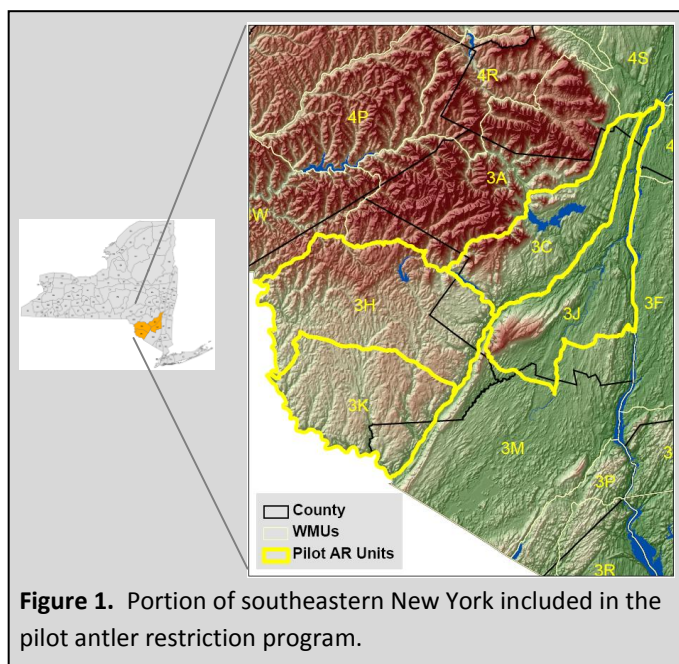


# A Summary of New York's Pilot Antler Restriction Program

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In recent years, the Department of Environmental Conservation (DEC) has recognized substantial interest among hunters for programs designed to reduce harvest of young, small-antlered bucks and potentially allow more bucks to live to older ages and develop larger antlers. To evaluate the impacts of such a program on deer harvest and management and on hunter attitudes and behaviors, DEC established a pilot antler restriction (AR) program in several Wildlife Management Units (WMUs) in southeastern New York, beginning with WMUs 3C and 3J (primarily Ulster County) in 2005 and including WMUs 3H and 3K (primarily Sullivan County) in 2006 (Figure 1).



Deer hunting regulations were amended to limit harvest of antlered deer in WMUs 3C, 3H, 3J, and 3K to deer with at least one antler with three or more points which are at least one inch long, including brow tines. The 3-point rule was expected to protect roughly 75% of yearling (1.5 year old) bucks from harvest (Table 1). The AR regulation applied to all hunting seasons and to all public and private lands within the WMUs. Hunters less than 17 years of age were exempt from the AR and were able to take any deer with one or more antlers measuring three inches or more in length.

**Table 1.** Proportion of bucks by age class that were generally ineligible for harvest (i.e., have  $\leq 4$  total antler points) in each Wildlife Management Unit (WMU) in the pilot antler restriction program based on physical check of harvested deer from 2001-2004 ( $n$  = sample size).

WMU	Buck Age Classes				$n$
	1.5	2.5	3.5+	All ages	
3C	80.0 %	21.3 %	0.0 %	53.4 %	204
3H	82.2 %	16.4 %	0.0 %	59.6 %	260
3J	63.7 %	16.9 %	7.1 %	44.1 %	279
3K	90.4 %	22.2 %	19.4 %	54.3 %	173
all units	77.2 %	18.8 %	9.0 %	52.5 %	916

The pilot AR program was not established as a scientific study to test pre-established hypotheses with a control group and a treatment group. Nor was the pilot program designed to examine purported impacts on deer breeding ecology or non-harvest deer mortality (e.g., winter mortality, predation, poaching). Rather, DEC committed to monitor potential impacts of mandatory ARs on deer harvest and management through routine data collection associated with annual deer hunting activity (e.g., harvest records, age and sex of harvested deer, and Bowhunter Sighting Log records) and to track hunter attitudes and satisfaction levels regarding the AR program.

Through the course of the pilot program, DEC and others expressed several questions about the AR program that warranted evaluation. These included:

- To what extent would buck harvest composition shift toward older (2.5+ year old bucks)?
- Would the decline in yearling buck harvest be offset by an equal increase in harvest of older bucks?
- Would hunters observe a shift in sex ratios of deer?
- Would hunters shift harvest effort toward antlerless deer?
- Would hunter participation levels change within the pilot area (i.e., more or fewer hunters or more or less effort)?
- How would the AR program affect hunter satisfaction?
- Would hunter expectations for the pilot AR program be realized?
- How would the AR program impact deer management?

