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**RESULTS OF THE 1997 ILLINOIS MOURNING DOVE HUNTER SURVEY**

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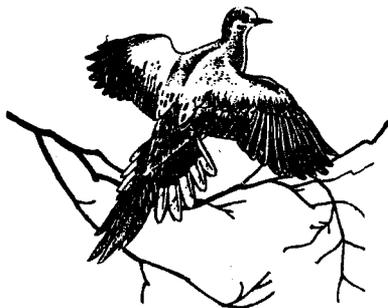
**FEDERAL AID IN WILDLIFE RESTORATION ACT**

**ILLINOIS**

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

*Prepared by:*

**Jeffrey M. Levensgood  
William A. Anderson  
and Larry M. David**



**Brent Manning, Director**

**ILLINOIS DEPARTMENT OF NATURAL RESOURCES**

**14 December 1999**

**John Buhnerkempe  
Wildlife Program Section**

**Jeffrey M. Ver Steeg  
Division of Wildlife Resources**



Illinois Department of Natural Resources  
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RESULTS OF THE 1997 ILLINOIS MOURNING DOVE HUNTER SURVEY

Jeffrey M. Levensgood, Investigations and Surveys Program\*  
William L. Anderson, Investigations and Surveys Program  
Larry M. David, Upland Wildlife Program

Abstract: Purchasers of 1996 Illinois Habitat Stamps who hunted mourning doves were surveyed via mail-letter questionnaire to determine their activities, harvest, and attitudes during the 1997 season. The mailing list consisted of 3,020 individuals, 1,845 (61%) of which returned usable questionnaires. Because of the respondents who did not hunt doves in Illinois again in 1997, the effective sample was reduced to 793 active hunters. These hunters spent an average of 4.9 days afield, and had expended over 80% of those days by the end of September. Only 7% of the days afield were spent dove hunting during the second segment (November 1-16) of the season. The hunters harvested an average of 4.5 doves per day afield and nearly 22 doves for the entire season. Fifty-eight percent of the hunters harvested 15 or fewer doves during the entire season. A majority (53%) of dove hunters were active only in the afternoon/evening hours, and were afield 3-4 hours on a typical dove hunt. Few dove hunters (12%) were active during the November segment, and relatively few doves were harvested at this time. Hunters were undecided as to whether they preferred a split (39%) or continuous (38%) season, but few (23%) indicated a preference for a 3-way split season. Although hunters wanted to maintain the option of all-day hunting, the tradition of afternoon-only hunting continued. A greater proportion of hunters used nontoxic shot for at least a portion of their dove hunting in 1997 (20%) than in 1992 (13%). One-half of the respondents felt it would be inappropriate for the DNR to require nontoxic shot for dove hunting at all state sites, down slightly from 53% in 1992. Hunters indicated that they received a high degree of satisfaction from dove hunting, and listed the "challenge and excitement of hunting", "having a good time with friends", "a good way to relax", and "fresh air, exercise, and healthy living" as the top reasons they enjoyed this activity. As a group, dove hunters were less dedicated and received less enjoyment when no game was bagged or seen, than upland game (i.e. quail and pheasant) hunters. The average dove hunter was 39 years old, male, and had hunted doves for 18 years.

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\*Illinois Natural History Survey.

The most abundant and widely distributed game bird in North America (Baskett et al. 1993), the mourning dove (Zenaidura macroura), hereafter simply dove, occurs in all 50 states (Aldrich, 1993), with an estimated nationwide fall population of 475 million birds (Sadler 1993). Doves are also found in most Canadian provinces, as well as Mexico, Central America, Bermuda, the Bahamas, and Greater Antilles.

In 1987, the dove was classified as a game species in 36 states (Reeves 1993). During 1983 to 1987 in the U.S., an estimated 2.4 million dove hunters harvested an average of 44.8 million doves in 10.4 million days afield annually (Sadler 1993). In Illinois, where doves have been hunted for 80 years, an estimated 71,000 hunters expended an average of 356,000 days afield and harvested 1.4 million doves annually during 1992 to 1996 (Anderson and Campbell 1997). In terms of animals harvested, the dove remains the most popular game species in the Prairie State.

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 Department of Natural Resources's (DNR) understanding of the attitudes, opinions, and activities of the average hunter. This in turn will allow the DNR to establish biologically responsible and sociologically acceptable hunting regulations. The last dove hunter survey was conducted following the 1992 season (Anderson and David 1994).

## METHODS AND MATERIALS

A 6-page, 27-question questionnaire was developed specifically for the 1997 Dove Hunter Survey (Fig. 1). This questionnaire and a letter of explanation (Fig. 2) were mailed (bulk rate--address service requested) to 3,020 potential dove hunters on 12 November 1997. Non-respondents were sent 2nd and 3rd copies of the questionnaire, and accompanying letters (Figs. 3 and 4), on 19 December 1997 and 28 January 1998, respectively. As of 15 May 1998, 1,845 usable questionnaires were returned (via first class postage) for a response rate of 61%.

