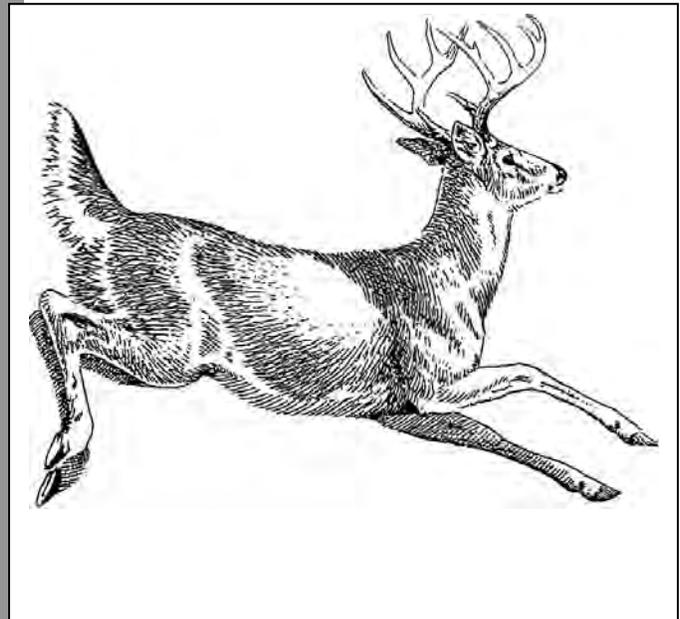


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# **Ulster County Deer Hunters' Satisfaction with the Pilot Antler Restriction Program in Wildlife Management Units 3C and 3J**



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## INTRODUCTION

Given strong local support from sportsmen in Ulster County, the Department of Environmental Conservation (DEC) implemented a pilot antler restriction program in 2005 in Wildlife Management Units 3C and 3J to enhance the age structure of adult bucks. This pilot program incorporates special regulations requiring that bucks taken in WMUs 3C and 3J have at least one antler with 3 or more points that are at least one inch in length. In an effort to provide greater opportunity for young hunters, those under age 17 are exempt from this regulation and may still take any buck with at least one antler that is 3 or more inches long.

Staff from DEC's Deer Management Team requested that HDRU assess hunters' evaluation of the program after the first year (2005). HDRU and DEC staff collaborated to develop a survey of a sample of hunters from Ulster County. This report summarizes the survey's findings.

## METHODS

DEC staff used the DECALS automated licensing system to select a sample of hunters from areas within or immediately adjacent to WMUs 3C and 3J who purchased big game licenses in 2005-06. The vast majority of the acreage of each of these WMUs is within Ulster County. About 13% of the initial list of 5,298 hunters were from Greene and Orange Counties. For sampling efficiency, we removed those names, which left a total of 4,591 hunters who had Ulster County residences. From this total, we selected a random sample of 1,000 hunters. The survey was mailed to these hunters on February 10, 2006. Up to three reminder notices were mailed, which is the typical protocol for HDRU mail surveys. Data entry from the surveys occurred in late March and early April, and analysis was facilitated by the software Statistical Package for the Social Sciences (SPSS).

## RESULTS

Of the 1,000 surveys mailed out, 35 were undeliverable and 498 were returned for an adjusted response rate of 52%,

### **Deer Hunting in 2005**

The vast majority of respondents (82%) indicated that their primary hunting area was in WMU 3C or 3J, and 76% actually hunted in one of the 2 units in 2005. Of the hunters who did not hunt WMU 3C or 3J in 2005 but who usually hunt there, only 12 individuals (< 3%) indicated it was because they do not support the new regulations. Deer hunting activity and harvest of respondents is summarized in Table 1 and harvest per hunter day is summarized in Table 2. The antlered harvest rate in WMUs 3C and 3J was about half that of the rate in other areas where these respondents hunted, an anticipated impact of the antler restriction program.

