5.....	5	15
Water.....6.....	6	16
Timber edge or hedgerows.....7.....	7	17
Other agricultural crops.....8.....	8	18

(describe other crops) \_\_\_\_\_

11. On a typical mourning dove hunting trip in Illinois in 1992, about how many hours per day did you hunt? (circle number of appropriate answer)

Less than 1 hour...1      1-2 hours...2      3-4 hours...3      5-6 hours...4

12. Did you usually use a dog to retrieve downed mourning doves when you dove hunted in Illinois in 1992?

Yes.....1      No.....2

12a. If "yes", what breed of dog?.....\_\_\_\_\_

13. Did you pay a landowner, club operator, or other person for the right to hunt mourning doves in Illinois in 1992?

Yes.....1 No.....2

13a. If you answered "yes" to question 13, about how much did you pay per day for the right to hunt mourning doves in Illinois in 1992? (circle number of appropriate answer)

\$10-15....1 \$16-30....2 \$31-50....3 over \$50....4

14. How many miles did you travel (round trip) on a typical mourning dove hunting trip in Illinois in 1992?.....

15. Including yourself, what was the most common number of hunters in your mourning dove hunting parties in 1992?.....

16. Please indicate how often you use the items listed below for hunting mourning doves in Illinois. (circle number of appropriate answer for each item)

	<u>Never</u>	<u>Sometimes</u>	<u>Usually</u>
Decoys.....	1.....	2.....	3.....
Calls.....	1.....	2.....	3.....
Stool/chair.....	1.....	2.....	3.....
Camouflage clothing.....	1.....	2.....	3.....
Portable blind.....	1.....	2.....	3.....
Umbrella.....	1.....	2.....	3.....
Reloaded shotgun shells..	1.....	2.....	3.....

17. Based on your observations, were there more, fewer, or the same number of mourning doves available for hunting in Illinois in 1992 compared to 1991? (circle number of appropriate answer)

More.....1 Fewer.....2 Same.....3 Don't Know.....4

PART III. OPINION QUESTIONS. Please answer even if you did not hunt in 1992.

18. In your opinion, how many mourning doves should be allowed in the daily bag limit in Illinois next season (1993)? (circle number of limit that best represents your opinion)

10 per day...1 12 per day...2 15 per day...3 20 per day...4 No opinion...5

19. Under Federal guidelines for mourning dove hunting, Illinois has the option of selecting a 60-day season with a daily bag limit of 15 doves or a 70-day season with a 12 dove bag limit. Which option would you prefer for Illinois? (circle number of appropriate answer)

60 days & 15 doves.....1 70 days & 12 doves.....2 No opinion.....3

20. Although Federal guidelines allow mourning doves to be hunted all day, Illinois has traditionally selected the period from 12 noon to sunset as the legal shooting time for doves. Do you agree or disagree with the idea of extending the legal shooting time into the hours before 12 noon?

Agree.....1      Disagree.....2      No Opinion.....3

20a. If the legal dove shooting time in Illinois included the hours before 12 noon, would you hunt mourning doves during this time of day?

Yes.....1      No.....2      Undecided.....3

21. If the mourning dove hunting season extended into November, would you hunt doves during that month? (circle number of appropriate answer)

Yes.....1      No.....2      Undecided.....3

22. Would you be willing to pay a landowner in Illinois for the right to hunt mourning doves? (circle number of appropriate answer)

Yes.....1      No.....2      Undecided.....3

22a. If you answered "yes" to question 22, about how much would you be willing to pay per day?  
(circle number of appropriate answer)

\$10-15....1      \$16-30....2      \$31-50....3      over \$50....4

23. About how much money do you think you spent for mourning dove hunting in Illinois during the 1992 season (or the last season you hunted)? Include license fees, travel and gasoline, lodging, food and drink, dogs and their maintenance, guns, ammo, clothing, boots, and other equipment purchased for the 1992 or most recent season. (circle number of appropriate answer)

Less than \$100.....1      \$501 to \$1000.....4  
\$100 to \$250.....2      \$1001 to \$2000.....5  
\$251 to \$500.....3      More than \$2000....6

24. In your opinion, which of the following should be more important for the Illinois Department of Conservation mourning dove management programs: (rank in priority order, 1" for your 1st choice, "2" for your 2nd choice, and so on)

- \_\_\_\_\_ Gather information about mourning dove biology and population trends.
- \_\_\_\_\_ Mourning dove habitat management and hunting on private land.
- \_\_\_\_\_ Mourning dove habitat management and hunting on public land.