The mailing list for this survey was developed from information recorded on 1996 Illinois Habitat Stamp stubs. The stamp stubs contained the purchaser's name, mailing address, and species hunted during the previous year in Illinois. License vendors were instructed to fill out the stubs and return them to the DNR permit office in Springfield. By systematically sampling the 216,004 stubs that were returned, 3,020 purchasers were identified as dove hunters. The people on the mailing list were notified by letters postmarked 27 August 1997 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).

Data were transferred from the completed questionnaires to a computer file using a data management program (Ashton-Tate dBASE IV). The data were analyzed with a statistical program (SPSS Inc. SPSS/PC+V2.0).

For some questions, the results were tabulated relative to

the northern or southern halves of Illinois. For this purpose, the state was divided into "North" and "South" zones, using 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. These zones are the same as those used for setting the rabbit, quail, pheasant, and gray partridge hunting seasons.

#### HUNTING REGULATIONS IN 1997

The 1997 dove hunting season was split into 2 segments for the second consecutive year, with the first segment running from 1 September through 14 October, and the second from 1 through 16 November, statewide. The bag limit was 15 birds per day and 30 in possession. For the 5th consecutive year, legal shooting hours began at sunrise and ended at sunset. In previous years, shooting hours were from 12 noon to sunset.

#### FINDINGS

Of the 1,845 individuals who filled out and returned questionnaires, 95% purchased an Illinois resident hunting license, 94% purchased a habitat stamp, and 43% hunted doves again in Illinois in 1997. Thus, the effective sample for this survey was reduced to 793 active dove hunters. Of those respondents who did not hunt doves in 1997, over half indicated that they did not do so because they were too busy with work, school, and/or other responsibilities, while nearly 20% cited the lack of a place to hunt as their reason for not hunting (Table 1). Of those respondents who hunted doves in 1997, 86% reported

that they were aware of, and 82% indicated that they registered with, the National Migratory Bird Harvest Information Program (HIP).

#### Hunter Activity

Of the 793 active dove hunters, 59% were afield on opening day of the season, 35% were afield on the second day, while 78% indicated they were afield  $\geq 1$  day during the period 3-30 September (Table 2). On a statewide basis, the first 2 days of the season accounted for nearly 20% of the days afield. Over 90% of the total days afield had been expended by the end of the first segment of the split season (to October 14). Hunters in the South Zone had spent a larger proportion of their days afield by the end of September, as compared with persons hunting in the North Zone.

Just over one-half (52%) of the hunters were afield  $\leq 3$  days and nearly three-fourths (72%) were afield  $\leq 5$  days. The active hunters spent an average of 4.9 days afield in pursuit of doves in 1997 (Table 2), compared to 4.7 days in 1992 (Anderson and David 1994). Although South Zone hunters spent a greater number of days hunting doves than North Zone hunters, this difference was not significant ( $t=-1.5$ ,  $P=0.13$ ). In comparison, the annual Hunter Harvest Survey indicated that dove hunters spent an average of 4.6 days afield, and that 77% of the hunters were afield  $\leq 5$  days, during the 1996 season (Anderson and Campbell 1997).

Statewide, a majority of hunters were active in the

afternoon only, while relatively few persons hunted in the morning only (Table 3). A larger proportion of South Zone hunters were active in the afternoons only, as compared to hunters in the North Zone. North Zone hunters were more likely to hunt in the mornings. Statewide, less than one-half of the respondents were active in the mornings. In contrast, two-thirds (66%) of the respondents to the 1992 dove hunter survey indicated they would hunt doves during the morning hours if it were legal to do so (Anderson and David, 1994). Hunters throughout the state pursued doves in the morning and afternoon of the same day on an average of 3 occasions during 1997. A majority of hunters were afield 3-4 hours on a typical dove hunt (Table 3).

#### Characteristics of Dove Harvest

Active hunters reported harvesting an average of 22 doves in Illinois during the 1997 season, which is the same as reported for 1992 (Anderson and David 1994). The total harvest per hunter was significantly greater in the southern half of the state than in the northern half ( $t=-4.2$ ,  $P<0.001$ ) (Table 4). The average number of doves taken per day afield was also higher in the southern half of the state. The average harvest reported for opening day in 1997 (5.0 doves/hunter) was considerably less than the 7.4 doves/hunter reported in 1992 (Anderson and David 1994).

About one-fifth of the statewide 1997 dove harvest took place on opening day and over one-third had occurred by the second day (Table 4). The cumulative harvest totaled 89% by 30 September, and 97% by 14 October. The temporal distribution of

dove harvest in 1997 was similar to that in 1992, as well as during the period 1949-1958 (Hanson and Kossack 1963:109). Only 3% of the harvest occurred during the second segment (November 1-16).

In 1992, about one-third of the respondents statewide, as well as in the respective halves (zones) of the state, expressed interest in pursuing doves during November (Anderson and David 1994). However, only 12% of respondents indicated they had hunted doves during the November segment in 1997. This apparent lack of interest was substantiated by the small proportion of hunting activity and dove harvest that occurred during the November segment. Of those respondents hunting doves during November, nearly two-thirds indicated they were primarily afield to hunt other species (Table 5). A much higher percentage of South Zone hunters were afield in November primarily to hunt doves, compared to hunters in the North Zone.

