

FARMER ATTITUDES TOWARD WHITE-TAILED DEER AND OTHER WILDLIFE ISSUES IN OHIO – 2000 UPDATE

Michael C. Reynolds, Forest Wildlife Research and Management Project, New Marshfield, Ohio 45766

The long-standing deer management goal of the Ohio Department of Natural Resources, Division of Wildlife seeks a deer population that provides maximum recreational opportunity while minimizing conflicts with agriculture, motorists, and other areas of human endeavor. To accomplish this goal, data related to deer populations and to public attitudes and desires associated with deer populations are collected and analyzed. The Division of Wildlife has periodically surveyed farmers in all regions of the state since 1979 to assess attitudes regarding deer populations and their management, and to quantify the extent of wildlife damage incurred by producers (Stoll and Mountz 1983, 1986; Stoll et al. 1989; Duda et al. 1995). Results of farmer attitude surveys are incorporated into deer management plans, and along with deer vehicle accident rates, are used to set target levels for deer populations in all 88 Ohio counties.

METHODS

The basic questionnaire used in this survey was similar to one originally developed in New York (Brown and Decker 1979) and used in past surveys in Ohio (Stoll and Mountz 1983, 1986; Stoll et al. 1991; Duda et al. 1995). The questionnaire provided information on farmer demographics, perceptions of deer abundance and wildlife damage, preferences for future deer populations, and attitudes about deer and deer hunting. In 1995, a series of questions was added to assess attitudes about wild turkeys, wild turkey crop damage, and wild turkey hunting (Duda et al. 1995). Some of these questions were retained for use in the 2000 survey, but specific questions regarding wild turkey crop damage were eliminated. However, a series of questions designed to assess general wildlife damage incurred by specific types of producers (e.g., grain farmers, orchardists, Christmas tree farmers, etc.) was added to the 2000 survey.

A proportional random sample of farmers was surveyed from the following 4 regions: Farmland, Hill Counties, Intermediate, and Northeast Metro (Fig. 1; the only constraint was that each county had at least 1 participant). Counties were assigned to regions based on the percentage of forested land and deer population densities as indexed by the buck gun harvest/mile². The farmland region consisted of 36 counties with <15% forest cover and a buck gun harvest/mile² <0.50. The Hill counties consisted of 24 counties with >34% forest cover and a buck gun harvest/mile² >1.10. Counties in the Intermediate region ($n = 17$) were spread throughout the state and had 15 – 34% forest cover and a buck gun harvest/mile² between 0.60 and 1.20. The Northeast Metro region consisted of 11 counties with 15 – 34% forest cover and a buck gun harvest/mile² between 0.30 and 0.60.

Names and phone numbers of survey participants were randomly selected from a list of agricultural producers on file with the Ohio Department of Agriculture. Surveys were conducted by telephone in August 2000 and responses were compiled by ODA's Agricultural Statistics Service. The survey consisted of 46 questions and required approximately 30 minutes to complete.

I tabulated responses to individual survey questions for the entire sample and by region and summarized the data in frequency tables (Appendix). Numbers may not always add exactly due to rounding or because respondents could select more than 1 choice in some questions. I analyzed responses of select questions based on whether or not farmers had experienced wildlife crop damage and compared attitudes about white-tailed deer between the 2 groups. I also compared responses of select questions from the current survey with those from previous surveys to determine how farmer attitudes regarding deer populations have changed over time. Regions used in the 2000 survey were similar to those used in 1995 and allowed for direct comparisons between these surveys. However, previous surveys were summarized by forest zones (1985 and 1989) or by deer harvest zones (1979). Therefore, results from previous surveys cannot be directly compared with the 2 most recent surveys, but some general conclusions can still be made.

RESULTS AND DISCUSSION

A total of 1244 producers was contacted (Farmland = 316, Hill Counties = 313, Intermediate = 322, and Northeast Metro = 295) of which 100% completed the phone survey and provided useable answers. Each of Ohio's 88 counties was represented in the survey by at least 1 and as many as 56 agricultural producers (Q2 – this references the specific question in Appendix).

Demographics

All respondents reported operating a farm in 1999 (Q1). Respondents farmed an average of 209 acres in 1999 (Q3). However, the inclusion of a few large farms in the sample (e.g., 4500 acres) likely inflated the average farm size. The median farm size was 97 acres and may be more appropriate to report because it minimized the influence of extremely large values. Farms of respondents in the Farmland region were larger (304 acres) than in the other 3 regions of the state (136 – 195 acres).

Respondents indicated that 31% of their income was derived from farming in 1999 (Q46). Most respondents (57%) derived <25% of their income from farming, 27% derived 25 – 75% of their income from farming, and 16% derived >75% from farming operations. Respondents in the Farmland region derived more of their income from farming (39%) than in the Northeast Metro (31%), Intermediate (28%), or Hill Counties region (24%).

Wildlife Crop Damage

Forty-nine percent of respondents ($n = 610$) reported experiencing some form of wildlife crop damage in 1999 (Q6). The proportion of respondents incurring damage was remarkably similar among regions. Respondents that reported wildlife damage had larger farms than those who did not experience any damage (289 acres vs. 131 acres).

The proportion of farmers who experienced wildlife crop damage slightly increased in all regions from 1979 to 1989, but a marked increase in the frequency of damage occurred in 1995 (77 – 82% of farmers in all regions reported experiencing crop damage). This increase corresponded with record deer populations and harvests, but aggressive hunting regulations in 1996 subsequently reduced deer populations. The deer herd has continued to increase, although not to the levels observed in 1995 as reflected in the lower proportion of farmers reporting

damage in the 2000 survey.

It is of note that the 49% of farmers reporting damage in 2000 was the lowest in any of the 5 farmer attitude surveys. This may be somewhat misleading because trends in the proportion of farmers who incurred moderate-severe damage were somewhat different. The proportion of farmers experiencing moderate-severe crop damage remained relatively constant from 1979 to 1989 in all regions (18 – 27%), but dramatically increased in 1995 (33 – 51%), and was similar in the 2000 survey (30 – 51%).

Only 12% of respondents who experienced damage contacted individuals/organizations in response to the damage (Q7). Seventy percent contacted the Division of Wildlife, 31% contacted their county extension agent, and 7% contacted other organizations (totals sum to >100% because some respondents contacted more than 1 agency or organization). Other organizations contacted included Ohio State University, crop insurance agents, and the Farm Services Agency office. Respondents reported being very dissatisfied with the agency or individuals contacted in regards to wildlife damage (35%), somewhat dissatisfied (21%), somewhat satisfied (27%), very satisfied (11%), or having no opinion regarding the service (6%; Q8). Most respondents that did not seek assistance with wildlife damage did not feel it was severe enough to warrant contacting anyone (65%), were unaware of the assistance available from agencies (26%), or were dissatisfied with service they had received in the past (6%; Q9).

Ten percent of respondents that suffered wildlife damage reported using fencing to reduce wildlife damage, 8% used scare tactics, 4% used habitat removal or modification, and 82% of respondents reported that they did not use any of the above non-lethal methods (totals sum to >100% because some respondents used more than 1 non-lethal method; Q15).

