

# Trends in Resident and Non-resident Hunter Effort and Harvest for Mourning Dove in Mississippi: 1980-81 to 2010-11 Seasons

Prepared for the

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#### TABLE OF CONTENTS

| TABLE OF CONTENTS        | i  |
|--------------------------|----|
| LIST OF TABLES & FIGURES | ii |
| INTRODUCTION & METHODS   | 1  |
| LITERATURE CITED         | 2  |
| RESULTS                  | 3  |

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#### LIST OF TABLES & FIGURES

| Table #  |   | Page |
|----------|---|------|
| 1        | Mississippi mourning dove hunting effort & harvest trends for licensed resident hunters (1980 to the Present)     | 3    |
| 2        | Mississippi mourning dove hunting effort & harvest trends for licensed non-resident hunters (1994 to the Present) | 8    |
| Figure # |   |      |
| 1        | Trends in total harvest of mourning dove for licensed resident hunters (1980 to the Present)                      | 4    |
| 2        | Trends in average daily kill of mourning dove for licensed resident hunters (1980 to the Present)                 | 4    |
| 3        | Trends in average seasonal harvest of mourning dove for licensed resident hunters (1980 to the Present)           |      |
| 4        | Trends in percent successful mourning dove hunters for licensed resident hunters (1980 to the Present)            | 5    |
| 5        | Trends in total man days mourning dove hunting for licensed resident hunters (1980 to the Present)                | 6    |
| 6        | Trends in average seasonal days mourning dove hunting for licensed resident hunters (1980 to the Present)         | 6    |
| 7        | Trends in total mourning dove hunters for licensed resident hunters (1980 to the Present)                         | 7    |
| 8        | Trends in proportion of licensed resident hunters who hunted for mourning dove (1980 to the Present)              | 7    |
| 9        | Trends in total harvest of mourning dove for licensed non-resident hunters (1994 to the Present)                  | 9    |
| 10       | Trends in average daily kill of mourning dove for licensed non-resident hunters (1994 to the Present)             | 9    |
| 11       | Trends in average seasonal harvest of mourning dove for licensed non-resident hunters (1994 to the Present)       | 10   |

| 12 | hunters (1994 to the Present)   | 10 |
|----|---|----|
| 13 | Trends in total man days mourning dove hunting for licensed non-resident hunters (1994 to the Present)        | 11 |
| 14 | Trends in average seasonal days mourning dove hunting for licensed non-resident hunters (1994 to the Present) | 11 |
| 15 | Trends in total mourning dove hunters for licensed non-resident hunters (1994 to the Present)                 | 12 |
| 16 | Trends in proportion of licensed non-resident hunters who hunted for mourning dove (1994 to the Present)      | 12 |

#### INTRODUCTION & METHODS

Self-administered mail surveys of resident hunters have been conducted intermittently since the 1947-48 Mississippi hunting season to estimate hunter effort and game harvest in Mississippi, with annual surveys (unless noted) starting in the 1980-1981 hunting season. Non-resident hunter surveys began on an annual basis in the 1994-95 hunting season (unless noted).

Annual surveys were completed by the Human Dimensions & Conservation Law Enforcement Laboratory in the Forest & Wildlife Research Center at Mississippi State University from 2001 thru 2011 using mail survey methodology prescribed by Dillman (2000). This entailed an introductory letter being sent to hunters followed one-week later by another letter, questionnaire, and business reply envelope (i.e., a complete packet). Ten days after that, hunters were sent a reminder/thank you postcard. Non-respondents were sent a complete packet as necessary three and seven weeks after the postcard.

These surveys provide information to biologists and researchers to determine trends in total harvest, average seasonal harvest per hunter, average daily harvest per hunter, average persondays spent afield, total person-days spent afield, percent successful hunters, and the proportion of hunters seeking 13 different game species and feral hog. This report includes mail survey data for mourning dove (*Zenaida macroura*) spanning from the 1980-81 hunting season to the 2010-11 hunting season for resident hunters, and data spanning from the 1994-95 hunting season to the 2010-11 hunting season for non-resident hunters.

This document will be updated annually with most recent data and will evolve to include other measures and information as that information is extracted from archived files. This report does not attempt to determine and describe trends in hunter effort and harvest. It is meant to provide the reader with the data for these estimates in an organized manner.

### LITERATURE CITED

Dillman, D.A. 2000. *Mail and Internet Surveys: The Tailored Design Method*. 2<sup>nd</sup> Edition. New York: John Wiley and Sons, Inc.

