

Regulatory Response to Deer Hunting with Dogs in Eastern Texas

Joseph J. Campo, *Fish and Wildlife Division, Texas Parks and Wildlife Department, 4416 Jeff Davis, Marshall, TX 75670*

Gary E. Spencer, *Fish and Wildlife Division, Texas Parks and Wildlife Department, 1342 South Wheeler, Jasper, TX 75951*

Abstract: We reevaluated the effects of hunting deer (*Odocoileus virginianus*) with dogs in 10 east Texas counties 5 years after the initial investigation in 1984. We mailed standardized questionnaires to rural boxholders, licensed hunters, and forest industry landowners. The numbers of landowners and hunters opposed to deer hunting using dogs increased ($P < 0.05$) from 1984 to 1989. However, there was no ($P > 0.05$) shift in hunter classification between years. The area available for hunting deer with dogs by landowner permission declined 69% and only 5% of the available deer range in the 10 dog-hunted counties was open for hunting deer with dogs. Hunter success and deer harvest rate decreased as percentage of county deer range open to dog hunting increased. As a result of these investigations, hunting deer using dogs in Texas was prohibited beginning with the 1990–91 hunting season.

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies 45:235–240

Early settlers in eastern Texas traditionally hunted deer using dogs. The tradition had been established in the southeastern states before settlers came to Texas. After several decades of unrestricted hunting and widespread habitat loss, deer were virtually extirpated from eastern Texas. In an effort to protect the limited resource, deer hunting using dogs was prohibited in 1925, but special laws allowed the practice to continue in some counties. By 1983, hunting deer with dogs was permitted by special law in 10 counties of eastern Texas. However, passage of the Wildlife Conservation Act of 1983 by the 68th Texas Legislature placed all wildlife resources under the regulatory responsibility of the Texas Parks and Wildlife Department (TPWD) and repealed special laws permitting hunting deer with dogs. In 1984, opposition to closing deer hunting using dogs and strong public sentiment against dog hunting prompted the TPWD Commission to conduct a 2-year study of the effects of hunting deer with dogs. The regulation that permitted hunting deer with dogs remained unchanged pending the conclusion of the study. The study (Spencer 1986) documented that hunting deer with dogs was a volatile social and political

issue with associated negative impacts on biological aspects of deer management. As a result of the 1984 study, the TPWD Commission reduced the season for hunting deer with dogs during the 1986–87 hunting season to the last half of the regular deer season in the 10-county area where the practice was legal. This response was an effort to reduce the tension between landowners and sportsmen using dogs and to retain the traditional method of deer hunting with dogs.

Once again, public pressure to close deer hunting with dogs in eastern Texas and hunter pressure to allow use of dogs for the entire regular deer hunting season precipitated another investigation by the TPWD Commission. In 1989 a study was conducted to evaluate any changes that had occurred during the interim in sociological and biological aspects of hunting deer with dogs. The objectives of this study were to determine landowner and sportsmen attitudes toward hunting deer with dogs and to determine the magnitude and distribution of dog-hunting. As a result of these investigations, the TPWD Commission voted to prohibit hunting deer using dogs beginning with the 1990–91 hunting season. This study was supported by the TPWD Federal Aid Project W-125-R.

Methods

We mailed 50,578 survey cards to rural boxholders to determine landowner attitudes and 1,783 survey cards to a random sample of licensed hunters to determine hunter attitudes in the 10-county area open to hunting deer with dogs. Each survey card recipient had hunted deer in the 10-county area at least once in the previous 3 years. We mailed a questionnaire to 5 major forest industry landowners in the 10-county area to evaluate policies regarding hunting deer with dogs on corporate lands. Forest industry landowners were asked to provide 1) the size of ownership, 2) whether the practice was permitted on land leased for hunting, 3) whether lease contracts stated the policy regarding hunting deer with dogs, and 4) whether company policy permitted hunting deer with dogs on land open to free public hunting. We used chi-square tests ($P \leq 0.05$) for difference in probabilities (CATMOD Procedure, SAS 1985) to determine if landowner and hunter attitudes were different between the 1984 and 1989 studies.