Cereal grains.--Seventy-eight percent of respondents reported growing grain crops in 1999 (Q10). Almost all respondents in the Farmland region grew grains (91%), followed by the Intermediate (80%), Northeast Metro (76%), and the Hill Counties (63%). Most damage to grain crops by wildlife was considered light (58%) or moderate (28%), but 9% of respondents experienced severe damage (Q10.1). Only 4% of grain growers did not report any damage by wildlife. More damage was considered moderate or severe in the Hill Counties than in other regions of the state. In most instances, respondents attributed most damage to white-tailed deer (65%), followed by other wildlife species (27%), wild turkey (5%), and geese (4%; Q10.2). Farmers in the Northeast Metro region reported a much higher incidence of damage by other wildlife species than in other regions of the state. Respondents reported that corn (65%), soybeans (19%), and wheat (9%) were the crops that suffered the greatest amount of damage by wildlife (Q10.3). Regional differences in crops that were most often damaged were likely a function of differences in agricultural production. Respondents reported that most damage to grain crops occurred in fall (59%) followed by summer (27%), spring (19%), and winter (1%; Q10.4).

Vegetables.--Seventeen percent of respondents reported growing vegetable crops in 1999 (Q11). Vegetables were grown more often in the Hill Counties and Northeast Metro regions than in the Intermediate and Farmland regions. Respondents reported damage to vegetable crops by wildlife as being light (35%), moderate (25%), severe (22%), or that no damage occurred (19%; Q11.1). Respondents attributed most damage to other wildlife species (61%), white-tailed deer (38%), and wild turkey (1%; Q11.2) and this pattern was similar among all regions. Respondents reported a variety of vegetable crops that were damaged, but sweet corn (65%), green beans (11%), and pumpkins (11%) suffered the greatest amount of damage (Q11.3). Respondents experienced most damage to vegetable crops in summer (89%), followed by fall

(6%) and spring (5%; Q11.4).

Fruit.--Ten percent of respondents reported growing fruit crops in 1999 (Q12). Respondents reported damage to fruit crops by wildlife as being light (40%), moderate (23%), severe (19%) or that no damage occurred (18%; Q12.1). Respondents attributed most damage to white-tailed deer (69%), other wildlife species (27%), and geese (4%; Q12.2). Respondents reported a variety of fruit crops that were damaged, but apple trees (50%), peach trees (12%), and several other species of fruit trees (18%) suffered the greatest amount of damage (Q12.3). Respondents experienced most damage to fruit crops in summer (42%), followed by fall (25%), winter (19%), and spring (13%; Q12.4).

Ornamental/nursery stock.--Five percent of respondents reported growing ornamental or nursery crops in 1999 (Q13). Respondents reported damage to ornamental and nursery crops by wildlife as being light (27%), moderate (24%), severe (21%) or that no damage occurred (27%; Q13.1). Most damage was attributed to white-tailed deer (92%) and other wildlife species (8%; Q13.2). Respondents reported a variety of ornamental and nursery crops that were damaged, but ornamental shrubs (8%), trees (8%), spruce trees (8%), and Indian corn (8%) suffered the greatest amount of damage (Q13.3). Respondents experienced most damage to ornamental and nursery crops in fall (42%), followed by winter (25%), spring (17%), and summer (17%; Q13.4).

Christmas trees.--Six percent of respondents reported growing Christmas trees in 1999 (Q14). Fifty-seven percent of respondents reported experiencing minor wildlife damage, 23% experienced moderate damage, 9% experienced severe damage, while 11% experienced no wildlife-related damage (Q14.1). Respondents indicated that most damage was caused by deer rubbing antlers on Christmas trees (77%) followed by foraging on needles and twigs of trees (23%; Q14.2). Respondents indicated that most damage occurred during winter (63%), followed by fall (25%), and summer (13%; Q14.3).

Financial loss.--No estimate of financial loss due to wildlife crop damage was assessed in the 2000 survey. Forster et al. (1996) reported that the estimated annual financial loss due to wildlife damage was 46.4 million dollars and averaged about \$650.00 per farm in Ohio. However, the majority of farmers in their survey still viewed wildlife as a source of pleasure or a resource rather than as a pest. Farmers in southeastern Ohio counties reported suffering the highest losses due to wildlife damage (Forster et al. 1996). Stoll and Mountz (1983) estimated financial losses due to wildlife crop damage in the 1979 survey. They reported that most financial losses were minimal and tolerated by farmers (<\$300.00). However, farmers indicated that damage in excess of \$500.00 was unacceptable. Both Forster et al. (1996) and Stoll and Mountz (1983) indicated that vegetable growers, orchardists, and Christmas tree farmers incurred the greatest financial losses from wildlife damage.

White-tailed Deer

Population trends.--Forty-two percent of respondents believed that deer had increased over the past 5 years in their county, 35% believed the deer herd had remained the same, 20% believed the deer population had decreased, and 5% had no opinion (Q4). However, respondents viewed trends in deer populations differently based on whether they had experienced wildlife damage. A majority of producers (52%) who experienced damage believed the deer population had increased in the past 5 years in their county. Respondents who did not experience any wildlife damage were more evenly split as to the growth of the deer population. Thirty-two

percent thought the herd had increased, 39% believed the population was unchanged, and 25% felt deer numbers had declined in their county during the past 5 years.

Respondents viewed trends in deer populations differently between 1995 and 2000 (Fig. 2). Sixty-seven percent of respondents thought deer populations had increased, 22% thought populations remained unchanged, and 8% thought they had declined during the 5-year period from 1990 to 1994. In contrast, 43% of respondents thought numbers of deer had increased, 35% thought populations remained unchanged, and 19% thought deer had declined during the 5-year period from 1995 to 1999. Deer populations were perceived to be higher during the early 1990s than during the late 1990s in all regions of the state. Fewer respondents thought deer populations had increased in 2000 than in 1995 in all regions. In contrast, more respondents thought deer populations had decreased in 2000 than in 1995 in all regions. Landowner perceptions of high deer populations during the mid-1990s were confirmed by record deer harvests that occurred during this period.

Attitudes about deer.--Forty-eight percent of respondents enjoyed seeing and having deer on their property, 33% enjoyed a few deer, but were concerned about the problems they can cause, 14% regard deer as a nuisance, and 5% had no particular feelings towards deer on their property (Q5). Respondents that had experienced damage enjoyed having a few deer, but were concerned about the problems deer can cause (44%) or felt deer were a nuisance (22%). The majority of respondents that experienced no damage enjoyed seeing and having deer on their property (66%). Respondents' feelings in regards to seeing and having deer on their property changed somewhat between 1995 and 2000 surveys (Fig. 3). Similar proportions of respondents enjoyed seeing and having deer on their property (46% vs. 48% in 1995 and 2000, respectively) and fewer respondents were concerned about the potential problems associated with having deer around (41% vs. 33% in 1995 and 2000, respectively). Interestingly, slightly more respondents felt deer were a nuisance in 2000 (14%) than in 1995 (10%). Regionally, no changes in attitudes towards deer occurred between surveys in the Hill Counties or Intermediate regions, but more respondents reported enjoying having deer around and fewer were concerned about the problems deer can cause in the Farmland and Northeast Metro regions. More respondents considered deer to be a nuisance in 2000 than in the 1995 survey in 3 of 4 regions (the Northeast Metro region remained unchanged from the 1995 survey).