### **RESULTS**

TABLE 1. Mississippi mourning dove hunting effort and harvest trends for licensed resident hunters (1980 to the Present)

|      | TOTAL<br>HARVEST | SE of<br>TOTAL<br>HARVEST | AVERAGE<br>DAILY<br>KILL | AVERAGE<br>SEASONAL<br>HARVEST | PERCENT<br>SUCCESSFUL<br>HUNTERS | TOTAL<br>MAN-<br>DAYS | AVERAGE<br>SEASONAL<br>DAYS<br>HUNTING | TOTAL<br>HUNTERS | PERCENT<br>OF TOTAL<br>LICENCEES<br>(A) |
|------|------------------|---------------------------|--------------------------|--------------------------------|----------------------------------|-----------------------|--|------------------|---|
| 1981 | 3,430,483        | 82,147                    | 5.69                     | 25.01                          | 92.6                             | 598,690               | 4.39                                   | 137,696          | 53.8                                    |
| 1982 | 3,375,777        | 171,010                   | 6.47                     | 27.69                          | 92.4                             | 523,435               | 4.32                                   | 122,573          | 50.4                                    |
| 1983 | 3,349,858        | 143,129                   | 6.04                     | 24.51                          | 92.1                             | 559,500               | 4.09                                   | 137,099          | 52.3                                    |
| 1984 | 3,599,242        | 175,680                   | 5.89                     | 28.72                          | 93.0                             | 612,075               | 4.90                                   | 125,919          | 48.6                                    |
| 1985 | 2,621,340        | 114,040                   | 6.03                     | 23.69                          | 93.5                             | 435,182               | 3.93                                   | 111,062          | 43.3                                    |
| 1986 | 2,538,405        | 77,291                    | 5.72                     | 23.00                          | 93.1                             | 439,252               | 4.00                                   | 110,602          | 43.6                                    |
| 1987 | 2,975,298        | 134,656                   | 6.49                     | 25.76                          | 94.8                             | 456,901               | 3.97                                   | 115,804          | 45.4                                    |
| 1988 | 3,019,850        | 144,185                   | 6.73                     | 25.94                          | 93.8                             | 445,836               | 3.84                                   | 116,950          | 45.6                                    |
| 1989 | -                | -                         | -                        | -                              | -                                | -                     | -                                      | -                | -                                       |
| 1990 | 2,033,899        | 114,358                   | 5.89                     | 21.85                          | 93.1                             | 331,484               | 3.58                                   | 105,457          | 46.1                                    |
| 1991 | 2,490,442        | 137,102                   | 6.15                     | 25.72                          | 92.3                             | 401,688               | 4.19                                   | 99,709           | 43.6                                    |
| 1992 | 1,756,385        | 84,751                    | 6.25                     | 21.74                          | 92.4                             | 278,307               | 3.48                                   | 80,166           | 35.2                                    |
| 1993 | 2,167,677        | 101,803                   | 6.07                     | 22.75                          | 92.1                             | 348,121               | 3.72                                   | 94,103           | 40.8                                    |
| 1994 | 1,910,221        | 61,398                    | 6.08                     | 22.55                          | 93.4                             | 309,912               | 3.69                                   | 84,716           | 38.4                                    |
| 1995 | 1,703,312        | 87,787                    | 6.82                     | 24.26                          | 93.3                             | 245,247               | 3.51                                   | 70,783           | 32.9                                    |
| 1996 | 1,920,544        | 116,548                   | 7.18                     | 25.85                          | 93.5                             | 263,565               | 3.58                                   | 74,300           | 35.6                                    |
| 1997 | 1,429,379        | 70,086                    | 7.18                     | 20.32                          | 93.2                             | 231,020               | 3.58                                   | 70,508           | 34.1                                    |
| 1998 | 1,657,651        | 83,699                    | 5.92                     | 21.48                          | 92.6                             | 276,009               | 3.62                                   | 77,411           | 37.3                                    |
| 1999 | 1,492,879        | 51,786                    | 6.33                     | 19.95                          | 92.2                             | 232,731               | 3.13                                   | 75,262           | 36.4                                    |
| 2000 | -                | -                         | -                        | -                              | -                                | -                     | -                                      | -                | -                                       |
| 2001 | 1,433,923        | 65,176.30                 | 6.59                     | 21.58                          | 93.2                             | 212,520               | 3.23                                   | 66,431           | 32.9                                    |
| 2002 | 1,565,111        | 85,798.22                 | 6.54                     | 21.21                          | 90.4                             | 233,361               | 3.24                                   | 73,801           | 36.8                                    |
| 2003 | 1,552,022        | 86,017.27                 | 5.93                     | 22.69                          | 92.8                             | 246,994               | 3.69                                   | 68,349           | 36.2                                    |
| 2004 | 1,164,827        | 83,230                    | 6.27                     | 20.4                           | 91.1                             | 177,489               | 3.22                                   | 57,087           | 30.5                                    |
| 2005 | 1,403,293        | 126,551                   | 6.41                     | 22.63                          | 92.4                             | 217,512               | 3.54                                   | 62,023           | 33.4                                    |
| 2006 | 1,208,041        | 74,460                    | 6.78                     | 23.59                          | 93.4                             | 170,437               | 3.43                                   | 51,220           | 29.2                                    |
| 2007 | 1,068,064        | 67,073                    | 6.42                     | 22.1                           | 94.5                             | 162,105               | 3.44                                   | 48,335           | 27                                      |
| 2008 | 1,091,269        | 69,965                    | 7.26                     | 22.55                          | 93.7                             | 147,402               | 3.08                                   | 48,385           | 26.8                                    |
| 2009 | 924,200          | 74,618                    | 5.8                      | 21.68                          | 91.8                             | 156,123               | 3.75                                   | 42,637           | 23.9                                    |
| 2010 | 1,062,573        | 70,159                    | 7.76                     | 23.38                          | 94.8                             | 133,109               | 3                                      | 45,445           | 27.5                                    |
| 2011 | 1,160,633        | 91,881                    | 7.83                     | 21.59                          | 93.1                             | 144,639               | 2.76                                   | 53,750           | 32.3                                    |

