

## **SUNDAY HUNTING IN NORTH CAROLINA THE PROS AND CONS**

A report of the ad-hoc committee of the N.C. Chapter of The Wildlife Society to evaluate the impacts of Sunday hunting in North Carolina.

### **Introduction and Purpose**

Present North Carolina laws prohibit hunting with firearms on Sunday except on military installations where the Federal government has exclusive jurisdiction, or during field trials authorized by the Wildlife Resources Commission. The law prohibiting hunting on Sunday was first enacted in 1868, and was amended to its present form in the 1960's to accommodate the schedule of activities on military installations where hunting cannot be permitted on weekdays and where the public is not involved.

At various times during the last several decades, interest in changing the law to permit Sunday hunting has surfaced. In the 1960's, the Wildlife Resources Commission proposed eliminating the ban in order to gain additional days of waterfowl hunting under the framework of Federal regulations which govern that sport. These regulations count Sunday as a hunting day, and North Carolina loses waterfowl hunting days each year as a result. When eliminating the ban met considerable opposition in the General Assembly, the proposal was modified to permit only waterfowl hunting on Sunday, while retaining the ban for other species. That effort was unsuccessful. Subsequently, the change to accommodate military installations was made.

It appears likely that a bill to repeal the ban on Sunday hunting will be introduced in the 1997 General Assembly. Since such proposals in the past have been controversial and raised many concerns, the NCTWS decided to examine this issue and assemble as much information as possible on the subject, both pro and con. As a professional society which is looked to for factual, unbiased information on wildlife matters, we felt obligated to do this for our members and other people who might be interested. Accordingly, the President appointed an ad hoc committee for this purpose.

From its inception, the Sunday Hunting Committee has pursued this assignment with the clear understanding that it was not to make recommendations either for or against the proposed change, nor would our report reflect the personal opinions of its committee members pro or con.

Our assignment was to approach the subject in a professional, objective manner, analyzing as best we could all the available information on the subject, and report our findings to the Chapter.

### **Methods and Procedures**

At its initial meeting the committee identified four different sets of issues involved in the question of Sunday hunting. These are:

- 1) Biology and management - impacts on game populations and management

activities (seasons, limits, enforcement, etc.)

2) Economic - impacts on the economy related to hunting (sales of equipment and services, licenses and taxes, income to landowners for hunting access, etc.)

3) Social - real or perceived impacts on people (safety, interference with religious activities, interference with other outdoor users, societal attitudes toward hunting, etc.)

4) Legal - legal or constitutional questions regarding prohibition of hunting on Sunday relative to the rights of landowners, hunters, and others.

Questions regarding all of these issues are raised whenever the matter of Sunday hunting is brought up. The Committee decided to explore each of them in as much detail as possible to determine factual information regarding their impacts. The methods used consisted of literature searches, questionnaire surveys, and contacts with groups or individuals who might have pertinent information. Details regarding the methods used and results obtained follow in the sections which address each group of issues.

### **Biology and Management Issues**

Sunday hunting raises many questions about its effect on wildlife populations, hunting regulations, and enforcement activities. However, several literature searches revealed nothing of value on these subjects. Most states' status regarding Sunday hunting has not changed in recent years, and those states that have experienced changes apparently have not studied or documented the impacts of the change.

By using a mail questionnaire, the committee did obtain some useful information from eighteen states which permit Sunday hunting (two of these permit it only on licensed and regulated shooting preserves, and are on shooting preserves and military reservations). Of the fifteen states that had general Sunday hunting, none found it necessary to reduce seasons or bag limits as a result. Five states reported that deer harvests increased, one state reported that bear harvests increased, and two states reported that both deer and bear harvests increased. Five states did not allow running big game with dogs on Sunday, while seven states allowed it. Nine states reported less hunting pressure compared with Saturdays, four reported equal hunting pressure, and none reported more pressure on Sunday. Eight states reported that the decision to allow Sunday hunting was based on biological data and social and economic justifications. One state said waterfowl was the justification. This survey, and the lack of published information, seem to indicate that biological and management issues have not presented major problems in the states which hunt on Sunday.