Landowners with contiguous tracts ≥ 400 ha in the 10-county area were identified by tax records and were contacted to determine where deer were hunted using dogs with landowner permission. Tracts that were not posted and with absentee landowners were classified as dog-hunted with landowner permission. We mapped these tracts to determine distribution of dog hunting on public and private land. Deer harvest rate (N deer/400 ha) and hunter success data for the 10 dog-hunted counties were taken from Boydston and Reagan (1989). We used a linear regression analysis (SAS 1985) to determine if correlations existed between hunter success, deer harvest rate, and the percentage of county deer range open to hunting deer with dogs.

Table 1. Landowner and hunter attitude surveys on hunting deer using dogs in eastern Texas, 1984 and 1989.

Opinion on using dogs	Landowner				Hunter			
	1984		1989		1984		1989	
	N	%	N	%	N	%	N	%
Favor	2,256	25 ^a	1,661	23	245	25 ^a	159	21
Undecided	113	1	101	1	56	6	46	6
Oppose	6,658	74	5,338	75	681	69 ^a	545	73

^aWithin groups, landowner and hunter response is different ($P \leq 0.05$) between years.

Results

Fourteen percent (7,165) of rural boxholders in the 10-county area open to hunting deer using dogs and 49% (811) of licensed hunters returned questionnaires. The response rates in 1984 were higher for the landowner (19%) and hunter (69%) surveys. In the earlier survey, return postage was paid and a drawing of returned cards for \$100 was included.

Landowner and hunter opinions on hunting deer with dogs changed significantly ($P < 0.05$) between years (Table 1). The percent in favor of using dogs decreased and the percent in opposition to using dogs increased. Most landowners (75%) and 73% of hunters surveyed opposed the practice of hunting deer with dogs. Only 1% of landowners and 6% of hunters surveyed were undecided on the issue. Landowner and hunter responses in opposition to hunting deer with dogs ranged from 65%–85% by county surveyed.

The percentages of landowners surveyed that hunted deer using dogs and permitted hunting deer with dogs decreased ($P \leq 0.05$) from the 1984 survey (Table 2). Most landowners indicated that they did not use dogs (83%) nor permit deer hunting with dogs (82%) on their property. Half of the respondents owned ≤ 4 ha

Table 2. Landowner attitude survey on hunting deer using dogs in eastern Texas 1984 and 1989: 1) Do you hunt deer using dogs? 2) Do you permit deer hunting using dogs on your property?

Question	Year			
	1984		1989	
	N	%	N	%
Hunt using dogs				
Yes	1,774	20 ^a	1,177	17
No	6,884	80 ^a	5,931	83
Permit hunting using dogs				
Yes	1,695	21 ^a	1,263	18
No	6,387	79 ^a	5,590	82

^aDifferent ($P \leq 0.05$) between years.

and 10% owned ≥ 40 ha for each survey year. Respondents with ≥ 200 ha (2%) were most likely to hunt deer using dogs and those with ≤ 8 ha were least likely to use dogs based on the responses.

Landowners and hunters reported 24 different reasons for opposing the use of dogs. The responses were categorized by subject as 1) concern for the deer resource, 2) violation of the law or right of other hunters, 3) unsporting or unnatural, or 4) simply prefer to hunt deer without dogs. No comment was reported by 6% of respondents. Only 20% of landowners, but all hunters surveyed that were opposed to using dogs, stated a reason for the opposition.

Landowners and hunters reported 17 different reasons for favoring the use of dogs. The responses were categorized by subject as 1) using dogs is a right or tradition, 2) more sporting than non-dog hunting, 3) helpful in getting deer moving, 4) dogs aid in finding wounded deer, or 5) simply prefer to hunt with dogs. Only 21% of landowners, but all hunters surveyed that favored using dogs stated a reason for their opinion.