Desired change in deer populations.--Statewide, 46% of respondents wanted the deer population to remain the same in their area, 32% wanted to see the deer population reduced, and 14% wanted to see the deer population increased, while 8% had no opinion (Q39). However, a higher percentage of respondents in the Hill Counties (43%) wanted to see the size of the deer herd reduced than in the Intermediate (32%), Farmland (27%), or Northeast Metro regions (24%). Conversely, more respondents in the Farmland region (19%) wanted to see an increase in the deer population than in the Intermediate (15%), Hill Counties (13%), and Northeast Metro regions (11%).

Respondents who wanted to see an increase in the deer population ($n = 177$) desired an average increase of 30% in the population (Q39.1). Respondents who wanted to see a decrease in the deer population ($n = 393$) desired an average decrease of 39% in the size of the herd (Q39.2). Additionally, respondents that had experienced wildlife crop damage wanted a larger decrease in the population than those not experiencing any damage (43% vs. 30% reduction).

County deer population targets levels are adjusted after each farmer attitude survey based on the average desired change in the deer population in each region. I calculated this value by combining responses from all individuals who wanted an increase, decrease, or no change in the

deer population and determining the average in each region. Overall, respondents in the 2000 survey wanted to see less of a reduction in the size of the deer herd (8.9%) than respondents in the 1995 survey (15.9%). Respondents from the Hill Counties desired the greatest average reduction in the deer population (14%), followed by the Intermediate region (10%), the Northeast Metro region (7%), and the Farmland region (5%; Fig. 4). Incorporation of these changes into county deer population target levels will result in deer populations in most counties being above target entering the 2001 hunting season and will require liberalized deer hunting regulations in upcoming hunting seasons to meet population objectives.

Past surveys assessed the attitudes and tolerance of both farmers and other rural landowners (Stoll and Mountz 1979, 1986; Stoll et al. 1991). However, the 2 most recent surveys only targeted farmers because of the demonstrated tolerance non-farming rural landowners had for deer in previous surveys (Stoll and Mountz 1983, 1986; Stoll et al. 1991). The majority of non-farming rural landowners desired an increase or the same number of deer than the existing population size in past surveys and conflicted with the desired trends of farmers. Inclusion of non-farming rural landowners would result in markedly higher deer population objectives (Stoll et al. 1991) that would be unacceptable to farmers and result in unacceptable numbers of deer vehicle accidents.

Hunting.--An average of 0.94 immediate family members deer hunted on their own property during 1999 (Q17). Fifty-eight percent of respondents reported that no one in their immediate family hunted, 16% indicated that a single family member hunted, 13% indicated two family members hunted, and the remaining 11% indicated that 3 or more family members hunted on their own property during 1999. More immediate family members hunted in the Hill Counties (1.5) than in the Intermediate (1.0), Farmland (0.6), and Northeast Metro regions (0.6).

Sixty-nine percent of respondents indicated they did not hunt deer during the 1999 gun season, 20% indicated they hunted on their own property, but did not kill a deer, and 11% indicated that they killed 1 or more deer on their property during the 1999 deer gun season (Q23). A greater proportion of respondents in the Hill Counties hunted and killed deer than in other regions.

Respondents indicated that 10% hunted wild turkeys in spring, 4% hunted wild turkeys in fall, 2% hunted ruffed grouse, and 11% hunted squirrels, while 80% did not hunt any of these wildlife species during 1999 (totals summed to >100% because some respondents reported hunting more than 1 wildlife species; Q16). More respondents in the Hill Counties participated in spring and fall turkey and grouse hunting than in other regions. Most likely because these species are most abundant in this region of the state.

Deer permits.--Seventy-two percent of respondents reported that no immediate family members purchased a deer permit in 1999, 14% indicated that a single family member bought a deer permit, 8% indicated that two family members bought permits, and 6% reported that 3 or more family members bought deer permits (Q18). The average number of immediate family members that purchased deer permits in Hill Counties (0.91) was greater than in the Intermediate (0.60), Farmland (0.40), and Northeast Metro regions (0.37). More immediate family members purchased deer permits in 1995 (1.43) than in the 2000 survey (0.57).

Most respondents were unwilling to go to a license vendor to pick up a free license and permits (60%; Q40). More respondents in the Hill Counties (42%) and Intermediate region (45%) were willing to pick up a free license from a vendor than in the Farmland (37%) or Northeast Metro regions (34%). However, when data were analyzed separately to reflect responses of individuals who deer hunted in 1999, the results were very different. A total of

58% of respondents who deer hunted in 1999 ($n = 385$) were willing to pick up a free license and permits from a vendor, but only 32% of respondents who did not hunt deer ($n = 856$) were willing to do so.

Shotgun season.--Mean number of immediate family members that hunted on their own property in the 1999 deer gun season in Hill Counties (1.39) was greater than in the Intermediate (0.98), Northeast Metro (0.62), and Farmland regions (0.55). A greater number of immediate family members reported hunting deer on their property during the previous year in the 1995 survey (1.14) than in the 2000 survey (0.94; Q19). Sixty percent of respondents reported that no immediate family members hunted, 16% indicated that 1 family member hunted, 12% indicated that 2 family members hunted, and 12% indicated that 3 or more family members hunted on their property during the 1999 deer gun season.

Longbow use in archery season.--The average number of family members using longbows in the Hill Counties (0.35) was higher than in the Intermediate (0.26), Northeast Metro (0.18), and Farmland regions (0.17; Q20). Eighty-six percent of respondents reported that no immediate family members hunted, 8% indicated that 1 family member hunted, 3% indicated that 2 family members hunted, and 3% indicated that 3 or more family members hunted on their own property with longbows during the 1999 archery season.

Crossbow use in archery season.--Mean number of immediate family members hunting with crossbows was slightly higher in the Hill Counties (0.31) than the Intermediate (0.30) and Northeast Metro region (0.23) and much higher than in the Farmland region (0.14; Q21). Eighty-seven percent of respondents reported that no immediate family members hunted, 8% indicated that 1 family member hunted, 3% indicated that 2 family members hunted, and 2% indicated that 3 or more family members hunted on their own property with a crossbow in 1999.

Muzzleloader season.--The average number of immediate family members hunting with muzzleloaders was somewhat higher in the Hill Counties (0.41) than the Intermediate (0.28) and Northeast Metro region (0.25) and much higher than in the Farmland region (0.20; Q22). Eighty-four percent of respondents reported that no immediate family members hunted, 10% indicated that 1 family member hunted, 4% indicated that 2 family members hunted, and 2% indicated that 3 or more family members hunted on their own property during the 1999 muzzleloader season.