(A) Calculated as a percent of small game license holders only

Figure 1. Trends in total harvest of mourning dove for licensed resident hunters (1980 to the Present)

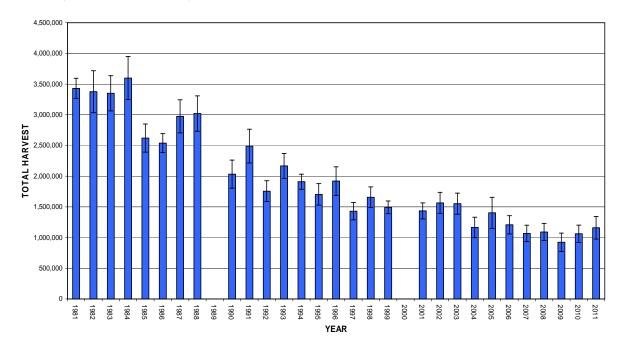


Figure 2. Trends in average daily kill of mourning dove for licensed resident hunters (1980 to the Present)

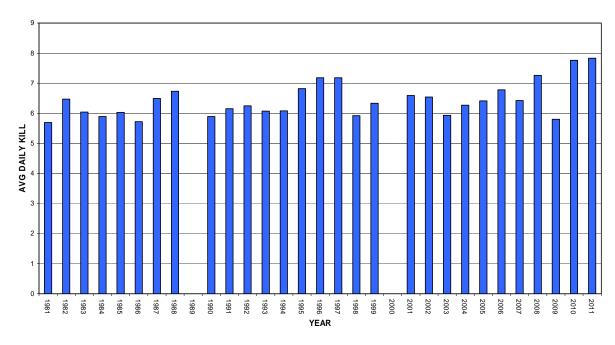


Figure 3. Trends in average seasonal harvest of mourning dove for licensed resident hunters (1980 to the Present)

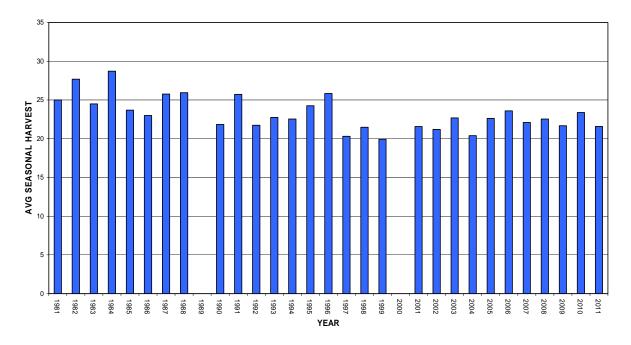


Figure 4. Trends in percent successful mourning dove hunters for licensed resident hunters (1980 to the Present)