Because of the staggered implementation of AR in the four units, we assessed the impacts of ARs on deer harvest numbers by:

- (1) comparing harvest data from the pilot units two years immediately prior to AR implementation (2003-2004 for WMUs 3C and 3J, 2004-2005 for WMUs 3H and 3K) with the most recent data (2009-2010); and
- (2) comparing harvest data between the pilot units and neighboring units (WMUs 3A, 3M, 4P, 4R, 4S, and 4W; see Figure 1) between 2003-2004 (pre-AR) and 2009-2010 (with AR).

Further, because of small annual samples sizes of some data (i.e., age at harvest, bowhunter sighting logs) within individual WMUs, we assessed the impacts of ARs on buck harvest composition and deer sighting rates by combining data across multiple years and/or combining data for WMUs 3C and 3J and for WMUs 3H and 3K.

To evaluate trends over time in hunter attitudes and behaviors related to the ARs, DEC and the Cornell University Human Dimensions Research Unit conducted hunter surveys following the 2005, 2006, 2007 and 2010 hunting seasons, though no baseline data were collected from hunters in the pilot AR area prior to implementing the program. Some results from the hunter surveys are included in this document, but the full reports are referenced in “[Related Resources](#)” and are available at [www.dec.ny.gov/outdoor/74971.html](http://www.dec.ny.gov/outdoor/74971.html).

## Buck Harvest

### Buck Harvest Composition

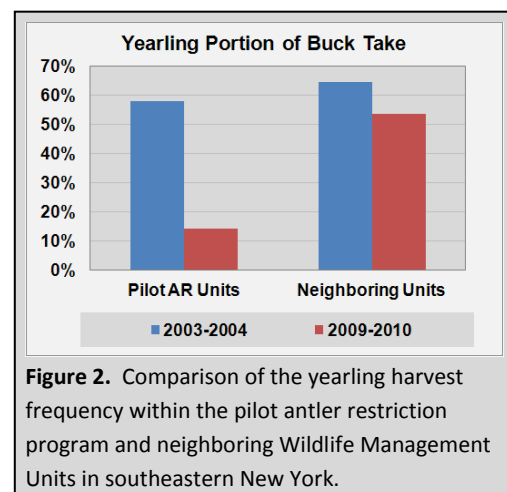
**Table 2.** Adult ( $\geq 1.5$  years) age distribution of harvested bucks in four Wildlife Management Units (WMUs) in Southeastern New York prior to and with a 3-point on one side antler restriction (AR) compared with neighboring units (WMUs 3A, 3M, 4P, 4R, 4S, and 4W) during the same time periods.

WMU	% Buck Harvest by Age Class							
	Pre-AR (2003-2004) <sup>a</sup>				With-AR (2009-2010)			
	<i>n</i> <sup>b</sup>	1.5	2.5	3.5+	<i>n</i>	1.5	2.5	3.5+
3C & 3J	223	58.3	29.6	12.1	164	15.9	45.7	38.4
3H & 3K	125	56.8	32.0	11.2	274	13.1	55.8	31.0
All Units	348	57.8	30.5	11.8	438	14.2	52.1	33.8
Neighboring Units	708	64.4	27.8	7.8	1,040	53.5	30.4	16.2

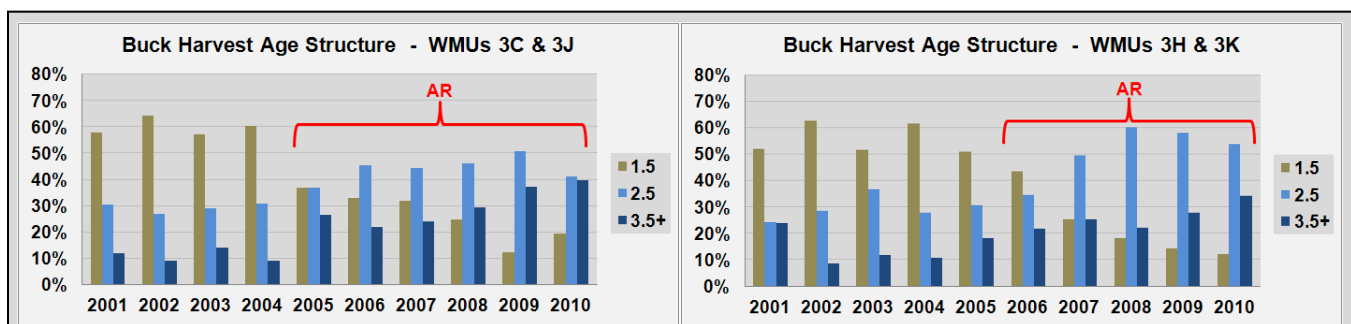
<sup>a</sup> Antler restrictions were initiated in 2005 in WMUs 3C and 3J and in 2006 in WMUs 3H and 3K.