The only information available about Sunday hunting experience in North Carolina relates to Marine Corps Base Camp Lejeune, which encompasses approximately 151,000 acres in Onslow County, North Carolina. As is the case with most military bases, the primary mission of Camp Lejeune is to train troops for combat. Although an active wildlife management program is carried out on the Base, recreational activities such as hunting have to be scheduled around military training requirements. Since most training is conducted Monday through Friday, hunting opportunities during this time is very

limited. As the deer population on Base increased during the late 60's and early 70's, there was concern that maintaining an adequate deer harvest would not be possible since hunting was often limited to Saturdays and holidays. In the early 70's, the North Carolina State Legislature authorized Sunday hunting for Camp Lejeune. Since that time, wildlife biologists at the Base have been able to maintain healthy deer populations using combinations of individual still hunting and organized hunts with dogs. Close to 5,000 acres of the Base have been set aside for bow hunting only. This 5,000 acres has been broken into 14 sub-areas for management purposes. These sub-areas include wooded land around Base Housing, the golf course, Base Hospital, Marine Corps Air Station, Base Schools, and some troop bivouac areas. Bow hunters have historically taken only 60 to 70 deer each year from the bow areas. Sunday hunters account for 30% to 40% of this harvest. Since management goals for the bow area include the harvest of approximately 185 deer annually, the Base allowed one strictly controlled organized deer hunt using dogs in mid to late December.

In 1993 the Commanding General of Camp Lejeune ended the organized deer hunt in the bow areas. Although there had never been an accident or injury during this particular hunt each year, the general cited safety concerns as his reason for ending the organized hunts in this area. Base wildlife biologists recommended the special gun hunt be allowed to continue. Relying on years of field experience and using models such as DeerCamp, they predicted the health of the deer herd would be jeopardized, deer browse damage to shrubs and ornamentals would increase, and deer/car collisions would also increase. Even with Sunday hunting, there was concern the deer population would increase since bow harvest rates were below 50% of the recommended harvest levels. In addition, a Lyme Disease study conducted on Camp Lejeune by North Carolina State University demonstrated that as the deer population in an area increased, so did the tick population. This was of considerable concern since Lyme Disease has been documented on the Base and ticks are a known vector of the Lyme Disease spirochete. Although the Commanding General did not rescind the ban on using guns in the bow area, he did direct the wildlife biologists to monitor the situation.

Some of the biologist's predictions have come true while the jury is still out on the other ones. Bow hunters still are not able to meet recommended harvest levels. Complaints of deer browse damage to shrubs and ornamentals has increased from averaging between 15 and 20 per year before 1993 to over 70 in 1996. Deer/car collisions actually decreased in 1994 but are starting to show an upward trend again. It is believed however, that an average of 32 deer/car collisions per year is still too high for the miles of roads in this area. In terms of the health of the deer population in the bow area, some biological indicators are showing a decline. There has been a reduction of live body weights across all age classes. Fawns per adult doe are also showing a decrease. It should be noted however, this decline is probably the result of a number of factors besides over population. There were hot, dry summers in 1994 & 1995 followed by the terrible hurricane season of 1996. The quality and availability of mast has been spotty at best.

The new Base Commander has made a change in regards to the use of guns in the bow areas. Base Biologists now have the authority to recommend special gun hunts in the bow areas. These hunts must be approved by the Area Commanders who have bow

hunting areas under their command. To date, two of the Area Commanders have reinstated this special hunt. It will be interesting to see how the deer populations respond in those portions of the bow areas where the gun hunts have returned, compared to those areas where gun hunts are still not allowed.

### Economic Issues

Sunday hunting bans have been a part of wildlife management policies in the United States since the Colonial period. In recent years a number of states have sought to repeal these bans and allow Sunday hunting for at least some species in at least some parts of the respective states. There is currently movement in North Carolina to consider repealing or modifying the ban on Sunday hunting. This report examines the history and economics of Sunday hunting bans and offers some insight into the benefits and costs of altering North Carolina's current policy.