Permission to hunt deer.--Fifty-seven percent of respondents indicated that they granted permission to someone other than an immediate family member to hunt on their property during the 1999 deer season (Q24). More respondents in the Hill Counties granted permission to deer hunt on their property than in other regions. Respondents indicated that the most important reasons they did not allow hunting on their property were not enough deer (34%), concerned for the safety of their family (30%), too many problems with hunters in the past (14%), fear of lawsuits if someone was injured on their property (11%), and opposition to hunting (7%; Q25). More respondents reported having problems with hunters in the past in the Hill Counties (21%) than in the Intermediate (16%), Northeast Metro (12%), or Farmland region (11%). Conversely, more respondents did not feel there were enough deer to hunt in the Farmland (46%) than in the Northeast Metro (35%), Intermediate (27%), or Hill Counties (22%).

Respondents granted permission to archery hunt for deer on their property in 1999 to family members (21%), friends and neighbors (66%), strangers who asked (9%), or no one (25%; Q26). Respondents granted permission to gun hunt for deer on their property in 1999 to family members (31%), friends and neighbors (81%), strangers who asked (11%), or no one (7%; Q27). Totals sum >100% because some respondents granted permission to more than 1 category of

hunters. Respondents reported that the most important factors influencing their decision to grant permission to a stranger to hunt on their property were knowing them indirectly (47%), the hunter's overall appearance and attitude (34%), the season in which the hunter wished to participate (14%), where the hunter resided (2%), and offers of compensation to the landowner (1%; Q31). Respondents reported that the number of hunters seeking permission to hunt deer on their property had remained unchanged during the past 5 years (52%), increased somewhat (17%), decreased somewhat (10%), decreased significantly (6%), or increased significantly (5%), while 10% had no opinion (Q34). Fewer respondents in the Farmland thought that the number of hunters asking permission to hunt had increased (17%) than in the Northeast Metro (24%), Hill Counties (24%) or Intermediate region (22%).

Number of deer hunters.--Respondents reported that the number of deer hunters in their area in 1999 was about right (54%), too many (12%), or too few (12%), while 23% had no opinion (Q35). Only 7% of respondents in the Farmland region thought there were too few hunters, but responses ranged from 12 – 14% in the other 3 regions. Conversely, 16% of respondents in the Hill Counties thought there were too many hunters, but fewer respondents in the other 3 regions thought there were too many hunters (8 – 11%). More respondents in the Hill Counties had some opinion about the number of deer hunters (84%) than in the other regions (72 – 78%). In the 1995 survey, 62% of respondents indicated that the number of deer hunters was about right, 15% thought there were too many, 10% said there were too few, and 13% had no opinion. These percentages were fairly similar to the 2000 survey, the major difference being more respondents in 2000 had no opinion (23%) in regards to hunter numbers.

Problems with deer hunters.--Respondents reported that in recent years problems with deer hunters on their property had remained fairly stable (47%), increased (20%), or decreased (10%), while 23% had no opinion (Q32). More respondents thought problems had increased and fewer had no opinion on the subject in the Hill Counties than in the other regions. Respondents described problems with deer hunters as minor (60%), substantial (10%), or severe (4%), while 26% had no opinion (Q33). More respondents in the Hill Counties indicated that problems with hunters were substantial (15%) than in other regions of the state. Answers to the question asking about the severity of problems with deer hunters varied slightly between surveys and so only broad generalizations can be made about changes in the severity of problems. In the 1995 survey, 85% of respondents indicated no or minor problems with deer hunters as compared to 60% reporting minor problems in the 2000 survey (Fig. 5). The combination of substantial and severe problems was virtually unchanged between surveys (12% in 1995 vs. 14% in 2000). The greatest change was that the proportion of respondents that had no opinion increased from 2% in 1995 to 26% in 2000. Trends in the severity of problems in each region between surveys were very similar to the overall responses.

Knowledge about deer management.--Respondents indicated that their knowledge of the approach used by the Division of Wildlife to manage deer in their county was fair (27%), good (26%), poor (14%), or excellent (3%), while 30% had no opinion. Trends were similar among regions. Sixty-eight percent of respondents reported they would not be interested in attending a free seminar/public meeting to learn more about the Division of Wildlife's deer management program, 32% would attend a free seminar on deer management (Q36). Forty-seven percent of respondents reported that they were satisfied with the way the Division of Wildlife manages deer, 21% were not satisfied, and 31% had no opinion (Q38). However, differences occurred among regions with fewer respondents in the Hill Counties reporting being satisfied (37%) with the Division of Wildlife's management program than in other regions of the state (48 – 54%).

The number of respondents reporting dissatisfaction was 2-3X greater in the Hill Counties (38%) than in other regions (14 – 19%).

Public lands.--The majority of respondents (47%) indicated that they thought there was adequate public land available for hunting, 25% did not think there was enough public land, and 28% had no opinion (Q44). Forty percent of respondents indicated that the state should acquire more public land for hunting and fishing, 22% did not think the state should buy additional lands for this purpose, and 38% had no opinion (Q45).

Fee hunting.--No respondents reported charging a fee for deer hunting on their property in 1999 (Q28). However, a small percentage of respondents (0.4%) reported charging a fee to hunt deer in the 1995 survey.

Wild Turkey

Attitudes about wild turkeys.--Forty percent of respondents reported enjoying seeing and having turkeys around their property, 16% enjoyed having turkeys around, but were concerned about the problems turkeys could cause, 9% regarded turkeys as a nuisance, and 34% had no particular feelings regarding turkeys (Q41). Fewer respondents enjoyed seeing and having turkeys on their property in the Farmland region (26%) than in other regions (42 – 47%). The majority of respondents in the Farmland region (57%) had no particular feelings about wild turkeys on their land.

Attitudes regarding wild turkeys changed between the 1995 and 2000 surveys (Fig. 6). Fewer respondents reported enjoying having turkeys on their property in 2000 (40%) than in 1995 (55%) and, interestingly, many more were indifferent to having wild turkeys around (34% in 2000 vs. 10% in 1995). Statewide responses in the 2000 survey were heavily influenced by attitudes in the Farmland and Northeast Metro regions. In the Farmland region, 75% of respondents enjoyed having turkeys around in 1995, but only 26% felt the same way in 2000. A few more individuals had become concerned about the problems turkeys might cause (11% in 2000 vs. 3% in 1995), but the overwhelming majority in the 2000 survey were simply indifferent to having turkeys around (58%). The pattern was very similar in the Northeast Metro region and to a lesser extent in the Intermediate region. The novelty of wild turkeys may have worn off in regions of the state that have recently been reoccupied by wild turkeys. Attitudes towards turkeys were unchanged between surveys in the Hill Counties, which is the core of wild turkey range in Ohio.