The non-dog hunter classification ranged from 50%–83% by county. Only 4% of the hunters surveyed in 1989 reported that they hunted deer exclusively with dogs and 11% hunted deer with and without dogs. Hunter classification (use dogs exclusively, still hunt only, or both) was similar ($P > 0.05$) between years. The highest hunting success (percent of hunters killing 1 or more deer) was 80% by hunters that hunted deer with and without dogs. Non-dog hunters reported 68% success. Hunters using dogs exclusively reported the lowest (63%) hunter success rate. All categories of hunters reported a higher ($P \leq 0.05$) success rate in 1989 than in 1984 because of a more liberal bag limit. Hunter success rate was different ($P < 0.05$) by hunter classification in both survey-years.

Forest industry landowners controlled 808,000 ha (44%) of deer range in the 10 dog-hunted counties. Two corporate landowners (14% of the total deer range) permitted the use of dogs on limited portions of their properties, and 3% of corporate lands surveyed were hunted using dogs. Only 1 corporation permitted deer hunting on their lands without requiring a lease fee; however, using dogs on those lands was not permitted.

A total of 1,831,353 ha was classified as deer range in the 10-county area open to hunting deer with dogs. Twenty-eight tracts (≥ 400 ha) were identified as dog-hunted with landowner permission in 1989; a 70% decline from 92 tracts in 1984. Most (68%) tracts were $\leq 2,000$ ha, and 14% were $\geq 4,000$ ha. Tracts were irregularly shaped and often included many small privately-owned lands. Dog-hunted lands represented 5% of the available deer range and had decreased 69% from the 1984 survey. The area hunted using dogs with landowner permission decreased in all counties and varied among counties from 0% to 24% of county deer range. Only 2 counties had $> 4\%$ of deer range open to using dogs and that was attributable to U.S. National Forest lands. Success of all deer hunters decreased as percentage of county deer range open to hunting deer with dogs increased ($r = -0.8$, $P < 0.05$). Deer harvest rate ($N/400$ ha) also declined with increasing area open to hunting with dogs ($r = -0.6$, $P = 0.07$).

Discussion

The 1989 study update documented a decline in the practice of hunting deer using dogs in eastern Texas. The number of people exclusively using dogs to hunt deer and the acreage of dog-hunted lands decreased since the 1984 study. More hunters (4% more) opposed using dogs and 3% more landowners did not hunt deer using dogs nor permit dogs on their land in 1989 than earlier. However, the percentages of deer hunters that used dogs exclusively, still hunters, and those that used both techniques did not change significantly between survey-years. A combination of changing attitudes, reduced area open to using dogs, and reduced hunting season length probably contributed to the decline in deer-dog hunting. Apparently, hunters using dogs exclusively to hunt deer reached a low ebb (4%) in 1989 or earlier.

Opposition to hunting with dogs resulted from trespass by dogs and hunters, hunting from public roads, indiscriminate kills, disturbance, and personal preference. A typical example was a dispute when deer dogs and/or hunters crossed onto an ownership or hunting lease where they had no permission. Law enforcement records (citations) indicated that trespass and illegal hunting from public roads were the most frequent violations of deer-dog hunters. Proponents of using dogs responded that deer-dog hunting was an American tradition that should not be taken away and provided a better chance of killing and finding a deer. Using dogs is an old traditional method of hunting deer that adds variety to the sport; however, this "variety" resulted in landowners threatening to file a legal action against TPWD citing negligence in managing the deer resource by permitting dogs to hunt deer. Hunters using dogs did request an injunction on TPWD regulations that resulted in a court hearing.