**History of Sunday Hunting Bans in the United States:** Table 1 summarizes the history of Sunday hunting regulation in the United States. Data for 1996 comes from a survey administered in December 1996. Other sources of information are cited in the bibliography. The first state in the United States to have a ban on Sunday hunting was Massachusetts, whose ban was enacted in 1635. Subsequent legislation did not arise until the mid-eighteenth century throughout the time between the American Revolution and the mid-nineteenth century. Sunday hunting bans began to crop up in the Eastern states, specifically Tennessee in 1741 and Delaware in 1750. Following the American Revolution, many states enacted Sunday hunting bans from this time until the turn of the nineteenth century: Delaware in 1795, New Jersey in 1798, Alabama and Mississippi in 1803, and Ohio in 1805. Indiana passed legislation in 1817, followed by Illinois in 1821, and last legislation for a Sunday hunting ban to emerge before the mid-nineteenth century [USDA 1912].

The next cluster of legislation occurred around the 1850's. Minnesota passed its ban in 1849, Iowa and Arkansas in 1855, and Florida in 1859. Reconstruction legislation started with North Carolina in 1868, New York in 1874, and subsequent legislation in North Carolina in 1897 that stipulated "all persons prohibited from rowing or sailing on Sunday to locate birds for future day" [USDA 1912, p.36].

Few bans emerged after 1897. The Maine Department of Inland Fisheries and Wildlife estimates its ban to have emerged around the early 1900's, Oklahoma enacted a ban in 1909, and Virginia's and Connecticut's bans were estimated by the Virginia Department of Game and Inland fisheries and the Connecticut Department of Environmental Protection to have been enacted before 1950. Some state states have recently repealed Sunday ban legislation: Kentucky in 1972, Oklahoma in 1989, and New York in 1996.

In several states, some areas are exempt from the ban. In Connecticut and New Jersey, private shooting preserves are exempt from the ban. In Michigan, only seven of eighty-three counties are included in the ban, in South Carolina only eighteen piedmont/mountain counties and public lands are included, and in North Carolina, military personnel may hunt on military reservations since the 1970's.

Species included in the ban vary from state to state, even from county to county in the seven counties in Michigan with Sunday bans. In New York, the ban is only on deer, in Connecticut only quail, and in South Carolina only big game (deer). In Ohio, all species are included except waterfowl, coyote, woodchuck, and fox (effective 1994).

There are a few states with other special provisions to their bans. Kentucky's ban, repealed in 1962, was not a Department of Fish and Wildlife Resources regulation, but a state law that empowered individual counties to enforce the law if they chose to. In New Jersey, farmers may hunt on Sunday, and the Sunday ban in New York, repealed in 1995, is to be reviewed in 2000 for re-enactment.

**Economic Rationale for Sunday Hunting Bans:** The economic research on this topic is limited to a single study by Lueck [1991] which examines many state wildlife regulations including Sunday hunting bans. Lueck examined Sunday hunting bans using data from 1986 that indicated whether or not a state had a ban in place during that year. In that study Lueck estimates the probability that a state would prohibit Sunday hunting by using cross section data on state economic and population characteristics. The findings of this statistical exercise showed that: 1) states with greater population densities were more likely to prohibit Sunday hunting; 2) states with greater rural population densities were more likely to prohibit Sunday hunting; 3) states with smaller private landholdings were more likely to prohibit Sunday hunting; 4) states with a greater fraction of non-farm land were more likely to prohibit Sunday hunting. Lueck further found that Sunday hunting prohibitions could not be explained as a religious based restriction. Using various measures of religiosity in a state (e.g., fraction of population belonging to a church, fraction of population regularly attending church services) were **not** correlated with Sunday hunting bans.

All of these findings support the view that Sunday hunting bans are best viewed as land use regulations rather than game management regulations, or even religious restrictions. Hunting can have adverse affects on non-hunters including accidental shooting of people and livestock as well as general congestion problems in the outdoors. Sunday hunting restrictions, if enforced, essentially limit the possibility that non-hunting users of land will be adversely affected by hunters. Such users include bird watchers, cyclists, hikers, horseback riders, and fishermen. These conflicts are most important in states with dense populations, especially with dense rural populations. In states with large private landholdings, private landowners have more incentive to actively manage their land for wildlife by implementing fee hunting programs. These landowners have incentive to enforce their property rights and limit the adverse effects of hunting on non-hunters. This explains the strong correlation between the presence or absence of Sunday hunting bans and the average size of private landholdings.