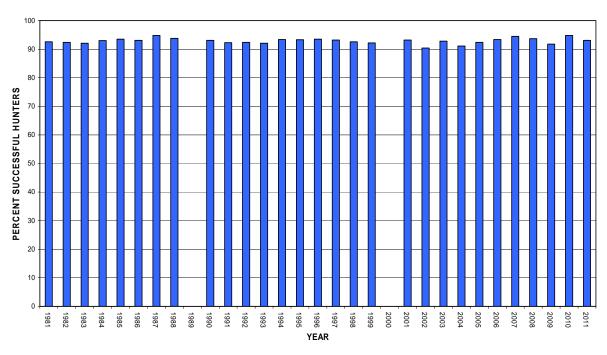


Figure 5. Trends in total man days mourning dove hunting for licensed resident hunters (1980 to the Present)

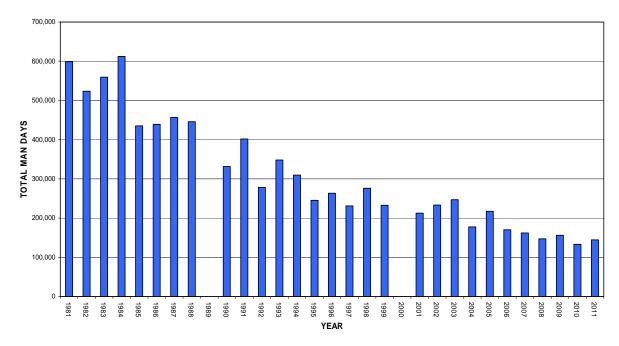


Figure 6. Trends in average seasonal days mourning dove hunting for licensed resident hunters (1980 to the Present)

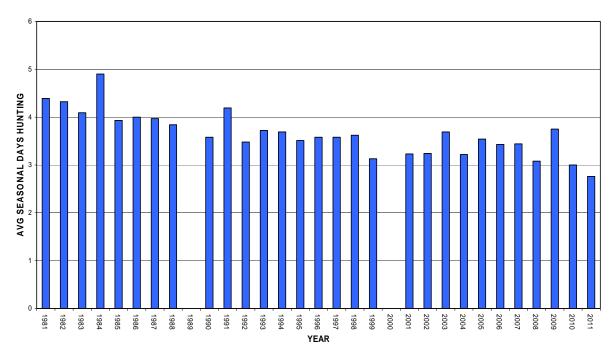


Figure 7. Trends in total mourning dove hunters for licensed resident hunters (1980 to the Present)

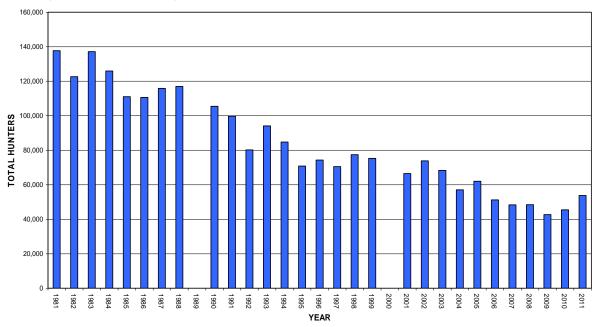


Figure 8. Trends in proportion of licensed resident hunters who hunted for mourning dove (1980 to the Present)

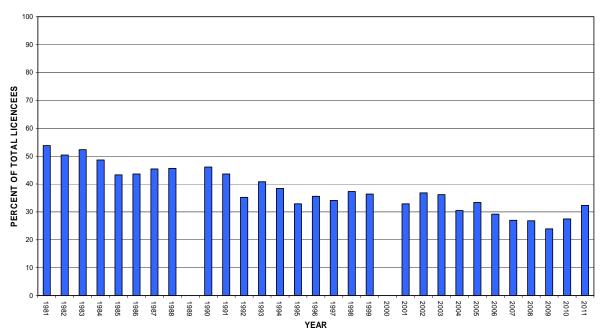


TABLE 2. Mississippi mourning dove hunting effort and harvest trends for licensed non-resident hunters (1980 to the Present)