<sup>b</sup> *n* = sample size

- The proportion of yearlings in the buck take dropped substantially in each of the units with ARs, with yearling bucks only comprising 14% of the deer take in 2009-2010 compared to 58% in 2003-2004 (Table 2).
- Neighboring WMUs also experienced a slight drop in yearling portion of the buck harvest, though the change was substantially less than occurred in the pilot AR units (Table 2 and Figure 2).
- Age structure of the buck harvest in the pilot AR units continued to shift over time as yearlings comprised a generally decreasing proportion of the annual harvest (Figure 3).



**Figure 2.** Comparison of the yearling harvest frequency within the pilot antler restriction program and neighboring Wildlife Management Units in southeastern New York.



**Figure 3.** Change in buck harvest age structure in four Wildlife Management Units (WMUs) in Southeastern New York resulting from implementation of a 3-point on one side antler restriction.

## Buck Harvest Numbers

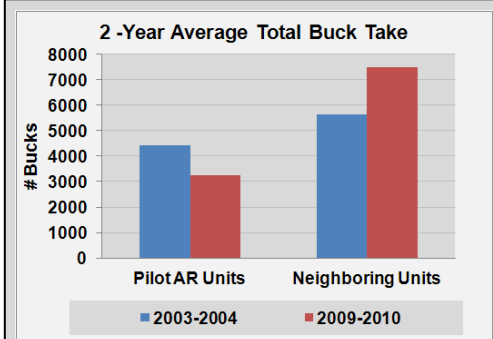
**Table 3.** Two-year average buck ( $\geq 1.5$  years old) take in four Wildlife Management Units (WMUs) in Southeastern New York prior to and with a 3-point on one side antler restriction.

WMU	Buck Take Objective <sup>a</sup>	2 Years Prior to AR <sup>b</sup>		2009-2010		Change
		#	(bucks/mi <sup>2</sup> )	#	(bucks/mi <sup>2</sup> )	
3C	2.7	910	2.9	526	1.7	- 42.2 %
3H	4.2	1,191	2.1	1,303	2.4	+ 9.4 %
3J	3.4	1,199	3.4	783	2.2	-34.7 %
3K	3.5	878	2.3	631	1.7	- 28.1 %
All Units		4,177	2.6	3,243	2.0	- 22.4 %

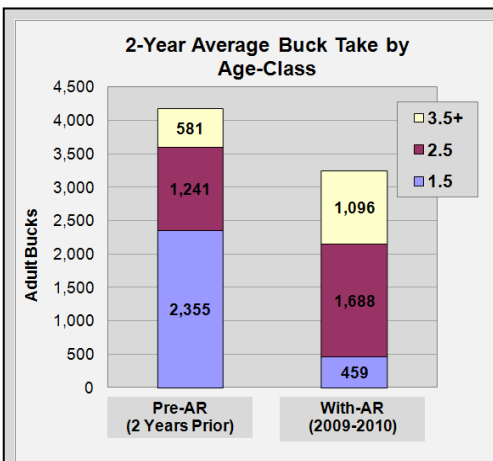
<sup>a</sup> The Buck Take Objective (BTO) was used prior to antler restrictions to reflect the buck take that is expected when the overall deer population is at the desired level based on input from local stakeholders.

<sup>b</sup> Includes harvest totals from 2003-2004 for WMUs 3C and 3J and 2004-2005 for WMUs 3H and 3K.