**Table 1. Percent of respondents who hunted various seasons and mean number of days hunted.**

Hunting Season	Percent who hunted			Mean days hunted <sup>1</sup>			Mean harvest antlered bucks <sup>1</sup>			Mean harvest antlerless bucks <sup>1</sup>		
	3C	3J	Other	3C	3J	Other	3C	3J	Other	3C	3J	Other
Early bow	26	20	14	8.4	8.0	5.8	0.12	0.18	0.29	0.18	0.29	0.15
Regular	52	43	29	7.7	6.8	6.0						
Late special seasons	13	12	5	3.2	2.9	4.0						

<sup>1</sup> Mean days hunted and harvest is for those who hunted at least one day in each area. Mean harvest combines all seasons.

**Table 2. Effort and harvest summary for respondents.**

WMU	Area Hunted		
	3C	3J	Elsewhere
Total days hunted	3,247	2,392	1,353
Antlered deer taken	32	43	46
Antlered deer harvest per hunter day	0.010	0.018	0.034
Antlerless deer taken	44	60	24
Antlerless harvest per hunter day	0.014	0.025	0.018
Ratio of antlered to antlerless harvest	0.7:1	0.7:1	1.9:1

Most respondents (89%) who hunted in 3C or 3J indicated one of these WMUs to be the primary unit where they have hunted in the past. About one-third (31%) indicated that they hunted in WMU 3C or 3J because they support the pilot program. Of the few hunters for whom 3C or 3J was not their primary hunting area, about half (51%) indicated they thought their chances of getting a mature buck in 3C or 3J would be greater there than where they typically hunt.

### Favored Program Outcomes

Table 3 indicates outcomes of the pilot program that are important to respondents. (It was noted in the accompanying survey question that a combination of the deer management program and the pilot antler restriction program might be needed to achieve some of the outcomes.) Outcomes most frequently indicated as important were to see a larger number of mature bucks and to be able to harvest more mature bucks. To see a larger number of mature antlered bucks was most frequently cited as the *most* important possible outcome—by almost one-third of the respondents.

### Willingness to Take Antlerless Deer

Most hunters (83%) indicated a willingness to take antlerless deer; 67% had done so in the past and an additional 16% who had not taken an antlerless deer indicated a willingness to do so. Many respondents (41%) did not know whether the program had

any effect on hunters' willingness to take antlerless deer. Those who had opinions were evenly divided—45% thought hunters were now more willing to take antlerless deer, while 44% thought the program had little effect on willingness to take antlerless deer. A small number (5%) thought the program caused fewer hunters to take antlerless deer.

**Table 3. Possible outcomes of the antler restriction program that are important to respondents and the most important possible outcome.**

<b>Possible Outcome</b>	<b>Impor- tant (%)</b>	<b>Most Impor- tant (%)</b>
To see a larger number of mature antlered bucks	70	31
To be able to harvest more mature antlered bucks	61	17
To increase the quality and health of all deer	52	12
To see a more equal ratio of bucks to does	51	13
To decrease the urgency by hunters to shoot at the first deer they see	46	4
To see a more balanced age structure among male deer	45	4
To increase hunting safety by encouraging better target identification	40	6
To increase the deer density	28	7
To make WMUs 3C and 3J a premier hunting destination	18	1
To reduce the deer density	4	2
To allow landowners to get top dollar for hunting leases	3	0
Other reasons	8	3

### **Attitudes about the Pilot Program**

There was considerable divergence as to how respondent's perceived other hunters' attitudes about the program prior to the 2005 deer season. The largest group (41%) thought that hunters took a "wait and see" attitude. Almost one-third (32%) thought hunters were generally opposed to the program, while 26% thought hunters supported the program. Following the deer hunting season, somewhat more respondents (51%) believed that support for the program has remained the same; 28% felt fewer hunters supported the program after the season, and 20% indicated that more hunters support the program after the season.

### **Compliance with the Regulations**

Most hunters (60%) indicated they didn't know how good hunter compliance was with the pilot program regulations. Of those who had an opinion, 72% felt that compliance was strong enough to begin to show a change in the age structure of bucks. Thirteen percent of those who answered the question, or 9% of all respondents, indicated they knew someone other than a hunter under 17 years of age who took a buck in 3C or 3J that did not meet the antler restriction criteria. These 47 respondents reported knowing of 105 bucks that taken that did not meet the minimum antler criteria. At the

upper end, 2 respondents reported 6 bucks, one reported 7, and one reported 8 bucks taken (not necessarily by the same hunter) that did not meet the minimum antler criteria.