**Conclusions:** Sunday hunting bans have been a part of American game policy since the earliest days of the republic. Today they are limited to fifteen states in the east, southeast, and Great Lakes regions. The economic analysis on the topic, while limited, indicates that these bans are more likely to be found in states that have relatively dense populations and land ownership characterized by small, heterogeneous plots. Piedmont North Carolina fits this empirical specification because it has a relatively dense population, especially dense in rural areas and because landholdings are small and varied

in size. The Coastal Plains, on the other hand, has large landownerships and relatively sparse human populations. Should North Carolina repeal its bans two effects are likely. First, there are likely to be more conflicts between hunters and non-hunter users of land. Second, there will be more effort by private landowners to actively manage their land for wildlife because they will have an additional day each week for which they could charge hunters for hunting on their land. This first effect would have to be weighed against the second effect to answer the question of whether or not the repeal of Sunday hunting bans would be a beneficial policy.

There are a variety of ways to address the economic aspects of the Sunday hunting issue. One way is to assess the benefits and costs of permitting Sunday hunting. Although benefit-cost methodologies are fairly well developed, data and time constraints precluded consideration of such economic aspects in this report.

Another way to address the economic aspects is in terms of impacts on jobs, sales for particular economic sectors, and state gross domestic product. Research presently underway by Dr. E. Connaughton at the University of North Carolina at Charlotte uses survey data together with a state input-output model to assess the direct and indirect requirements of expanding hunting by another day. Review of efforts to date raise questions regarding survey design and preliminary results. In addition, present efforts do not distinguish upperbound estimates of the positive economic activity effects from the anticipated net effects of allowing Sunday hunting. The preliminary nature of this research together with its inherent limitations precludes its use in this study.

### Social Issues

Social (people) issues were the most difficult to evaluate, since it was impossible to find quantitative information which could be reported. However, past attempts to change Sunday hunting laws have demonstrated that these issues are real and can generate strong currents. The committee considered various ways of obtaining some data on these issues, but concluded that we did not have the time or the resources to conduct the extensive surveys necessary to evaluate them. We would have had to survey a variety of interest groups - religious organizations, sportsmen's groups, hikers, horseback riders, and landowner organizations - to determine their interests and concerns. However, from past experience and discussions with various interested individuals we can identify several concerns which will probably surface when a bill is introduced.

The first of these are religious concerns - the strong feeling by many people that Sunday is a day of rest and that hunting is not a proper activity for that day. In the past there has been concern about interference with church services, picnics, and other church activities from hunters, dogs and shooting. In the past such scenes have been described in vivid detail to legislative committees, with obvious effect.

The concerns of other Sunday users of the outdoors, such as hikers and horseback riders, focus on two things - safety and competition for space. Fears about hunters shooting in areas used by these groups are often expressed, and there is keen competition between hunters and horseback riding groups. The riders feel that the woods (particularly Game Lands) should be theirs to use on Sundays since hunters have them to use the rest of the

week (this ignores the fact that hunters pay for their use of Game Lands, and that hunting seasons are open only part of the year). The safety concern may be exaggerated, but is perceived as very serious by non-hunting recreationists.

A third concern is expressed by hunters who fear that adding Sundays to the open seasons for shooting game will encourage already active anti-hunting groups, giving them an opportunity to portray hunters as selfish, greedy users of the outdoors who want it all - even the one last day left for the other users. This causes some sportsmen to oppose the idea of Sunday hunting. While the Committee did not conduct surveys of sportsman's groups, discussions with individual hunters indicate that sportsmen do not have a united opinion on the question of Sunday hunting. Some strongly favor it, others are strongly opposed, and many do not have strong feelings one way or the other. It should be emphasized that the push for repeal of the Sunday hunting ban does **not** come from organized sportsmen's organizations. Rather, the motivation comes primarily from economic interests.

Another important concern is fear on the part of landowners that opening Sunday to hunting will increase problems some of them experience with trespassing or other abuses of their property by hunters. This is especially true in parts of the state where deer hunting with dogs is permitted. Because of this, some consideration is being given to prohibiting the use of dogs for hunting big game on Sundays if the ban on Sunday hunting with guns is repealed.