|      | TOTAL<br>HARVEST | SE of<br>TOTAL<br>HARVEST | AVERAGE<br>DAILY<br>KILL | AVERAGE<br>SEASONAL<br>HARVEST | PERCENT<br>SUCCESSFUL<br>HUNTERS | TOTAL<br>MAN-<br>DAYS | AVERAGE<br>SEASONAL<br>DAYS<br>HUNTING | TOTAL<br>HUNTERS | PERCENT<br>OF TOTAL<br>LICENCEES<br>(A) |
|------|------------------|---------------------------|--------------------------|--------------------------------|----------------------------------|-----------------------|--|------------------|---|
| 1995 | 100,323          | -                         | 7.63                     | 24                             | 0.907                            | 12,455                | 3.19                                   | 4,195            | 0.234                                   |
| 1996 | 80,172           | -                         | 7.118                    | 21.5                           | 95.75                            | 12,286                | 3.123                                  | 4,140            | 21.9                                    |
| 1997 | -                | -                         | -                        | -                              | -                                | -                     | -                                      | -                | -                                       |
| 1998 | 89,567           | -                         | 7.03                     | 22.893                         | 91.275                           | 11,577                | 3.09                                   | 3,862            | 17.725                                  |
| 1999 | 85,570           | -                         | 8.255                    | 21.41                          | 95.975                           | 10,908                | 2.608                                  | 4,201            | 17.5                                    |
| 2000 | -                | -                         | -                        | -                              | -                                | -                     | -                                      | -                | -                                       |
| 2001 | 204,497          | 9,483.97                  | 8.08                     | 22.49                          | 95.6                             | 25,004                | 2.78                                   | 9,093            | 26.4                                    |
| 2002 | 119,788          | 8,663.08                  | 7.81                     | 24.05                          | 94                               | 14,991                | 3.09                                   | 4,981            | 14                                      |
| 2003 | 90,807.09        | 9,464.13                  | 7.23                     | 21.2                           | 93.1                             | 12,394                | 2.95                                   | 4,282            | 13.1                                    |
| 2004 | 70,853           | 7,379                     | 7.27                     | 21.6                           | 93.3                             | 9,469                 | 2.98                                   | 3,280            | 10.4                                    |
| 2005 | 70,743           | 8,302                     | 5.7                      | 21.96                          | 93.2                             | 12,344                | 3.86                                   | 3,222            | 9.9                                     |
| 2006 | 71,630           | 7,104                     | 8.24                     | 23.44                          | 94.8                             | 8,423                 | 2.85                                   | 3,057            | 9.7                                     |
| 2007 | 68,031           | 9,999                     | 8.08                     | 23.68                          | 97.56                            | 8,171                 | 2.88                                   | 2,873            | 8.3                                     |
| 2008 | 91,360           | 10,948                    | 6.67                     | 20.73                          | 93.94                            | 13,569                | 3.16                                   | 4,406            | 12.1                                    |
| 2009 | 58,902           | 9,140                     | 6.14                     | 17.09                          | 93.5                             | 9,360                 | 2.77                                   | 3,447            | 9.3                                     |
| 2010 | 77,254           | 10,524                    | 8.48                     | 18.84                          | 94.9                             | 8,885                 | 2.21                                   | 4,101            | 11.3                                    |
| 2011 | 76,524           | 12,821                    | 6.40                     | 20.04                          | 96.7                             | 11,882                | 3.24                                   | 3,818            | 10.6                                    |

(A) Calculated as a percent of small game license holders only

Figure 9. Trends in total harvest of mourning dove for licensed non-resident hunters (1994 to the Present)

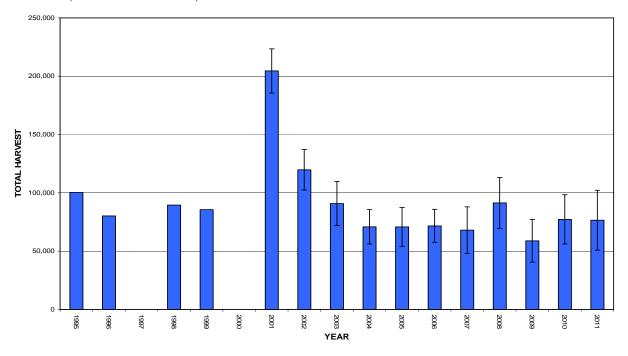


Figure 10. Trends in average daily kill of mourning dove for licensed non-resident hunters (1994 to the Present)

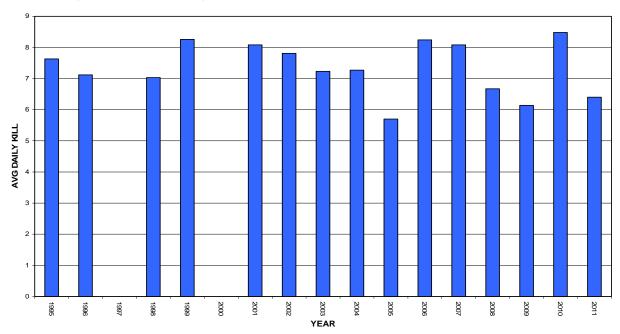


Figure 11. Trends in average seasonal harvest of mourning dove for licensed non-resident hunters (1994 to the Present)