While only 12% of all active dove hunters hunted  $\geq 1$  day in November, 74% of these hunters during November harvested  $\geq 1$  doves. The late-season dove hunters harvested an average of 6.1 doves and hunted 3 days during the November segment. Upland game hunters in the South Zone were the least successful in harvesting doves while afield in November, whereas South Zone dove hunters were the most successful (Table 5).

Relatively few respondents whom indicated they went afield in November to specifically hunt doves also harvested other game species, particularly in the South Zone (Table 5). Rabbits were the species most likely harvested by dove hunters in both zones,

followed by pheasants in the North, and quail in the South.

For the entire state, 13% of the active hunters harvested 0 doves, 17% took 1-5 doves, 15% took 6-10 doves, 13% took 11-15 doves, 8% took 16-20 doves, 11% took 21-30 doves, and 23% bagged >30 doves. In 1992, 26% of the respondents reported harvesting  $\geq 21$  doves (Anderson and David 1994). Individual hunters reported harvesting as many as 330 doves over the course of the season.

### Attitudes and Opinions

Enjoyment Derived from Dove Hunting. According to Filion and Parker (1984), the importance or worth of a recreational activity can be judged by the degree of satisfaction from, and level of commitment to, that activity. The 1997 dove hunter questionnaire contained several questions designed to judge the satisfaction and commitment of Illinois dove hunters.

Dove hunters were asked to rank the top 4 reasons they enjoyed dove hunting. The "challenge and excitement of hunting", "having a good time with friends", "a good way to relax", and "fresh air, exercise, healthy living" were rated as the top 4 reasons for enjoying dove hunting (Table 6). These were also ranked among the top reasons by quail (Anderson and David 1997), rabbit (Anderson and David 1996), and pheasant (Anderson and David 1998) hunters in Illinois.

Eighty-one percent of respondents indicated they got "much" or "very much" enjoyment from dove hunting (Table 7). This percentage dropped to 49% when no doves were bagged, and to 19% when no doves were seen, but increased to 91% among ardent ( $\geq 10$

days afield) hunters. Relatively few dove hunters indicated that, if they had to give it up, they would miss dove hunting more than other activities (Table 7). However, the proportion of ardent hunters giving this response was considerably greater (37.4%). The above profile of hunter attitudes was similar to those observed in quail (Anderson and David 1997), pheasant (Anderson and David 1998) and rabbit (Anderson and David 1996) hunters, though the average upland bird (i.e. quail and pheasant) hunter was seemingly more dedicated and received more enjoyment from being afield--regardless of success--when compared to dove hunters.

Sixty-one percent of active hunters indicated that they had no or little difficulty in finding a place to dove hunt in Illinois in 1997, while 14% indicated they had much difficulty finding a place to dove hunt (Table 8). As in 1992 (Anderson and David 1994), 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 in Illinois (Anderson and David 1997, 1998).

Attitudes Towards Regulations. On a statewide basis, dove hunters were essentially split on whether they preferred that Illinois maintain a split season, or return to a continuous 60-day season (Table 9). Hunters in the North Zone were evenly divided on this issue, while a slightly larger number of South Zone hunters preferred a split season. When asked, should the split season continue, whether they would prefer a 2-way or 3-way split, North Zone hunters clearly preferred the former. The same

option was preferred in the South Zone by a smaller margin. A large number of hunters expressed no opinion on this issue, presumably due to the low degree of participation in late-season dove hunting.

The primary reason given for preferring a split season was to be able to harvest doves along with other game (Table 8). A higher proportion of South Zone than North Zone hunters indicated that they preferred a split season because November was a more enjoyable time to be afield. This was presumably due to the much warmer late-summer/early-fall temperatures in southern Illinois.

Twenty percent of the active dove hunters indicated they used nontoxic shot for dove hunting in 1997. These hunters harvested an average of 14 doves each using nontoxic shot, which was the same as in 1992 (Anderson and David 1994). Nearly 50% of respondents felt it was inappropriate for the DNR to require nontoxic shot for dove hunting on all State-managed areas (Table 9), which is down slightly from 53% in the 1992 dove hunter survey (Anderson and David 1994). The most commonly given reasons that respondents felt broad-based nontoxic shot regulations for dove hunting would be inappropriate primarily involved a lack of appreciation for the risks of lead poisoning from lead shot ingestion, and concerns over the effectiveness of steel shot.

When asked their opinion regarding legal shooting hours, an overwhelming majority of respondents wanted to maintain the option of all-day hunting (Table 9). However, the vast majority of hunters indicated their preference for a sunrise opening,

rather than beginning shooting hours at 1/2 hour before sunrise.

#### Characteristics of Dove Hunters

Active dove hunters who participated in the 1997 survey were, on average, 39 years of age, male (99%), married (71%), and had hunted doves for 18 years.