25. The use of nontoxic steel shot has been required for mourning dove hunting on selected areas in Illinois in recent years. The purpose of requiring nontoxic shot on these areas is to protect waterfowl (ducks and geese) from ingesting lead shot and becoming lead poisoned.

25a. Have you ever hunted mourning doves with nontoxic steel shot?

Yes.....1      No.....2

25b. If "yes", how many mourning doves did you harvest in Illinois with nontoxic steel shot during the 1992 season?

Number of doves harvested in 1992 with nontoxic shot \_\_\_\_\_

25c. In your opinion, would it be appropriate or inappropriate for the State to require nontoxic steel shot for mourning dove hunting on all State-managed hunting areas to protect mourning doves and other upland birds from exposure to lead?

Appropriate.....1      Inappropriate.....2      No opinion.....3

25d. If you answered "Inappropriate", give reason \_\_\_\_\_

---

26. A new Federal Migratory Bird Harvest Information Program will be implemented for mourning dove (and other migratory game bird) hunters in Illinois (and most other states) in 1996. Hunters will be required to show proof (for example, carry a card that costs \$2.00 annually) that their name and mailing address is on record with this Federal program. The purpose of the program is to improve management of migratory game birds through more accurate harvest surveys.

26a. Were you previously aware that this new requirement is scheduled for implementation in Illinois?

Yes.....1      No.....2

26b. In your opinion, is implementation of a Federal Migratory Bird Harvest Information Program an appropriate or inappropriate action for the Federal government to take for the purpose of improving the management of migratory game birds?

Appropriate.....1      Inappropriate.....2      No opinion.....3

27. How many years have you hunted mourning doves?      Number of years \_\_\_\_\_

28. At what age did you begin hunting (of any type of game)?      Years of age \_\_\_\_\_

29. How old were you on your last birthday?      Years of age \_\_\_\_\_

Thank you for your cooperation.

POSTAGE IS PREPAID

Please mail your questionnaire today.

Illinois



Department of Conservation

life and land together

Brent Manning  
Director

John W. Comerio  
Deputy Director

Bruce F. Clay  
Assistant Director

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 mourning dove hunting activities during the past hunting season.

The information supplied by you and other selected hunters is vital to the management of the mourning dove in Illinois. Our goals are to safeguard mourning dove populations, to grant maximum dove hunting opportunity to licensed hunters, and to maintain an attractive level of hunter success.

The information you provide will be used to better understand the characteristics of our mourning dove population and our mourning dove hunters. It also will help us understand how dove hunters view their sport.

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

Please take a few minutes to 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.

Sincerely,

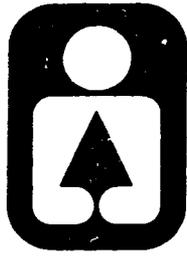
Jeffrey M. Ver Steeg  
Chief  
Division of Wildlife Resources

JMV:LD:lg

Enclosure

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

Illinois



Department of Conservation

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Brent Manning  
Director

John W. Comerio  
Deputy Director

Bruce F. Clay  
Assistant Director

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

Dear Fellow Sportsman:

Recently we mailed you a Mourning Dove Hunter Questionnaire, and requested that you fill it out and return it as soon as possible. We have not received your form at this time. Perhaps you have misplaced the questionnaire or haven't found time to complete it.

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

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

Please drop the completed questionnaire in the mail. Postage is prepaid. Your prompt attention will be sincerely 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 at the end.

Jeffrey M. Ver Steeg  
Chief  
Division of Wildlife Resources

JMV:LD:lg

Enclosure

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

Illinois



Department of Conservation

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Brent Manning  
Director

John W. Comerio  
Deputy Director

Royce F. Clay  
Assistant Director

LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787  
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 mourning dove hunting activities for the past season. We don't like to keep bothering you, but this information is very important and only you can supply it.

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 discard this one. Your response is needed, even though you did not hunt mourning doves or had an unsuccessful season.

Postage is prepaid for returning the questionnaire. Please drop the completed questionnaire in the mail. Your prompt attention will be greatly appreciated.

Thank you.