Problems with turkey hunters.--Sixty-nine percent of respondents reported no problems with spring turkey hunters on their property during the past 2 hunting seasons, 6% reported minor problems, 1% reported substantial problems, and 23% had no opinion (Q42). A greater percentage of respondents in Hill Counties (14%) and the Intermediate region (8%) reported problems with spring turkey hunters in the Hill Counties (14%) and Intermediate region (8%), respectively. Only 4% of respondents in the Farmland and Northeast Metro regions reported problems with spring turkey hunters, perhaps because fewer turkeys exist in these areas and hunting pressure may be lower. A large increase in the percentage of respondents reporting severe problems with spring wild turkey hunters occurred between 1995 and 2000 surveys (1% vs. 23% of respondents reporting severe problems with turkey hunters; Fig. 7). This increasing trend in severe problems was apparent among all regions and ranged from 39% in the Farmland, 10% in the Hill counties, 16% in the Intermediate region, and 28% in the Northeast Metro region in the 2000 survey.

Permission to hunt wild turkeys.--Forty-five percent of respondents did not allow anyone to hunt turkeys on their property, 41% allowed friends and neighbors, 31% allowed family members to hunt, and 6% allowed strangers that asked for permission to hunt turkeys (Q43). Totals summed to >100% because some respondents granted permission to more than 1 group to hunt.

Acknowledgments. I thank Mike Tonkovich of the Waterloo Wildlife Research Station for coordinating survey design and implementation. I thank Jim Ramey and the Ohio Department of Agriculture's Agricultural Statistics Service for assisting with survey design, conducting the survey, and entering survey data. I also thank D. Swanson, L. Culbertson, L. Smith, and P. Ruble for reviewing the manuscript.

LITERATURE CITED

- Brown, T.L., and D.J. Decker. 1979. Incorporating farmers' attitudes into management of white-tailed deer in New York. *Journal of Wildlife Management* 43:236-239.
- Duda, M. D., K. C. Young, and T. Graham. 1995. Farmer attitudes toward wildlife issues in Ohio. *Responsive Management Survey Results Report*. Harrisonburg, Virginia.
- Forster, L, F. Hitzhusen, and R. Davis. 1996. Farmers' perceptions of financial losses and benefits from wildlife. ESO 2300, Department of Agricultural Economics, The Ohio State University, Columbus.
- Stoll, R. J., Jr., and G. L. Mountz. 1983. Rural landowner attitudes towards deer and deer populations in Ohio. *Fish and Wildlife Report 10*. Ohio Department of Natural Resources, Division of Wildlife, Columbus.
- Stoll, R. J., Jr., and G. L. Mountz. 1986. Rural landowner attitudes towards deer and deer populations in Ohio – 1985 update. *Inservice Note 578*. Ohio Department of Natural Resources, Division of Wildlife, Columbus.
- Stoll, R. J., Jr., W. L. Culbertson, and S. E. Miller. 1991. Rural landowner attitudes towards deer and deer populations in Ohio. *Inservice Note 642*. Ohio Department of Natural Resources, Division of Wildlife, Columbus.

APPENDIX

1 Did you operate a farm in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	100%	100%	100%	100%	100%
No	0.0%	0.0%	0.0%	0.0%	0.0%

2 In what county did you do most of your farming?

All 88 counties were represented in the survey

3 How many acres did you operate in 1999 in the county listed in number 2.

	State	Farm	Hill	Intermediate	NE Metro
Mean	208.7	304.2	195.4	194.6	136.5
SD	356.1	508.7	273.4	321.7	233.7

4 Over the past five years, which statement **best** describes the trend you have seen in the deer population in the county listed in number 2. Would you say there are:

	State	Farm	Hill	Intermediate	NE Metro
More deer now	42.6%	37.6%	47.3%	45.3%	40.0%
Same number deer now	35.3%	37.3%	33.9%	32.0%	38.3%
Fewer deer now	19.6%	21.7%	16.9%	20.8%	19.0%
No opinion	2.5%	3.5%	1.9%	1.9%	2.7%

5 Which of the following statements **best** describes your feeling about having deer on the property you operate?

	State	Farm	Hill	IM	NE
I enjoy seeing and having deer around	48.3%	52.2%	41.9%	46.6%	52.9%
I enjoy a few deer but worry about the problems that they cause	33.4%	31.2%	35.8%	35.7%	30.5%
I generally regard deer as a nuisance	13.8%	12.7%	18.2%	12.1%	11.9%
I have no particular feeling about deer	4.6%	3.8%	4.2%	5.6%	4.8%

6 Did you experience any wildlife crop damage on the land that you operated in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	49.0%	50.0%	50.5%	46.0%	49.8%
No	51.0%	50.0%	49.5%	54.0%	50.2%

- 7 Which of the following individuals or organizations did you contact regarding this damage?

	State	Farm	Hill	Intermediate	NE Metro
Division of Wildlife	8.2%	5.1%	12.7%	10.8%	4.1%
County Extension Agent	3.6%	1.9%	6.3%	4.7%	1.4%
NR Conservation Service	0.8%	0.6%	1.3%	1.4%	0.0%
Other	0.5%	0.6%	0.6%	0.7%	0.0%
No one	88.4%	93.0%	81.6%	84.5%	94.6%

- 8 How would you describe your satisfaction with the service that you received from the agency/individual listed in question 7?

	State	Farm	Hill	Intermediate	NE Metro
Very dissatisfied	35.2%	27.3%	55.2%	21.7%	12.5%
Somewhat dissatisfied	21.2%	27.3%	13.8%	21.7%	37.5%
Have no opinion	5.6%	9.1%	3.5%	8.7%	0.0%
Somewhat satisfied	26.8%	27.3%	20.7%	30.4%	37.5%
Very satisfied	11.3%	9.1%	6.9%	17.4%	12.5%

- 9 What **single** factor most influenced your decision not to contact anyone regarding this damage?

	State	Farm	Hill	IM	NE
Damage was not severe enough to justify call	65.3%	67.1%	61.2%	64.0%	68.4%
Was unaware that help was available from these agencies	26.2%	26.7%	25.6%	28.8%	23.7%
Was dissatisfied with previous attempts to get help with my damage problem	8.5%	6.2%	13.2%	7.2%	7.9%

- 10 Did you grow grain crops in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	77.7%	91.1%	63.3%	80.4%	76.2%
No	22.3%	8.9%	36.7%	19.6%	23.8%

- 10.1 How would you describe the damage to them by wildlife?