#### DISCUSSION

Most of the dove hunting pressure in Illinois in 1997 occurred during the first part of the season, as was the case in 1992 (Anderson and David 1994). Relatively little activity was reported after October 1, and few days afield were spent dove hunting during November. As was suggested by Anderson and David (1994), the precipitous decline in dove hunting activity presumably occurs as a result of the migration of doves with the first cool fronts in late August and early September (Hanson and Kossack 1963:26), as well as the opening of hunting seasons for other species in October or November. Among active dove hunters, 85% also hunt upland game, 33% hunt waterfowl, and 51% hunt deer during the firearms season (Anderson and Campbell, 1991).

In 1997, an experimental split dove season was in effect for the second consecutive year. Little dove hunting activity (7.2% of days afield) and harvest (3.5% of doves bagged) occurred during the November portion of the season (Tables 2 and 4). On a statewide basis, only 9% of pheasant hunters indicated they harvested  $\geq 1$  dove while pheasant hunting during the 1996-97 season (Anderson and David 1998). Thus, it appears that the

November segment of the dove season is unimportant in terms of hunter activity and doves harvested. Given this finding, coupled with the elimination of dove hunting opportunity during the second half of October (when upland game bird hunting is limited prior to opening of upland game season in early November), the DNR should closely evaluate the split dove season. We recommend that the biological and sociological data be summarized in a report to bring closure to the experimental dove season and provide recommendations for the development of future dove hunting seasons. In this context, the report should also consider potential changes in federal regulations and future research on mourning dove hunting.

With the exception of 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). Illinois retained afternoon-only hours through 1992, based upon premises 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). In the 1950s, when all-day hunting was allowed, most dove hunting in Illinois occurred during late afternoon (Hanson and Kossack 1963:108).

Illinois opted to allow all-day dove hunting again, beginning in 1993, based upon the interest expressed by dove

hunters participating in the 1992 dove hunter survey. Although 66% of the hunters surveyed in 1992 said they would hunt doves in the morning if it were legal, and 73% of dove hunters in the current survey preferred to maintain the option of all-day hunting, the tradition of hunting only in the afternoon continued. Woolf and Roseberry (1998) also found that, while hunters indicated an interest in expanded dove hunting opportunity afforded by all day hunting, few actually took advantage of this opportunity.

With regard to the question of impacts of all-day hunting on doves themselves, Woolf and Roseberry (1998) were unable to detect any detrimental effects related to hunting regime (morning only, afternoon only, all day hunting) on doves using those areas (Woolf and Roseberry, 1998). The authors did, however, recommend, and we fully concur, that changes in hunter behavior (i.e. increased use of extended hours) would necessitate a reevaluation of the potential impacts of extended hours on doves.

The DNR requires the use of nontoxic shot for dove hunting at some sites where the use of lead shot poses an unacceptable risk to waterfowl. A greater proportion of dove hunters used nontoxic shot for at least a portion of their dove hunting, and felt it would be appropriate for the DNR to require nontoxic shot for dove hunting on all state areas, in 1997 than in 1992. The increased use of nontoxic shot, and reduced resistance to its use for dove hunting, may have stemmed from a combination of an increase in the number of sites requiring its use (15 sites in 1992 and 22 sites in 1997), a greater environmental awareness

among the hunting public, and an increased familiarity with the use of steel shot. Research being conducted in Illinois has revealed extremely high densities of spent lead shot on state-owned dove fields (Buck 1998), ingestion of lead shot by doves, and relatively large proportions of doves with bone, blood, and/or liver lead concentrations above background levels (Buck 1998; T. Nelson EIU, pers. commun.). We strongly encourage the DNR to consider the findings of this research in formulating regulations for dove hunting on state-owned properties, in order to adequately protect migratory birds as well as resident wildlife.