Sincerely,

Jeffrey M. Ver Steeg  
Chief  
Division of Wildlife Resources

JMV:LD:lg

Enclosure

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



## APPENDIX A

### SUCCESS IN USING 2-YEAR-OLD AND 1-YEAR-OLD MAILING LISTS FOR CONDUCTING THE 1992 ILLINOIS DOVE HUNTER SURVEY

Respondents to the annual Hunter Harvest Survey (Anderson and Campbell 1991 and 1992) who had hunted doves in Illinois during the 1990 or 1991 seasons comprised the mailing list used for the 1992 Illinois Dove Hunter Survey. Thus, the names and addresses on the mailing list were either 2 years old or 1 year old at the time the survey was conducted.

Success experienced in contacting people whose names and addresses were 2 years old versus those who were 1 year old, and rates at which these 2 groups filled out and returned questionnaires, are summarized in Table A1. The preseason notice was successfully mailed to 95.2% of the people on the 2-year-old list and to 97.6% of those on the 1-year-old list. According to Student's *t* test, the difference between these percentages was significant ( $P < 0.05$ ). Of those people who received the preseason notice, 98.3% on the 2-year-old list and 97.8% on the 1-year-old list were successfully mailed questionnaires. The difference between these percentages was not significant. Of the people who received the questionnaire, 72.5% on the 2-year-old list and 79.0% on the 1-year-old list filled out and returned the document. The difference between these percentages was significant.

Hunting activities of people who filled out and returned questionnaires, and whose names and addresses were 2 years old or 1 year old, are summarized in Table A2. High percentages (93.3% and 96.4%) of the people on both lists purchased an Illinois resident hunting license again in 1992. The difference between these percentages was significant. About two-thirds (66.2% and 66.8%) of the people on both lists hunted doves again in Illinois in 1992. The difference between these percentages was not significant. The mean number of days afield for the people who hunted doves was 4.95 (2-year-old names) and 4.54 (1-year-old names). These hunters harvested means of 23.68 and 20.97 doves, respectively, during the 1992 season. According to Student's *t* test, none of the differences between these means, 2-year-old names versus 1-year-old names, was significant.

Table A1. Contacts with and responses by people who were on 2-year-old and 1-year-old mailing lists (1992 Illinois Dove Hunter Survey).

Activity	Number (and Percentages)		Statistical Test of Differences
	2-Year-Old List <sup>a</sup>	1-Year-Old List <sup>b</sup>	
Pre-season notice			
Mailed (27 Aug. 1992) <sup>c</sup>	815	740	
Not Delivered	39 ( 4.8)	18 ( 2.4)	
Delivered	776 (95.2)	722 (97.6)	$t = 2.56 (P < 0.05)$
Questionnaire			
Mailed (3 Nov. 1992) <sup>c</sup>	776	722	
Not delivered <sup>d</sup>	13 ( 1.7)	16 ( 2.2)	
Delivered <sup>d</sup>	763 (98.3)	706 (97.8)	$t = 0.72 (P > 0.05)$
No response	210 (27.5)	148 (21.0)	
Usable response	553 (72.5)	558 (79.0)	$t = 2.92 (P < 0.05)$

<sup>a</sup>Respondents to the 1990 Hunter Harvest Survey (Anderson and Campbell 1991) who had hunted doves in Illinois in 1990.

<sup>b</sup>Respondents to the 1991 Hunter Harvest Survey (Anderson and Campbell 1992) who had hunted doves in Illinois in 1991.

<sup>c</sup>Date mailed. Nonrespondents were sent 2nd and 3rd copies of the questionnaire on 9 December 1992 and 12 January 1993, respectively.

<sup>d</sup>For all 3 mailings.

Table A2. Mourning dove harvest and hunter activity by respondents who were on 2-year-old and 1-year-old mailing lists (1992 Illinois Dove Hunter Survey). Sample sizes are in parentheses.

Activity in 1992	Percentage or Mean $\pm$ SE		Statistical Test of Differences
	2-Year-Old List	1-Year-Old List	
Purchased resident hunting license	93.3 (553)	96.4 (558)	$t = 2.34 (P < 0.05)$
Hunted doves in Illinois	66.2 (553)	66.8 (558)	$t = 0.21 (P > 0.05)$
Days afield	4.95 $\pm$ 0.24 (365)	4.54 $\pm$ 0.21 (367)	$t = 1.28 (P > 0.05)$
Doves harvested	23.68 $\pm$ 1.44 (365)	20.97 $\pm$ 1.30 (367)	$t = 0.72 (P > 0.05)$

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