Additionally, 22% indicated they heard about bucks that were did not meet the minimum antler criteria. These 74 respondents reported a total of 197 bucks that were taken illegally; one respondent had heard about 11 deer taken illegally, and another heard about 10 deer taken illegally (not necessarily by the same hunter).

### Overall Satisfaction

Overall, 39% of respondents indicated they were generally satisfied with their hunting in WMUs 3C and 3J, 31% indicated they were generally dissatisfied, and 30% gave a neutral rating of neither satisfied nor dissatisfied. The general outdoor experience, hunting with friends and family, and knowing efforts are underway to change the age structure of bucks were the leading sources of satisfaction. Not seeing enough deer, insufficient access, and lack of time to hunt more were the leading sources of dissatisfaction.

**Table 4. Factors that contributed most to hunters’ satisfaction and dissatisfaction in WMUs 3C and 3J in 2005.<sup>1</sup>**

<b>Factors Most Affecting Satisfaction</b>	<b>Percent</b>
The general outdoor experience	63
Hunting with friends and family	49
Knowing efforts are underway to change the age structure of bucks	40
Having enough time afield	26
Seeing enough deer	24
Harvesting one or more deer	18
Getting shots at deer	7
Other reasons	4
<b>Factors Most Affecting Dissatisfaction</b>	
Not seeing enough deer	54
Insufficient access	41
Lack of time to hunt more	36
Weather of field conditions	16
Other reasons	16
Not being able to shoot young bucks	15
Lack of a hunting companion	5

<sup>1</sup> Respondents could check up to 3 choices that most affected both satisfaction and dissatisfaction.

Having respondents proceed through the above topics, including the consideration of both satisfactions and dissatisfactions, places them in a better position to give a reasoned opinion on whether the pilot program should be continued in 2006. Two-thirds (66%) of all respondents, and 75% of those with an opinion indicated they believe the

program should be continued. One-third of that number (22%) did not believe the antler restrictions should be continued, and 12% had no opinion.

## SUMMARY AND IMPLICATIONS

One of the most striking results of this survey is that hunters in 3C probably did not see many deer, and certainly did not kill very many in 2005. The combined antlered and antlerless harvest per hunter day was only 0.024 in 3C and 0.043 in 3J, compared to 0.52 deer harvested per hunter day reported by respondents who hunted outside the pilot antler restriction area. Thus, on average, it took about 42 hunter days in 3C and 23 hunter days in 3J to harvest a deer, compared to 20 days for respondents who hunted elsewhere. This compares to a statewide estimate of 18 days in 1990. One-quarter (24%) of respondents checked “seeing enough deer” as a reason for their hunting satisfaction, but 54% checked “not seeing enough deer” as a reason for their hunting dissatisfaction in these WMUs.

As expected, most hunters who hunted 3C or 3J in 2005 did so because it was already their traditional area to hunt; not a lot of other hunters were attracted to these WMUs initially. That appears to be fine with local hunters—very few indicated interest in these WMUs becoming a premier hunting destination (there were individual write-in comments to this effect as well as the data in Table 3).

While the pilot program had strong support from local organized sportsmen, it did not seem to have overwhelming support across all hunters prior to the 2005 season. The perception of the largest group of respondents (41%) was that most hunters had a “wait and see” attitude; of the remaining respondents, slightly more felt that hunters were generally against the pilot program, compared to those who favored it. However, by the end of the 2005 deer season and the time when this survey was implemented in February 2006, most respondents felt the pilot program should be continued. Indeed, 75% of respondents with a point of view indicated the program should be continued.

These data are insufficient to conclusively determine hunter compliance with the new regulations, but the number of respondents who had knowledge of illegal harvest of young bucks, plus the number of others who had heard of violations, may be cause for concern. In a much smaller-scale (~25 square miles) experiment with *voluntary* antler restrictions from 2001 through 2004 in part of WMU 7H near King Ferry, a perceived intolerably high level of non-compliance was one factor leading to the end of the experiment prior to the 2005 hunting season. Most respondents from WMUs 3C and 3J with an opinion thought compliance was high enough for the program to continue, but the illegal harvest should be further examined to more closely estimate its effect on the buck population and age structure.