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#### LITERATURE CITED

- Aldrich, J.W. 1993. Classification and distribution. 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 \_\_\_\_\_. 1997. Illinois hunter harvest survey, 1996-97. Ill. Dept. Nat. Res., Federal Aid in Wildlife Restoration Act Project W-112-R-6, Study 1, Job 1, Job Completion Rep. 67pp.
- \_\_\_\_\_, 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.
- \_\_\_\_\_, and \_\_\_\_\_. 1994. Results of the 1992 Illinois mourning dove hunter survey. Ill. Dep. Conserv., Div. Wildl. Res., Admin. Rep. P-R Project W-112-R, Job Completion Rep. 20 pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1996. Results of the 1994-95 Illinois rabbit hunter survey. Ill. Dept. Nat. Res., Div. Wild. Res., Admin. Rep. P-R Project W-112-R. 16 pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1997. Results of the 1995-96 Illinois quail hunter survey. Ill. Dept. Nat. Res., Div. Wild. Res., Admin. Rep. P-R Project W-112-R. 18 pp.
- \_\_\_\_\_, and \_\_\_\_\_. 1998. Results of the 1996-97 Illinois pheasant hunter survey. Ill. Dept. Nat. Res., Div. Wild. Res., Admin. Rep. P-R Project W-112-R. 21 pp.
- Armstrong, E.R., and D.L.G. Noakes. 1983. Wintering biology of mourning doves, Zenaida macroura, in Ontario, Canada. Field Nat. 97(4):434-438.
- 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.
- Bryan, H. 1982. A social science perspective for managing recreational conflict. Marine Recreation Fisheries. Sport Fishing Institute, Washington, D.C. Pages 15-22.
- Buck, S.R. 1998. Quantification of spent lead shot at two state managed dove hunting sites and blood and bone lead values of free-ranging mourning doves in east and north central Illinois. M.S. thesis, Univ. IL--Urbana-Champaign. 75 pp.
- Dolton, D.D. 1992. Mourning dove breeding population status, 1992. U.S. Fish and Wildlife Service, Laurel, MD. 15pp.
- Filion, F.L., and S.A.D. Parker. 1984. Human dimensions of migratory game-bird hunting in Canada. Occasional Paper No. 51, Canadian Wildlife Service, Ottawa, Ontario. 34pp.
- 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. Mourning dove harvest. 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.
- Woolf, A., and J.L. Roseberry. 1998. Impacts of feeding fields and shooting hours on mourning doves and dove hunting in Illinois. Final Fed. Aid Perf. Rep., Proj. W-117-R-5, IL Dept. Nat. Res. 86 pp.

Table 1. Reasons given by respondents to the 1997 Illinois Dove Hunter Survey for not hunting doves in Illinois during the 1997 season(n=964).

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Reason	<u>Percentage</u>
Too busy/other responsibilities	55.5
No place to hunt	19.6
Few doves	10.4
Friends didn't hunt	4.0
Age/health reasons	3.5
Unfavorable weather	1.1
Lack of interest/motivation	1.0
Too dangerous	1.0
Decided not to	0.9
Other miscellaneous	3.0

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Table 2. Temporal distribution of dove hunting activity in Illinois in 1997. The split season extended from September 1 to October 14, and from November 1 to November 16, statewide. Sample sizes are in parentheses.

Date(s)	North		South		Entire State	
	Hunters	Days Afield	Hunters	Days Afield	Hunters	Days Afield
September	(348)	(1,597)	(437)	(2,252)	(793)	(3,855)
1	57.2%	12.5%	60.6%	11.8%	59.0%	12.1%
2	32.5	7.8	36.8	7.4	35.0	7.6
3-30	76.2	57.6	80.5	64.3	77.9	61.4
October						
1-14	17.6	13.1	18.8	10.6	18.0	11.6
November						
1-16	15.2	9.1	10.3	6.0	12.3	7.2
Mean Days		4.6		5.2		4.9 <sup>a</sup>

<sup>a</sup>19.4% hunted 1 day, 18.0% hunted 2 days, 14.8% hunted 3 days, 19.4% hunted 4-5 days, 19.4% hunted 6-10 days, 5.2% hunted 11-15 days, and 3.8% hunted ≥16 days.

Table 3. Time of day and length of time respondents hunted doves during the 1997 Illinois dove season. Sample sizes are in parentheses.

Subject	Percentage of Hunters		
	North	South	Entire State
Time of day hunted	(347)	(436)	(788)
Morning only	12.1%	9.4%	10.5%
Afternoon/evening	48.7	56.4	52.7
Both morning and afternoon	39.2	34.2	36.2
Mean number of days hunted both morning and afternoon			
	1.48 days	1.28 days	1.36 days
Number of hours hunted on typical trip			
	(345)	(431)	(781)
<1	3.2%	1.2%	2.0%
1-2	27.0	28.8	27.8
3-4	52.2	58.0	55.4
5-6	14.5	9.7	12.0
>6	3.2	2.3	2.7

Table 4. Temporal distribution of dove harvest in Illinois in 1997. The split season extended from September 1 to October 14, and from November 1 to November 16, statewide. Sample sizes are in parentheses.

Date(s)	North		South		Entire State	
	Mean <sup>a</sup>	Percentage	Mean	Percentage	Mean	Percentage
September		(5,928) <sup>b</sup>		(11,340)		(17,292)
1	4.3	25.4	5.6	21.4	5.0	22.8
2	2.2	13.0	3.0	11.6	2.6	12.1
3-30	8.5	49.7	14.5	56.0	11.7	53.8
October						
1-14	1.4	8.2	2.0	7.7	1.7	7.8
November						
1-16	0.6	3.8	0.9	3.3	0.8	3.5
Entire season						
Per day	3.7		5.0		4.5	
Total	17.0		25.9		21.8 <sup>c</sup>	

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

<sup>b</sup>Doves harvested.

<sup>c</sup>13.2% harvested 0 dove, 17.4% harvested 1-5 doves, 14.8% harvested 6-10 doves, 12.7% harvested 11-15 doves, 7.6% harvested 16-20 doves, 5.7% harvested 21-25 doves, 5.5% harvested 26-30 doves, and 23.1% harvested  $\geq$  30 doves.

Table 5. Reason for hunting and dove harvest during the November segment of the 1997 dove season in Illinois. Sample sizes are in parentheses.