	State	Farm	Hill	Intermediate	NE Metro
None	3.6%	2.8%	7.0%	3.4%	1.8%
Light	58.4%	61.5%	40.0%	62.2%	67.0%
Moderate	28.5%	28.0%	36.0%	25.2%	25.9%
Severe	9.5%	7.7%	17.0%	9.2%	5.4%

10.2 What species would you attribute most of this damage to:

	State	Farm	Hill	Intermediate	NE Metro
Deer	65.4%	71.9%	65.6%	68.7%	53.6%
Turkey	4.6%	0.7%	12.9%	3.5%	3.6%
Geese	3.3%	2.9%	2.2%	5.2%	2.7%
Other wildlife	26.7%	24.5%	19.4%	22.6%	40.0%

10.3 Which crop suffered the greatest amount of damage?

Top 5 crops	State	Farm	Hill	Intermediate	NE Metro
Corn	64.3%	66.2%	63.4%	61.7%	65.5%
Soybeans	19.0%	16.6%	11.8%	26.1%	20.9%
Wheat	9.0%	16.6%	2.2%	7.8%	6.4%
Hay	3.3%	0.0%	10.8%	2.6%	1.8%
Alfalfa	2.2%	0.0%	7.5%	1.7%	0.9%

10.4 During which season did most of this damage occur?

	State	Farm	Hill	Intermediate	NE Metro
Fall	24.3%	20.9%	23.7%	27.0%	26.4%
Winter	1.1%	0.7%	3.2%	0.0%	0.9%
Spring	19.3%	20.1%	17.2%	21.7%	17.3%
Summer	55.4%	58.3%	55.9%	51.3%	55.5%

11 Did you grow vegetable crops in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	16.6%	11.5%	18.4%	14.2%	22.5%
No	83.4%	88.5%	81.7%	85.8%	77.6%

11.1 How would you describe the damage to them by wildlife?

	State	Farm	Hill	Intermediate	NE Metro
None	18.8%	38.9%	10.3%	14.3%	18.2%
Light	34.7%	38.9%	41.4%	28.6%	30.3%
Moderate	24.8%	11.1%	24.1%	33.3%	27.3%
Severe	21.8%	11.1%	24.1%	23.8%	24.2%

11.2 What species would you attribute most of this damage to:

	State	Farm	Hill	Intermediate	NE Metro
Deer	37.8%	18.2%	53.9%	50.0%	22.2%
Turkey	1.2%	0.0%	3.9%	0.0%	0.0%
Geese	0.0%	0.0%	0.0%	0.0%	0.0%
Other wildlife	61.0%	81.8%	42.3%	50.0%	77.8%

11.3 Which crop suffered the greatest amount of damage?

Top 5 crops	State	Farm	Hill	Intermediate	NE Metro
Sweet corn	64.6%	63.6%	53.9%	72.2%	70.4%
Green beans	11.0%	18.2%	23.1%	5.6%	0.0%
Pumpkins	11.0%	0.0%	11.5%	0.0%	22.2%
Tomatoes	6.1%	18.2%	3.9%	5.6%	3.7%
Cabbage	2.4%	0.0%	3.9%	0.0%	0.0%

11.4 During which season did most of this damage occur?

	State	Farm	Hill	Intermediate	NE Metro
Fall	5.9%	8.3%	7.7%	10.5%	0.0%
Winter	0.0%	0.0%	0.0%	0.0%	0.0%
Spring	4.7%	0.0%	11.5%	5.3%	0.0%
Summer	89.4%	91.7%	80.8%	84.2%	100.0%

12 Did you grow fruit crops in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	10.2%	3.2%	13.3%	10.8%	13.6%
No	89.8%	96.8%	86.7%	89.2%	86.4%

12.1 How would you describe the damage to them by wildlife?

	State	Farm	Hill	Intermediate	NE Metro
None	17.7%	20.0%	14.3%	31.3%	10.0%
Light	40.3%	40.0%	28.6%	43.8%	50.0%
Moderate	22.6%	40.0%	19.1%	18.8%	25.0%
Severe	19.4%	0.0%	38.1%	6.3%	15.0%

12.2 What species would you attribute most of this damage to:

	State	Farm	Hill	Intermediate	NE Metro
Deer	69.2%	75.0%	77.8%	83.3%	50.0%
Turkey	0.0%	0.0%	0.0%	0.0%	0.0%
Geese	3.9%	0.0%	0.0%	0.0%	11.1%
Other wildlife	26.9%	25.0%	22.2%	16.7%	38.9%

12.3 Which crop suffered the greatest amount of damage?

Top 6 crops	State	Farm	Hill	Intermediate	NE Metro
Apple trees	50.0%	50.0%	38.9%	58.3%	55.6%
Peach trees	11.5%	0.0%	22.2%	8.3%	5.6%
Fruit trees	9.6%	0.0%	11.1%	16.7%	5.6%
Cherries	5.8%	0.0%	5.6%	0.0%	11.1%
Strawberries	5.8%	0.0%	5.6%	0.0%	11.1%
Grapes	5.8%	0.0%	5.6%	0.0%	11.1%

12.4 During which season did most of this damage occur?

	State	Farm	Hill	Intermediate	NE Metro
Fall	25.0%	0.0%	5.0%	58.3%	31.3%
Winter	19.2%	50.0%	30.0%	0.0%	12.5%
Spring	13.5%	50.0%	20.0%	8.3%	0.0%
Summer	42.3%	0.0%	45.0%	33.3%	56.3%

13 Did you grow ornamental or nursery crops in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	5.4%	5.1%	5.7%	3.4%	7.5%
No	94.6%	94.9%	94.3%	96.6%	92.5%

13.1 How would you describe the damage to them by wildlife?

	State	Farm	Hill	Intermediate	NE Metro
None	27.3%	25.0%	44.4%	20.0%	18.2%
Light	27.3%	25.0%	11.1%	80.0%	18.2%
Moderate	24.2%	37.5%	22.2%	0.0%	27.3%
Severe	21.2%	12.5%	22.2%	0.0%	36.4%

13.2 What species would you attribute most of this damage to:

	State	Farm	Hill	Intermediate	NE Metro
Deer	91.7%	100.0%	80.0%	100.0%	88.9%
Turkey	0.0%	0.0%	0.0%	0.0%	0.0%
Geese	0.0%	0.0%	0.0%	0.0%	0.0%
Other wildlife	8.3%	0.0%	20.0%	0.0%	11.1%

13.3 Which crop suffered the greatest amount of damage?

Top 4 crops	State	Farm	Hill	Intermediate	NE Metro
Indian corn	8.3%	0.0%	20.0%	0.0%	11.1%
Ornamental shrubs	8.3%	16.7%	0.0%	0.0%	11.1%
Spruce trees	8.3%	16.7%	0.0%	0.0%	11.1%
Trees	8.3%	16.7%	0.0%	25.0%	0.00%

13.4 During which season did most of this damage occur?

	State	Farm	Hill	Intermediate	NE Metro
Fall	41.7%	50.0%	40.0%	25.0%	44.4%
Winter	25.0%	33.3%	20.0%	25.0%	22.2%
Spring	16.7%	16.7%	0.0%	25.0%	22.2%
Summer	16.7%	0.0%	40.0%	25.0%	11.1%

14 Did you grow Christmas trees in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	5.7%	3.8%	5.1%	4.1%	10.2%
No	94.3%	96.2%	94.9%	96.0%	89.8%

14.1 How would you describe the damage to them by wildlife?

	State	Farm	Hill	Intermediate	NE Metro
None	11.4%	33.3%	0.0%	16.7%	6.7%
Light	57.1%	50.0%	50.0%	50.0%	66.7%
Moderate	22.9%	16.7%	25.0%	16.7%	26.7%
Severe	8.6%	0.0%	25.0%	16.7%	0.0%

14.2 Was most of this damage a result of:

	State	Farm	Hill	Intermediate	NE Metro
Rub damage from bucks	77.4%	75.0%	62.5%	100.0%	78.6%
Feeding	22.6%	25.0%	37.5%	0.0%	21.4%

14.3 During which season did most of this damage occur?

	State	Farm	Hill	Intermediate	NE Metro
Fall	25.0%	0.0%	50.0%	0.0%	0.0%
Winter	62.5%	100.0%	50.0%	0.0%	66.7%
Spring	0.0%	0.0%	0.0%	0.0%	0.0%
Summer	12.5%	0.0%	0.0%	0.0%	33.3%

15 Please indicate which of the following nonlethal methods you used in 1999 to reduce wildlife damage to the property you operated in 1999.