- Prior to AR, buck takes in WMUs 3C and 3J were at or slightly above objective levels, reflecting overall populations near the desired levels (Table 3). Whereas, buck takes in WMUs 3H and 3K were substantially below objective levels, reflecting deer populations well below desired levels prior to the AR program.
- Recent buck take in the pilot AR area averaged 22% below levels immediately prior to AR, though substantial variation existed among the units (Table 3). WMU 3H is the only unit where buck take returned to the level immediately prior to AR.
- Buck take in neighboring WMUs increased 33% over the same time period during which take in the AR units dropped. (Figure 4).
- By age class, overall yearling buck harvest in the pilot area declined 80% with AR, while harvest of 2.5 year old bucks increased 36% and harvest of 3.5+ year old bucks increased 88% (Figure 5).
- For WMUs 3C, 3J, and 3K, the decline in yearling buck harvest was not offset by an equal increase in harvest of older bucks. Buck harvest in these units remains substantially below pre-AR levels.



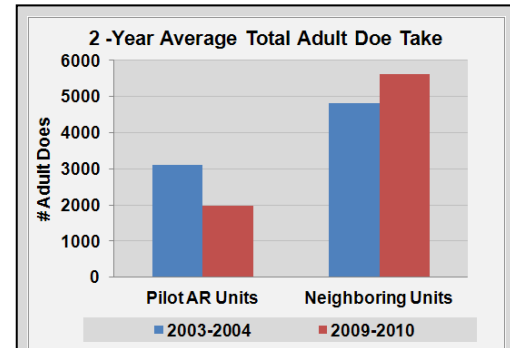
**Figure 4.** Comparison of 2-year average buck takes within the pilot antler restriction program and neighboring Wildlife Management Units in southeastern New York.



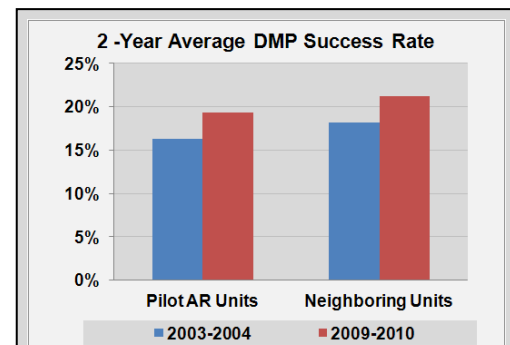
**Figure 5.** Change in 2-year average buck take by age class in four Wildlife Management Units (WMUs) in Southeastern New York resulting from implementation of a 3-point on one side antler restriction.

## Doe Harvest

- Recent doe harvest in the pilot AR units averaged 37% below pre-AR levels, while doe take has increased 17% in neighboring units during the same time period (Figure 6), principally due to higher allocations of Deer Management Permits (DMPs - doe tags) in neighboring units.
- ARs appeared not to have had any significant impact on hunter harvest of antlerless deer. Though DMP success did climb in the pilot WMUs between 2003-2004 and 2009-2010, a similar increase occurred in neighboring WMUs (Figure 7).
- Hunters in the pilot area demonstrated similarly low willingness to harvest antlerless deer as hunters in the broader southeastern portion of New York. That is, hunters in the pilot area reported taking shots at 2-9% of vulnerable antlerless deer that they could legally have harvested (DEC-Cornell unpublished data), whereas hunters in the southeastern region shot at 8% of vulnerable antlerless deer (Table 4; Enck et al. 2011).
- Hunters indicated that the pilot AR program has had little influence on their willingness to apply for or try to fill DMPs (Enck et al 2011).



**Figure 6.** Comparison of 2-year average doe takes within the pilot antler restriction program and neighboring Wildlife Management Units in southeastern New York.



**Figure 7.** Comparison of 2-year average hunter success rates on Deer Management Permits (antlerless tags) within the pilot antler restriction program and neighboring Wildlife Management Units in southeastern New York.

**Table 4.** Hunters' interactions with antlerless deer, young and older bucks in 2010 in four Wildlife Management Units (WMUs) that comprised the pilot antler restriction program compared to hunter experiences in the broader Southeastern Region<sup>a</sup> of New York (SE NY) in 2009.