Respondents\* afield during November segment primarily to hunt:

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(53)	(45)	(98)
Doves	23%	50%	35%
Other upland species	77%	50%	65%

Respondents\* harvesting  $\geq 1$  doves during November segment:

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(12)	(22)	(34)
Dove Hunters	100%	73%	82%
	(41)	(22)	(63)
Upland Game Hunters	71%	68%	70%

Mean number doves harvested by respondents\* during November segment:

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(12)	(22)	(34)
Dove hunters	4.1	11.2	8.7
	(41)	(22)	(63)
Upland game hunters	4.3	5.5	4.7

Percentage of respondents\* harvesting other upland species while dove hunting during the November segment:

<u>North</u>	<u>South</u>	<u>Entire State</u>
(12)	(22)	(34)
42%	14%	24%

\*Those who were afield  $\geq 1$  days during the November segment.

Table 6. In order of importance, reasons given by dove hunters for enjoying their sport, Illinois 1997 (n=1834).

---

Reason	<u>Rating</u>
Challenge and excitement	52.1
Having a good time with friends	48.4
A good way to relax	33.2
Fresh air; exercise; healthy living	30.2
Nature, sunsets, animals, plants	29.9
Getting away from work/home	24.4
Eating the game	23.8
Shooting game	23.3
Watching retriever work	17.4
Others	<2.0

---

Table 7. Indicators of the importance of dove hunting to Illinois hunters in 1997. Sample sizes are in parentheses.

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"In general, how much enjoyment do you get from dove hunting?"

	(1772)
Very much	45.4%
Much	35.4
Some	16.1
Very little	3.1

"How much enjoyment do you get from a dove hunting trip if you don't bag at least one dove?"

	(1769)
Very much	18.4%
Much	30.4
Some	39.2
Very little	16.7

"How much enjoyment do you get from a dove hunting trip if you don't see any doves?"

	(1764)
Very much	5.6%
Much	13.3
Some	37.5
Very little	43.5

"If you had to give up mourning dove hunting, how would you feel?"

	(1752)
Miss it more than other activities	11.9%
Miss it less than other activities	65.2
Don't miss it very much	22.9

---

Table 8. The level of difficulty that active dove hunters experienced in finding a place to hunt in Illinois in 1997. Sample size is in parentheses.

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Subject	<u>Percentage of Hunters</u>
Level of difficulty	(768)
None	42.6
Little	18.5
Moderate	25.3
Much	13.7

---

Table 9. Attitudes of active dove hunters toward nontoxic shot, season lengths, season dates, and shooting hours in Illinois in 1997. Sample sizes are in parentheses.

"In your opinion, should Illinois continue to have a split dove season?"

	<u>North</u> (340)	<u>South</u> (424)	<u>Entire State</u> (767)
Continue split season	39.7%	38.2%	39.1%
60 day continuous	40.0	36.3	37.6
No opinion	20.3	25.5	23.3

"If Illinois continues with a split dove season, would you prefer:"

	<u>North</u> (331)	<u>South</u> (424)	<u>Entire State</u> (747)
Two-way split	41.7%	38.2%	39.4%
Three-way split	26.0	36.3	23.3
No opinion	32.3	25.5	37.4

"If you prefer to have a split dove season, which of the following statements most accurately reflects your reason?"

	<u>North</u> (220)	<u>South</u> (261)	<u>Entire State</u> (482)
To hunt other game also	60.9%	52.5%	56.2%
Better hunting	25.9	26.1	26.1
More enjoyable	13.2	21.5	17.6

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

	<u>Entire State</u> (756)
Appropriate	29.9
Inappropriate*	49.7
No opinion	20.4

Table 9 - continued.

Table 9. Continued - page 2.

"During what times of the day would you prefer to have legal dove hunting hours in Illinois?"

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(332)	(413)	(766)
Morning only	2.1%	1.0%	1.3%
Afternoon only	19.0	19.6	20.9
All day	73.5	74.6	72.9
No preference	5.4	4.8	5.0

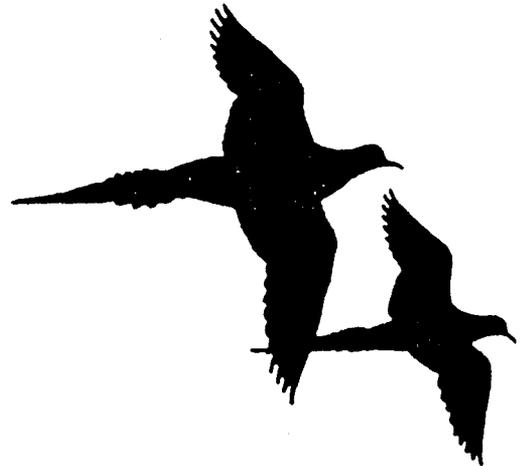
"In your opinion, should legal shooting time during mourning dove hunting season begin at sunrise or one-half hour before sunrise?"