	State	Farm	Hill	Intermediate	NE Metro
Fencing	9.8%	5.7%	15.2%	6.8%	11.6%
Scare tactics	7.9%	6.4%	10.1%	6.8%	8.2%
Habitat removal/modification	3.9%	1.3%	7.0%	2.0%	5.4%
None of the above	82.3%	89.2%	75.3%	86.5%	78.2%

16 Which of the following species did you hunt for on **your property** during the 1999 hunting season?

	State	Farm	Hill	Intermediate	NE Metro
Spring Turkey	10.1%	2.2%	23.1%	9.3%	5.8%
Fall Turkey	4.4%	0.6%	12.2%	2.8%	2.0%
Grouse	2.1%	0.3%	5.8%	1.6%	0.7%
Squirrels	10.8%	8.6%	17.6%	13.4%	7.1%
None of the above	79.6%	88.9%	63.1%	78.3%	88.5%

17 Including yourself, how many members of your immediate family hunted deer on **your property anytime** during the 1999 **deer** season?

	State	Farm	Hill	Intermediate	NE Metro
Mean	0.94	0.60	1.50	1.01	0.62
SD	1.48	1.05	1.90	1.52	1.08

18 In Ohio, landowners and their immediate family are not required to buy a deer permit provided they hunt on their own property. However, if you choose to hunt off your property, you must purchase a deer permit. In 1999, how many members of your immediate family, including yourself, purchased a deer permit?

	State	Farm	Hill	Intermediate	NE Metro
Mean	0.57	0.40	0.91	0.60	0.37
SD	1.27	0.88	1.69	1.35	0.88

19 Including yourself, how many members of your immediate family hunted deer on **your property** during the 1999 **gun** season?

	State	Farm	Hill	Intermediate	NE Metro
Mean	0.89	0.55	1.39	0.98	0.62
SD	1.52	1.06	1.91	1.66	1.11

- 20 Including yourself, how many members of your immediate family hunted deer on **your property** during the 1999 **longbow** season?

	State	Farm	Hill	Intermediate	NE Metro
Mean	0.24	0.17	0.35	0.26	0.18
SD	0.76	0.54	0.97	0.81	0.64

- 21 Including yourself, how many members of your immediate family hunted deer on **your property** during the 1999 **crossbow** season?

	State	Farm	Hill	Intermediate	NE Metro
Mean	0.24	0.14	0.31	0.27	0.23
SD	0.79	0.59	0.98	0.83	0.71

- 22 Including yourself, how many members of your immediate family hunted deer on **your property** during the 1999 statewide **muzzleloader** season?

	State	Farm	Hill	Intermediate	NE Metro
Mean	0.29	0.20	0.41	0.28	0.25
SD	0.84	0.67	1.07	0.78	0.77

- 23 Please indicate which one of the following statements applies to you for the 1999 hunting season.

	State	Farm	Hill	IM	NE
I did not hunt deer during the 1999 gun season	68.8%	79.0%	52.7%	66.5%	77.6%
I hunted deer on my property during the 1999 gun season but I did not kill a deer	19.5%	16.6%	26.5%	21.7%	12.9%
I hunted deer on my property during the 1999 gun season and harvested at least 1 deer	11.4%	4.1%	20.1%	11.8%	9.5%

- 24 Other than your immediate family, did you give anyone else permission to hunt deer on your property anytime during the 1999 season?

	State	Farm	Hill	Intermediate	NE Metro
Yes	57.1%	48.4%	72.2%	59.0%	48.1%
No	42.9%	51.6%	27.8%	41.0%	51.9%

25 Which of the following is the **single** most important reason for not allowing hunting on your property?

	State	Farm	Hill	IM	NE
I'm afraid someone might sue me if they get hurt on my property	10.7%	9.9%	13.8%	11.4%	9.2%
I've had too many problems with hunters in the past	14.2%	11.1%	20.7%	15.9%	12.4%
I am opposed to hunting	6.9%	5.6%	5.8%	8.3%	7.8%
I am concerned about my safety and the safety of my family	30.0%	25.3%	28.7%	34.9%	31.4%
There are not enough deer	34.1%	45.7%	21.8%	27.3%	34.6%

26 Which of the following groups did you give permission to **archery hunt** for deer on your property during the 1999 season?

	State	Farm	Hill	Intermediate	NE Metro
Family	21.4%	18.5%	22.2%	19.6%	25.4%
Friends and neighbors	65.6%	66.9%	64.4%	68.3%	62.7%
Strangers who ask	8.8%	7.3%	10.2%	7.4%	9.9%
None of the above	24.8%	25.8%	27.1%	22.8%	22.5%

27 Which of the following groups did you give permission to **gun hunt** for deer on your property during the 1999 season?

	State	Farm	Hill	Intermediate	NE Metro
Family	30.6%	25.2%	35.6%	28.6%	31.0%
Friends and neighbors	81.3%	80.8%	84.0%	81.5%	77.5%
Strangers who ask	10.7%	8.6%	13.8%	8.5%	11.3%
None of the above	6.5%	6.6%	4.4%	6.3%	9.9%

28 Did you charge a fee for deer hunting on your property in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Yes	0.0%	0.0%	0.0%	0.0%	0.0%
No	100%	100%	100%	100%	100%

29 On what time basis did you regularly charge hunters for?

- 29.1 Daily
- 29.2 Monthly
- 29.3 Season

Not Applicable because no landowners charged hunting fees

30 On average, how much did you charge?

Not Applicable because no landowners charged hunting fees

31 Which of the following factors has the single greatest influence on your decision to let a stranger deer hunt on your property?