Area	Antlerless Deer		Young, Small-antlered Bucks <sup>c</sup>		Older, Larger-antlered Bucks	
	# Seen per Day	Willingness to Shoot <sup>b</sup>	# Seen per Day	Willingness to Shoot	# Seen per Day	Willingness to Shoot
3C & 3J	2.4	9%	0.34	3%	0.12	49%
3H & 3K	2.8	2%	0.45	2%	0.17	52%
SE NY	2.2	8%	0.2	18%	0.12	56%

<sup>a</sup> Southeastern Region includes all Region 3 and Region 4 WMUs (Enck and Decker 2011)

<sup>b</sup> Willingness to shoot refers to the percent of vulnerable deer (i.e., hunter had an unfilled tag, a clear shot and the deer was in-range) that hunters shot at.

<sup>c</sup> Some hunters may have included 1.5 year old bucks that met the legal antler standard in the pilot AR units to be young, small-antlered bucks.

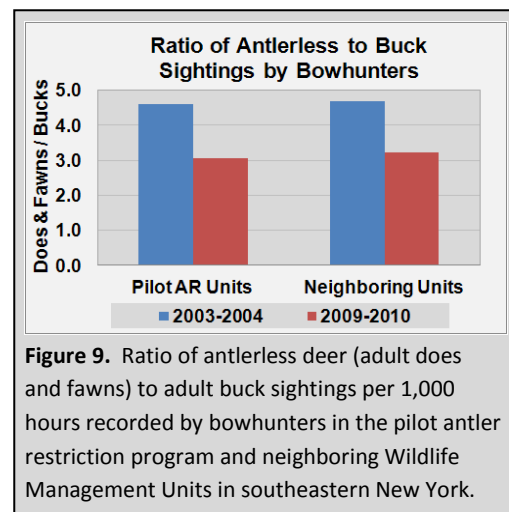
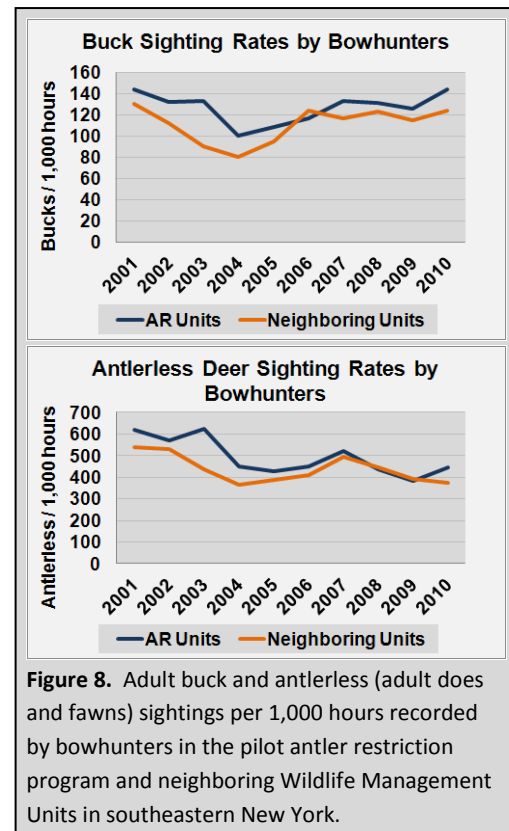
## Hunter Observations of Deer

### *Bowhunter Sighting Log*

- Sighting rates of bucks and of antlerless deer recorded by bowhunters in the pilot AR area followed similar trends as in neighboring units without ARs (Figure 8).
- The ratio of antlerless deer (does and fawns) to adult buck sightings recorded by bowhunters, narrowed in the pilot area from an average of 4.6 : 1 in 2003-2004 to an average of 3.1 : 1 in 2009-2010. However, an identical trend was observed over the same time period in neighboring WMUs without ARs (Figure 9).