	<u>North</u>	<u>South</u>	<u>Entire State</u>
	(413)	(332)	(748)
Sunrise	50.4%	56.0%	52.8%
One-half hour before	27.8	25.6	27.1
No preference	21.8	18.4	20.1

---

\*Reasons included: steel shot is too expensive (38.4%), less potential for waterfowl risk (14.8%), crippling loss with steel greater than loss from lead poisoning (14.6%), lead shot less risk than other factors like predation, etc. (14.3%), steel shot is ballistically inferior to lead shot (9.0%), site by site basis (2.9%), already have too many regulations (2.6%), gun considerations (2.2%), other reasons (1.2%)

# 1997 ILLINOIS MOURNING DOVE HUNTER SURVEY



## INSTRUCTIONS

Please answer the questions on the following pages for your mourning dove hunting activities in Illinois during the 1997 season. If you did not hunt mourning doves in Illinois in 1997, 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, please insert the questionnaire into the self-addressed, postage-paid envelope and mail. Your comments are welcome, but please write them on a separate sheet of paper to receive proper attention.

---

### PART I: General hunting questions.

1. Did you purchase a resident Illinois hunting license for the 1997 season?  
(circle the number of the appropriate answer)  
  
Yes.....1      No.....2
  
2. Did you purchase a 1997 Illinois Habitat Stamp for your own personal use?  
(circle the number of the appropriate answer)  
  
Yes.....1      No.....2
  
3. Are you aware of the National Migratory Bird Harvest Information Program, called HIP for short?  
(circle the number of the appropriate answer)  
  
Yes.....1      No.....2
  
4. Did you register with HIP for the 1997 hunting season?  
(circle the number of the appropriate answer)  
  
Yes.....1      No.....2

Figure 1. The questionnaire used for conducting the 1997 Illinois Mourning Dove Hunter Survey (continued).

5. Did you hunt mourning doves in Illinois during the 1997 season?  
 (circle the number of the appropriate answer)

Yes.....1      No.....2

5a. If you answered "yes" to question 5, go on to Part II.

5b. If you answered "no" to question 5, why did you not hunt mourning doves in Illinois in 1997?  
 (circle the number of the one most appropriate answer)

- |                         |                         |                            |
|-------------------------|-------------------------|----------------------------|
| Age or health.....1     | No place to hunt.....2  | Cost too much.....3        |
| Unfavorable weather...4 | Friends didn't hunt...5 | Too dangerous.....6        |
| Very few doves.....7    | Too many hunters.....8  | Too busy/had to work.....9 |
| Other (write in) _____  |                         |                            |

**IF YOU DID NOT HUNT MOURNING DOVES IN ILLINOIS DURING THE 1997 SEASON,  
 SKIP TO PART III**

---

**PART II. Mourning dove hunting activity.**

6. In which county, or counties, did you hunt mourning doves most in Illinois in 1997?

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

7. During the 1997 mourning dove hunting season, what time of the day did you usually hunt doves?  
 (circle the number of the appropriate answer)

Morning hours only.....1      Afternoon hours only.....2      Both mornings & afternoons.....3

8. On how many days during the 1997 season did you hunt mourning doves in both the morning and afternoon on the same day?

Number of Days \_\_\_\_\_

9. On a typical mourning dove hunting trip in Illinois in 1997, about how many hours per day did you hunt?  
(circle the number of the appropriate answer)

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

10. Please provide the following information for the number of days you hunted mourning doves and the number of doves you harvested in Illinois in 1997:  
(write in the appropriate number of days and number of doves)

<u>No. Days Hunted</u>	<u>No. Mourning Doves Harvested</u>
First day, Monday, September 1..... ____ day	____ mourning doves
Second day, Tuesday, September 2..... ____ day	____ mourning doves
September 3-30, 1997..... ____ days	____ mourning doves
October 1-14, 1997..... ____ days	____ mourning doves
November 1-16, 1997..... ____ days	____ mourning doves

11. During the November portion of the mourning dove hunting season, other upland game were also open for hunting (e.g., quail, pheasants, rabbits). If you hunted doves in November in Illinois in 1997, did you go afield primarily to hunt doves or did you attempt to harvest doves while you were primarily hunting other game? (circle the number of the appropriate answer)

- Primarily to hunt mourning doves .....1  
 Attempted to harvest doves while primarily hunting other game.....2

12. While you were hunting mourning doves in Illinois during the November portion of the 1997 season, did you also shoot (harvest) any rabbits, quail, gray partridge (Huns), or pheasants?  
(circle the number of the appropriate answer)

- Yes.....1      No.....2

12a. If you answered "yes" to question 12 above, how many of each of these species did you harvest while also hunting doves in November 1997?