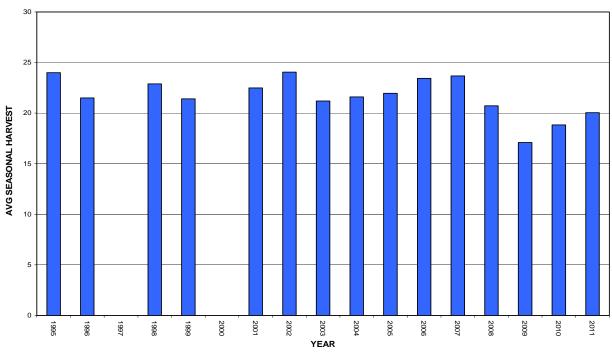


Figure 12. Trends in percent successful mourning dove hunters for licensed non-resident hunters (1994 to the Present)

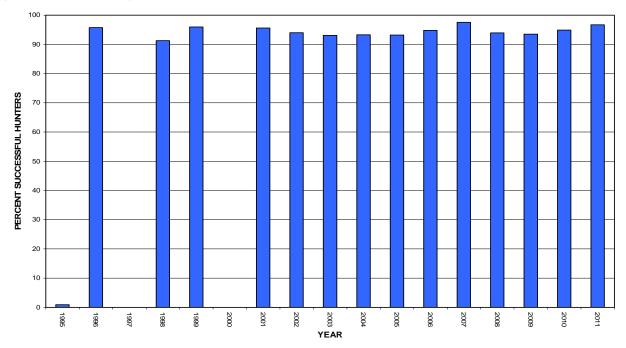


Figure 13. Trends in total man days mourning dove hunting for licensed non-resident hunters (1994 to the Present)

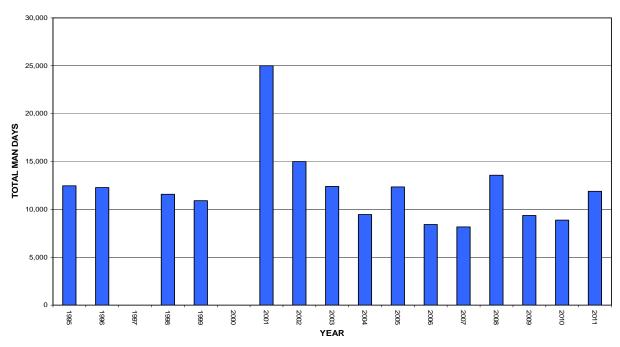


Figure 14. Trends in average seasonal days mourning dove hunting for licensed non-resident hunters (1994 to the Present)

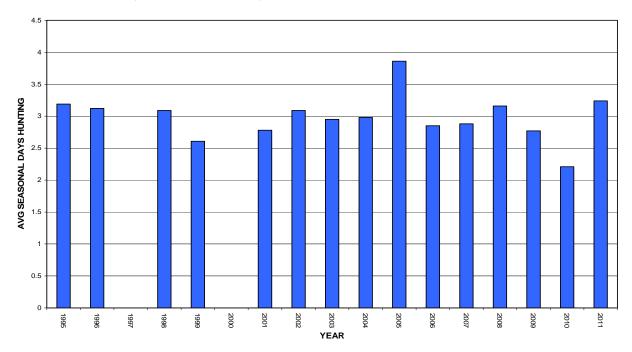


Figure 15. Trends in total mourning dove hunters for licensed non-resident hunters (1994 to the Present)

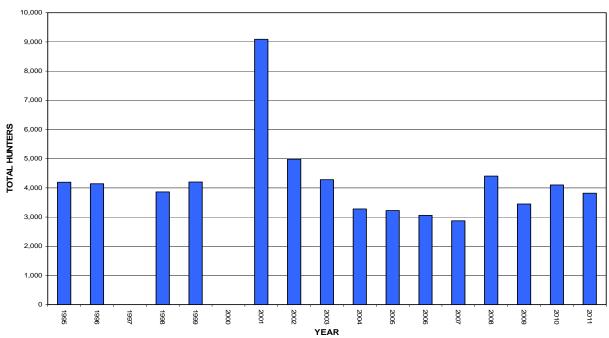


Figure 16. Trends in proportion of licensed non-resident hunters who hunted for mourning dove (1994 to the Present)