### *Hunter Surveys*

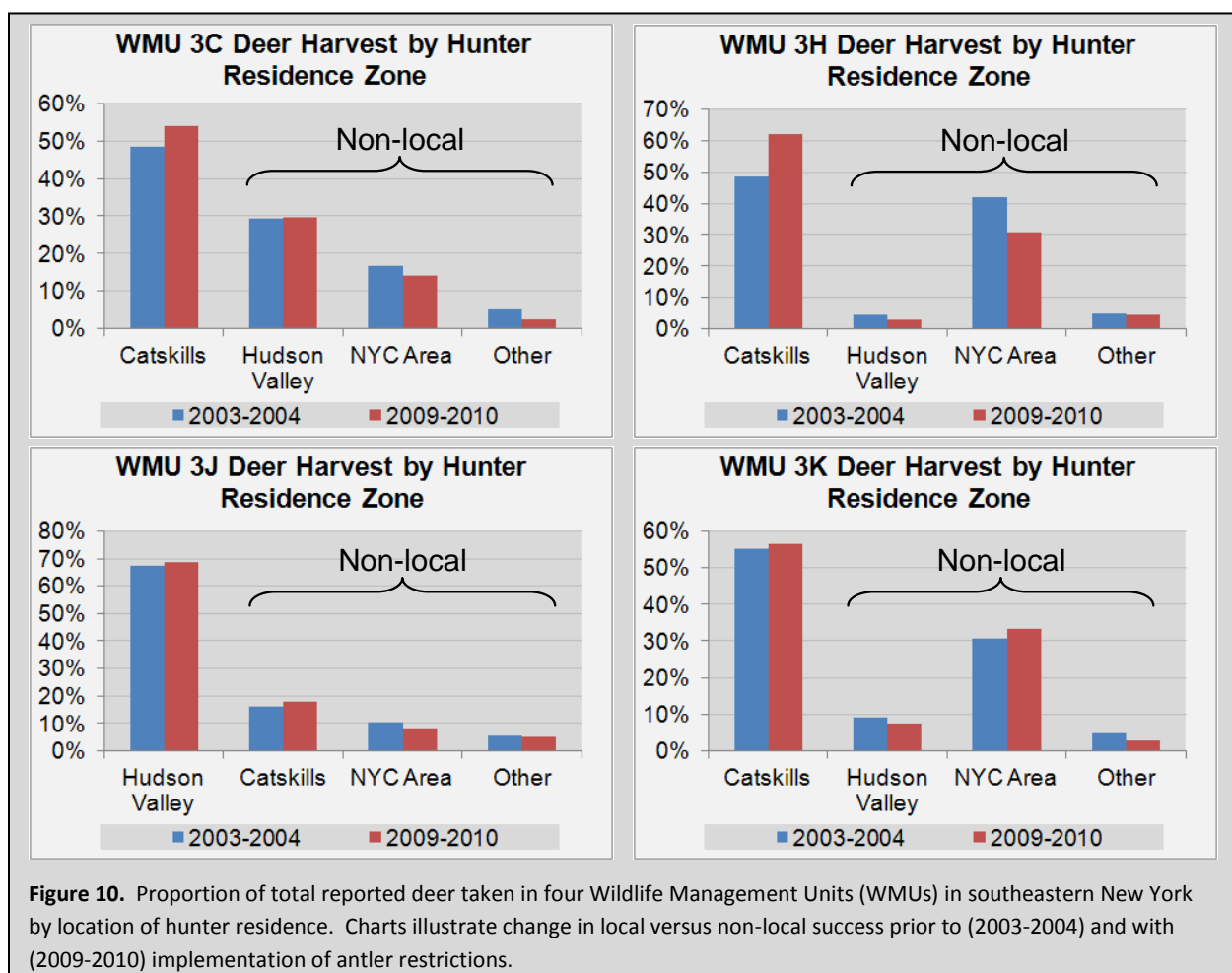
- Hunters reported seeing similar numbers of antlerless deer and older, larger-antlered bucks per day in the pilot area in 2010 (DEC-Cornell unpublished data) as did hunters in the broader southeastern region of New York in 2009 (Table 4; Enck et al. 2011).
- However, hunters in the pilot area saw nearly twice as many young, small-antlered bucks per day as in the broader region (Table 4). This is likely due to the fact that most young, small-antlered bucks were unavailable for harvest in the pilot AR units and would remain visible to hunters throughout the hunting season. Though the reporting periods were offset by one year, deer populations in the region did not fluctuate dramatically during this period.
- Similar to reports from bowhunters in the pilot area and neighboring units, surveyed hunters perceived antlerless to adult buck ratios averaging 4.6-5.1 : 1 in 2007 (Enck and Brown 2008c) and 3.4 : 1 in 2010 (DEC-Cornell unpublished data).
- With presumably more older bucks in the population due to reduced harvest of yearling bucks, hunters in the pilot AR units considered about 30% of the buck population in 2010 to be older, larger-antlered bucks (DEC-Cornell unpublished data). This is comparable to hunter perceptions in the broader southeastern portion of New York, who considered about 30% of the regional buck population in 2006 to be older, larger-antlered bucks (Enck and Brown 2008b).