	State	Farm	Hill	IM	NE
Overall appearance and attitude	34.8%	28.6%	41.7%	29.7%	34.3%
An offer of some type of compensation, including money, from the hunter	0.7%	0.0%	2.1%	0.0%	0.0%
The season in which they intend to hunt	14.2%	14.3%	12.5%	10.8%	20.0%
Where they reside	2.1%	0.0%	4.2%	2.7%	0.0%
Know them indirectly (friend of a friend)	46.8%	57.1%	35.4%	56.8%	45.7%

32 Compared to recent years, would you say that the problems with deer hunters (trespass, fence damage, road damage, general disrespect for your property) has:

	State	Farm	Hill	Intermediate	NE Metro
Increased	19.8%	14.6%	29.4%	21.4%	13.2%
Decreased	10.2%	8.9%	12.1%	10.9%	8.8%
Remained fairly stable	47.0%	46.8%	43.8%	46.6%	50.9%
No opinion	23.1%	29.6%	14.7%	21.1%	27.1%

33 Would you describe these problems as:

	State	Farm	Hill	Intermediate	NE Metro
Minor	60.3%	59.2%	61.0%	63.4%	57.3%
Substantial	9.7%	6.4%	14.7%	9.9%	7.5%
Severe	4.1%	4.1%	4.8%	5.3%	2.0%
No opinion	24.9%	30.3%	19.2%	21.4%	33.2%

34 Would you say that the number of hunters seeking permission to hunt deer on your property during the past 5 years has:

	State	Farm	Hill	Intermediate	NE Metro
Remained unchanged	52.2%	53.5%	52.7%	55.3%	46.8%
Increased somewhat	17.1%	14.7%	17.6%	17.4%	19.0%
Increased significantly	4.5%	1.6%	6.4%	5.3%	4.8%
Decreased somewhat	10.1%	8.3%	11.8%	8.4%	11.9%
Decreased significantly	5.6%	7.0%	5.4%	4.0%	6.1%
No opinion	0.1%	15.0%	5.8%	9.6%	11.5%

35 Was the number of deer hunters who hunted in your area in 1999:

	State	Farm	Hill	Intermediate	NE Metro
About right	53.5%	54.8%	53.4%	54.4%	51.5%
Too few	11.6%	7.3%	14.4%	12.4%	12.2%
Too many	11.8%	11.5%	16.3%	11.2%	8.1%
No opinion	23.0%	26.4%	15.7%	22.1%	28.1%

36 Given the opportunity, would you attend a free seminar/public meeting to learn more about the management of your deer herd?

	State	Farm	Hill	Intermediate	NE Metro
Yes	31.6%	28.7%	33.2%	33.5%	30.9%
No	67.9%	71.0%	65.8%	66.2%	68.8%

37 How would you describe your knowledge of the approach used by the Division of Wildlife to manage the deer in your county?

	State	Farm	Hill	Intermediate	NE Metro
Poor	14.3%	12.4%	20.5%	13.7%	10.5%
Fair	26.7%	27.7%	28.4%	24.5%	26.1%
Good	26.2%	24.5%	23.3%	28.9%	28.1%
Excellent	3.0%	3.5%	2.9%	2.5%	3.1%
No opinion	29.7%	31.9%	24.6%	30.4%	32.2%

38 Are you satisfied with the way the Ohio Division of Wildlife manages deer?

	State	Farm	Hill	Intermediate	NE Metro
Yes	47.4%	48.1%	37.1%	50.9%	53.6%
No	21.4%	14.0%	38.3%	19.3%	13.6%
No opinion	31.2%	37.9%	24.3%	29.8%	32.9%

39 The Division of Wildlife is updating its management plan for deer population levels in your area. Would you like to see the deer population in your area:

	State	Farm	Hill	Intermediate	NE Metro
Increase	14.2%	18.8%	12.8%	14.6%	10.5%
Decrease	31.6%	27.1%	42.8%	31.7%	24.4%
Remain the same	45.8%	45.2%	38.7%	46.3%	53.6%
No opinion	8.5%	8.9%	5.4%	7.5%	11.5%

39.1 What size increase would you like to see in the deer herd?

	State	Farm	Hill	Intermediate	NE Metro
Mean desired increase	29.8%	30.7%	29.1%	27.0%	33.2%
SD	22.2%	25.4%	21.1%	19.0%	21.8%

39.2 What size decrease would you like to see in the deer herd?

	State	Farm	Hill	Intermediate	NE Metro
Mean desired decrease	39.4%	37.1%	38.9%	41.2%	40.3%
SD	23.9%	24.7%	23.7%	22.7%	25.0%

40 Landowners in Ohio can hunt for free on their own property. Unlike senior citizens, who can hunt for free provided that they go to a license vendor to get their free licenses and permits, the only obligation that the landowner has to the Division of Wildlife is to have his or her deer and turkey checked at an official check station. The Division of Wildlife believes that it could better manage the deer and turkey resources if landowners, like senior citizens, were required to visit a license vendor for their free licenses and permits. One very positive side of this is that landowners would then have a voice in all routine surveys conducted by the Division of Wildlife for management purposes. Would you be willing to go to 1 of several hundred license vendors to pick up your free licenses and permits?

	State	Farm	Hill	Intermediate	NE Metro
Yes	39.7%	37.3%	42.2%	45.0%	33.9%
No	60.0%	62.7%	56.6%	55.0%	66.1%

41 In general, which of the following statements best describes your feelings about having wild turkey on your land

	State	Farm	Hill	IM	NE
I enjoy seeing and having wild turkey around	40.0%	26.1%	46.7%	45.3%	41.7%
I enjoy a few wild turkey but worry about the problems they cause	16.2%	10.8%	22.4%	18.0%	13.6%
I generally regard wild turkey as a nuisance	9.5%	5.4%	17.9%	8.1%	6.4%
I have no particular feeling about wild turkey	34.2%	57.6%	12.5%	28.6%	38.3%

42 How would you describe the problems with hunters during the spring turkey season within the past two seasons. Would you say that there have been:

	State	Farm	Hill	Intermediate	NE Metro
No problems	69.5%	58.6%	75.1%	75.8%	68.1%
Minor problems	5.9%	2.6%	11.2%	6.8%	2.7%
Substantial problems	1.5%	0.3%	3.2%	1.2%	1.4%
No opinion	23.0%	38.5%	9.9%	16.2%	27.8%

43 Which of the following groups would you usually allow to hunt wild turkey on the property that you operated in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Family	31.1%	22.9%	41.3%	34.5%	25.1%
Friends and neighbors	40.9%	28.3%	58.3%	44.7%	31.9%
Strangers who ask	6.0%	2.5%	11.5%	4.3%	5.4%
No one	45.1%	61.1%	24.0%	39.8%	55.9%

44 Do you feel that there is adequate public land available to accommodate hunters?

	State	Farm	Hill	Intermediate	NE Metro
Yes	47.3%	45.5%	50.5%	48.8%	44.1%
No	24.8%	23.6%	22.0%	25.8%	27.8%
No opinion	27.8%	30.9%	26.8%	25.5%	28.1%

45 Do you feel that the state should acquire more land for public hunting and fishing?

	State	Farm	Hill	Intermediate	NE Metro
Yes	39.6%	36.3%	33.3%	43.0%	45.5%
No	22.3%	23.4%	25.5%	21.2%	19.4%
No opinion	38.1%	40.4%	41.2%	35.8%	35.2%

46 Approximately what percent of your household's income was derived from the sale of farm products in 1999?

	State	Farm	Hill	Intermediate	NE Metro
Mean	31.0%	39.4%	24.2%	28.8%	31.2%
SD	33.3%	34.9%	30.8%	32.0%	35.1%