Cottontail rabbit	_____	Gray partridge	_____
Bobwhite quail	_____	Pheasant	_____

13. Please rate the level of difficulty you experienced in finding a place to hunt mourning doves in Illinois in the 1997 season? (circle the number of the appropriate answer)

- No difficulty.....1
- Little difficulty.....2
- Moderate difficulty.....3
- Much difficulty.....4

---

**PART III. Opinion Questions. Please answer, even if you did not hunt doves in 1997.**

14. In general, how much enjoyment do you get from mourning dove hunting?  
(circle the number of the most appropriate answer)

- Very much...1
- Much....2
- Some....3
- Very little.....4

15. How much enjoyment do you get from a mourning dove hunting trip during which you don't bag at least one mourning dove? (circle the number of the most appropriate answer)

- Very much....1
- Much....2
- Some....3
- Very little.....4

16. How much enjoyment do you get from a mourning dove hunting trip during which you don't see any mourning doves? (circle the number of the most appropriate answer)

- Very much....1
- Much....2
- Some....3
- Very little.....4

17. In 1997, Illinois completed the second year of a regulation experiment involving the use of a split dove hunting season. The 1997 season opened on September 1, closed in mid-October, and then re-opened on November 1 and ran concurrently with the first 16 days of the upland game hunting season.

In your opinion, should Illinois:

- Continue to have a split dove hunting season .....1
- Change to a season with 60 continuous days of dove hunting ending Oct. 30.....2
- No opinion.....3

17a. If Illinois continues with a split dove hunting season, would you prefer to:

- Retain a two-way split season (e.g. Sept. 1-Oct. 14 AND Nov. 1-16).....1
- Change to three-way split season (e.g., Sept. 1-Oct. 14 AND the first 12 days of the upland game season AND 4 days over the Thanksgiving holiday period).....2
- No opinion.....3

18. If you prefer to have a split dove season, which of the following statements most accurately reflects your reason? (circle the number of the most appropriate answer)

I like to hunt doves along with other upland game.....1

I believe that the first half of November provides better dove hunting opportunity than the last half of October.....2

I find it more enjoyable to be afield in November than October.....3

19. The use of nontoxic (steel or bismuth) 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.

19a. Did you use nontoxic shot for any of your mourning dove hunting in Illinois in 1997?

Yes.....1      No.....2

19b. If "yes", how many mourning doves did you harvest in Illinois with nontoxic shot during the 1997 season? (write in the number of doves)

Number of doves harvested in 1997 with nontoxic shot \_\_\_\_\_

19c. In your opinion, would it be appropriate or inappropriate for the State to require nontoxic 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

19d. If you answered "Inappropriate", give reason \_\_\_\_\_  
\_\_\_\_\_

20. In recent years, Illinois regulations have allowed mourning dove hunting from sunrise to sunset (all day). Before 1993, Illinois usually allowed dove hunting only in the afternoons (noon to sunset). During what times of the day would you prefer to have legal dove hunting hours in Illinois?

(circle the number of the appropriate answer)

Morning only.....1      Afternoon only .....2      All day.....3      No preference.....4

21. In your opinion, should legal shooting time during the mourning dove hunting season begin at sunrise or one-half hour before sunrise?

Sunrise.....1      One-half hour before sunrise.....2      No preference.....3

22. If you had to give up mourning dove hunting, how would you feel?

Would miss it more than any other recreational activity.....1

Would miss it but less than other recreational activities.....2

Would probably not miss it very much.....3

23. From the list below, please rank the top four reasons you enjoy hunting mourning doves.  
(enter "1", "2", "3", or "4" for the four most appropriate answers, number "1" is the top reason)

Having a good time with friends..... \_\_\_\_\_

Getting away from work and home..... \_\_\_\_\_

Watching retrieving dog(s) work..... \_\_\_\_\_

A good way to relax..... \_\_\_\_\_

Fresh air, exercise, healthy living..... \_\_\_\_\_

Nature, sunsets, animals, plants..... \_\_\_\_\_

Challenge and excitement of hunting..... \_\_\_\_\_

Shooting game..... \_\_\_\_\_

Eating the game..... \_\_\_\_\_

Other (write in) \_\_\_\_\_

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

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

26. What is your gender? (circle appropriate number)

Male.....1                      Female.....2

27. What is your marital status? (circle the number of the appropriate answer)

Married.....1                      Never married.....2                      Widowed.....3                      Divorced or separated...4

Thank you for your cooperation.

POSTAGE IS PREPAID



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

Dear Fellow Sportsman:

You are one of a select group of Illinoisans asked to furnish information on your mourning dove hunting activities during the recently completed (1997) hunting season. You were selected because you indicated on your 1996 Illinois Habitat Stamp stub that you are a dove hunter.

The information supplied by you and other selected hunters is vital to the management of Illinois doves. Our goals are to safeguard 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 dove population and 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 doves or were not successful. Only a limited number of 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:ld



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

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 dove hunters being sampled will be of great value to the Department of Natural Resources in better directing the management of our dove resources.

Please fill out the questionnaire completely and return it even if you did not hunt 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,

Jeffrey M. Ver Steeg  
Chief  
Division of Wildlife Resources

JMV:LD:ld

Enclosure

2

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



ILLINOIS  
DEPARTMENT OF  
**NATURAL RESOURCES**

524 South Second Street, Springfield 62701-1787

Jim Edgar, Governor ● Brent Manning, Director

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 if you did not hunt 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:ld

Enclosure

3