Hunting deer with dogs is a relatively highly efficient harvest method (Campo et al. 1987). Hunters using dogs reported 63% success in the 1989 study and was comparable to 68% success reported by non-dog-hunters. This is most significant in that the deer density was 7 times lower on dog-hunted lands than on still-hunted areas (Spencer 1986, TPWD 1990). Under this condition, even light hunting pressure in the female segment (where either-sex regulations apply) might result in the suppressed deer herds observed on dog-hunted lands. The increase in hunter success reported in 1989 was attributed to statewide regulations that provided a 4-deer bag limit and more favorable hunting conditions. Harvest rates were negatively correlated with percentage of deer range open to using dogs within the 10 dog-hunted counties. Marchinton et al. (1970) stated that dog-hunters will continue to hunt an area after the deer herd has been reduced to the point that most other hunters would consider hunting unrewarding. Also they concluded that dog-hunting cannot result in overharvest of the deer herd if female deer are not harvested (legal or illegal). However, deer populations remained well below carrying capacity (40 deer/400 ha) in the 10 counties open to hunting deer using dogs. In addition to the possibility of direct adverse effects occurring among deer being chased by dogs under low densities, some other factors associated with the hunting practice were contributing to excessive

deer mortality. In experimental deer-dog hunts, the incidence of crippling was 38% (Spencer 1986). Our observations indicated that most deer hunting with dogs would probably result in over harvest of deer.

A significant reduction of 69% in area open to hunting deer with dogs, representing only 5% of the total deer range in the 10-county area, occurred during the 5-year interim. The reduction in area and season length seemed to increase hunting pressure on the available land. Very large tracts were required for dog hunting without trespass onto adjoining properties (Campo et al. 1987). Most dog-hunted tracts were irregularly shaped, widely separated with frequent inholdings, and represented "islands" surrounded by lands that were not open to dog hunting. Illegal hunting on adjacent property greatly increased the total area "available" to dog hunters. The result was an increase in conflicts between those that continued to hunt deer with dogs on a diminished land base and the surrounding landowners that did not want dogs or dog hunters trespassing onto their property.

It was apparent that hunting deer with dogs had both biological and sociological implications that had not decreased in recent years. The action to reduce the deer-dog hunting season in 1986 was to retain the practice, give dog hunters an opportunity to eliminate some of the problems associated with hunting using dogs, and not forfeit public support. The regulation seemed to only intensify the discord between dog and non-dog hunters and decreased public support for TPWD regulations. Public displeasure with the practice of hunting deer with dogs was increasing and possibly negative effects on biological aspects of deer management were being recognized. The Wildlife Conservation Act of 1983 empowered the TPWD Commission to amend or revoke its proclamation to prevent depletion or waste and to provide the people the most equitable and reasonable privilege to pursue wildlife resources. The wildlife resource is managed for people and ultimately the public must be satisfied with the results. Schoenfeld (1957) wrote that public support, at least sufferance, and the development of a favorable climate of public opinion must accompany or even precede wildlife management. This was true almost 40 years ago and still is true today.

Literature Cited

- Boydston, G. and M. Reagan. 1989. Big game harvest regulations. Texas Parks and Wildl. Fed. Aid Rep. 4. 81pp.
- Campo, J.J., G.E. Spencer, and B. Ortego. 1987. White-tailed deer hunting with dogs in east Texas. Proc. Southeast. Assoc. Fish and Wildl. Agencies 41:404-409.
- Marchinton, R.L., A.S. Johnson, J.R. Sweeney, and J.M. Sweeney. 1970. Legal hunting of white-tailed deer with dogs: biology, sociology and management. Proc. Annu. Conf. Southeast. Assoc. Game and Fish Comm. 24:74-89.
- SAS Institute, Inc. 1985. SAS user's guide: Statistics. Version 5. SAS Inst. Inc., Cary, N.C. 956pp.
- Schoenfeld, C.A. 1957. Public relations aspects of wildlife management. J. Wildl. Manage. 21:70-74.
- Spencer, G.E. 1986. Hunting deer with dogs. Texas Parks and Wildl. Fed. Aid Rep. 56. 71pp.
- Texas Parks and Wildlife Department. 1990. Hunting deer with dogs. Texas Parks and Wildl. Dep. Fed. Aid Rep. 3. 29pp.