## Hunter Participation

- ARs had no influence on deer-hunting participation in the pilot AR units for the majority (60 - 72%) of respondents (Enck and Decker 2011).
- Very few respondents were attracted to hunt in the pilot WMUs because of ARs (2-9%), or stopped hunting in the pilot WMUs because of ARs (3-8%).
- Slightly more local hunters in WMUs 3H and 3K indicated that they now hunt more days because of the antler restrictions, but the opposite trend occurred in WMUs 3C and 3J.
- More non-local hunters indicated that they now hunt fewer days (19%) rather than more days (4%) in the pilot WMUs because of the restriction.
- The proportion of successful deer harvest by non-local hunters generally declined in the pilot AR units between 2003-2004 and 2009-2010, with strongest declines in WMU 3C (-5.4%) and WMU 3H (-13.6%; Figure 10). This change suggests that fewer non-local hunters hunted in the pilot ARs in 2009-2010 compared to 2003-2004 or that they reduced their hunting effort over that time period compared to local hunters.



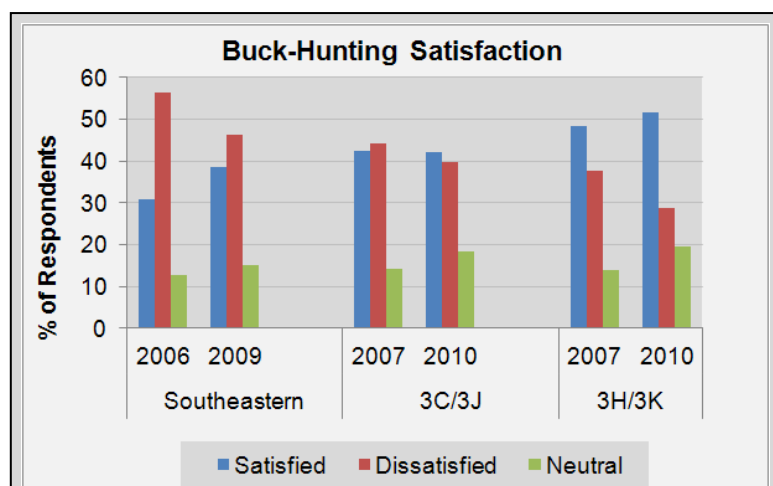
## Hunter Attitudes and Behaviors

*(unless otherwise noted, data are from Enck and Decker 2011)*

### Satisfaction and Expectations

Impacts of the pilot AR program on hunter satisfaction were mixed.

- Hunters in the pilot program generally reported higher levels of buck-hunting satisfaction than hunters in the broader southeastern region of New York, though the recent difference was nominal in WMUs 3C and 3J (Figure 11; Enck et al. 2011, and Enck and Decker 2011).
- The slightly increased levels of buck-hunting satisfaction reported by hunters in 3H/3K between 2007 and 2010 were consistent with increased satisfaction levels also observed in the broader region (Figure 11), suggesting the change in buck hunting satisfaction levels may not be associated with the pilot AR program.
- 40% of hunters from WMUs 3C and 3J and 56% from WMUs 3H and 3K reported that their buck-hunting satisfaction had increased since the pilot was implemented, whereas 36% from WMUs 3C and 3J and 19% from WMUs 3H and 3K reported that their buck-hunting satisfaction had decreased.
- Substantially more hunters reported being satisfied than dissatisfied with the level of protection afforded to young bucks and with the level of safety they felt in the pilot area (Table 5).
- A majority of hunters reported being dissatisfied and having unmet expectations with: (1) the number of older, larger-antlered bucks seen, (2) the number of antlered bucks compared to antlerless deer seen, and (3) their opportunity to shoot larger-antlered bucks (Table 5).
- A majority of hunters were dissatisfied with the number of older bucks compared to the number of young bucks seen, and significantly more hunters reported being dissatisfied than satisfied with their freedom to choose which buck they could harvest (Table 5).
- Slightly more hunters from WMUs 3H and 3K than from WMUs 3C and 3J indicated their expectations were met for: (1) the total number of antlered bucks of any size seen while hunting, and (2) their perceived chances of shooting any buck.