While it is difficult to gauge the importance of these concerns in North Carolina they are real and will have to be considered. The survey of wildlife agencies in states with Sunday hunting indicates that none of them felt that activity had created a negative impact with other outdoor user groups, but most of these were states with relatively low population densities. As Lueck points out, such conflicts in North Carolina may be more likely in the more densely populated areas.

### Legal Issues

Questions regarding the rights of landowners to use their property as they see fit, as well as the rights of hunters and others to pursue their recreational pursuits, and questions of constitutionality have been raised. These are beyond the purview of the committee and can only be answered by the courts.

### Summary and Conclusions

No publications relevant to biology and management issues were available. A survey of states which permit Sunday hunting did not reveal problems related to these issues. Apparently states with Sunday hunting have been able to incorporate their activity into their management procedures without difficulty.

Economic studies by Lueck indicate that Sunday hunting bans are most often found in states with relatively dense populations and small landownership patterns. He indicates that since much of North Carolina fits this pattern, repeal of the ban would likely lead to more conflicts between hunters and other user groups, while at the same time resulting in

more effort by private landowners to actively manage land for wildlife because of increased income opportunity. The eastern part of the state because of its more rural character, fewer people, and larger landholdings, would probably benefit more economically than would other parts of the state.

Social concerns were a difficult area to evaluate. Apparently these were not a big problem in the states which permit Sunday hunting, but their importance in North Carolina could not be measured. It would be logical to assume, however, that these concerns would be stronger in the more populated areas, and less important in the more rural areas.

Sportsmen are not united for or against the proposed ban repeal, and are not the driving force behind the effort. Economic interests are the primary motivating influence.

What would happen with a partial or total lifting of a ban on Sunday hunting is conjecture at this stage. With respect to wildlife resources, more hunting opportunities should encourage more participation. Hence, the result would be more license sales, duck stamp purchases, and Pittman-Robertson excise tax receipts for use by federal and state wildlife agencies. On private lands, the additional hunting opportunity should also encourage those who supply hunting services to improve wildlife habitat management practices in an attempt to gain financially from the increased participation. However, by providing Sunday hunting, more land use conflicts may arise between hunters and non-hunters. These conflicts are more likely to arise in situations where there is multiple competing uses and where no clear land use rights or privileges have been established.

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TABLE I  
History of Sunday Hunting Bans in the United States

	1996 Ban	First Ban	Repealed	Areas Included	Species
<b>Included</b>					
Alabama	NO	1803			
Alaska	NO				
Arizona	NO				
Arkansas	YES	1855		Statewide	All
California	NO				
Colorado	NO				
Connecticut	YES	NA		Not private preserves	All
Delaware	YES	1750		Statewide	All
Florida	NO				
Georgia	NO				
Hawaii	NO				
Idaho	NO				
Illinois	YES	1821		Statewide	All
Indiana	NO	1807			
Iowa	NO	1855			
Kansas	NO				
Kentucky	NO	1873	1972		
Louisiana	NO	NA			
Maine	YES	NA		Statewide	All
Maryland	YES	NA		Statewide	All
Massachusetts	YES	1635		Statewide	All
Michigan	YES	NA		7 of 83 counties	All
Minnesota	NO	1849			
Mississippi	NO	1803			
Missouri	NO				
Montana	NO				
Nebraska	NO				
Nevada	NO				
New Hampshire	NO	1798			
New Jersey	YES	NA		Not private preserves	All
New Mexico	NO				
New York	NO	1874	1996		Deer
North Carolina	YES	1868		Not military reservations	All
North Dakota	NO				
Ohio	YES	1805		Statewide	Not
waterfowl, quail					
Oklahoma	NO	1909	1989		Quail
Oregon	NO				
Pennsylvania	YES	NA		Statewide	All
Rhode Island	NO				
South Carolina	YES	NA		Public lands & 18 counties	All
South Dakota	NO				
Tennessee	NO	1741			
Texas	NO				
Utah	NO				
Vermont	NO				
Virginia	YES	NA		Statewide	All
Washington	NO				

West Virginia	YES	NA		Statewide	All
Wisconsin	NO				
Wyoming	NO				