**Figure 11.** Trends in buck hunter satisfaction in southeastern New York and the four Wildlife Management Units in the pilot antler restriction program. Data compiled from: Enck and Brown 2008b, Enck and Brown 2008c, Enck et al. 2011, and Enck and Decker 2011.



**Table 5.** Attitudes of hunters in New York’s pilot antler restriction program in southeastern New York regarding whether several aspects of their hunting experience were enough for them to be satisfied or met their expectations. Data compiled from Enck and Decker 2011.

Aspect of Hunting Experience	WMUs 3C & 3J				WMUs 3H & 3K			
	Enough to be Satisfied (%) <sup>a</sup>		Expectations Met (%) <sup>b</sup>		Enough to be Satisfied (%)		Expectations Met (%)	
	More than Enough	Not Enough	Yes	No	More than Enough	Not Enough	Yes	No
# Older, larger-antlered bucks seen while hunting	24	58	37	63	25	50	46	54
# Antlered bucks compared to # antlerless deer seen	17	58	45	55	18	63	44	56
Opportunity to shoot a larger-antlered buck	20	53	45	55	25	50	49	51
# of bucks (all ages) seen while hunting	31	49	46	54	30	47	51	49
# Older, larger-antlered bucks compared to # younger, smaller-antlered bucks seen	23	55	*	*	20	52	*	*
Freedom to choose which buck to harvest	27	44	*	*	30	41	*	*
Total # of deer seen while hunting	34	41	*	*	33	43	*	*
Perceived level of protection from harvest for young bucks	42	25	*	*	45	28	*	*
Perceived level of safety knowing other hunters must carefully assess if a buck is legal	38	19	*	*	45	26	*	*

<sup>a</sup> Response category for “bare minimum” is not included in this table, so the totals do not equal 100%.  
<sup>b</sup> Hunters were only asked whether their expectations were met for a subset of hunting related aspects.

### *Attitude toward voluntary antler restrictions*

- Most hunters (65% in WMUs 3C and 3J and 78% in WMUs 3H and 3K) expressed a positive attitude toward exercising voluntary restraint by passing-up shots at young, small-antlered bucks in areas without mandatory ARs.

- Additionally, 45% of hunters in WMUs 3C and 3J and 60% of hunters in WMUs 3H and 3K indicated that their experience with the pilot AR program has made them more willing to voluntarily pass up shots at young, small-antlered bucks in areas without mandatory ARs.

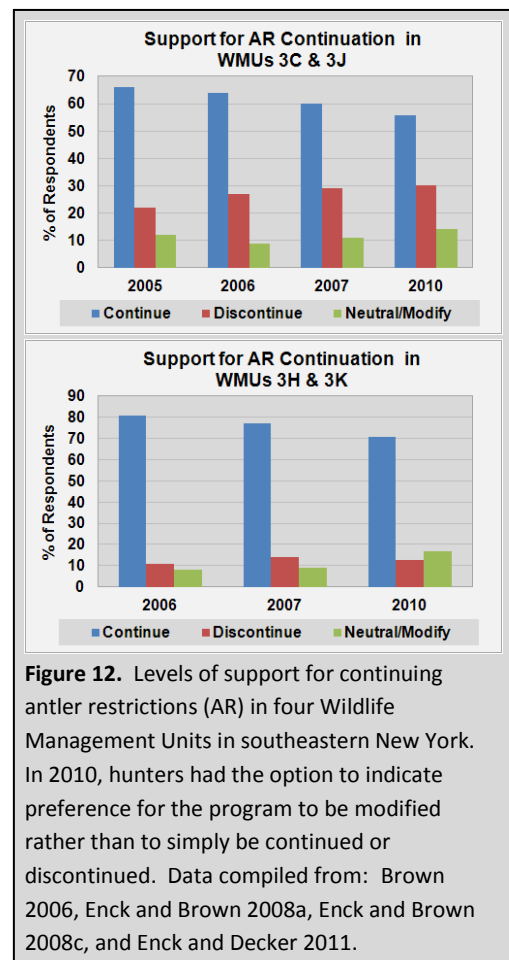
### *Perceptions of non-compliance*

- In 2010, hunters thought 19% of bucks taken in WMUs 3C and 3J and 17% of bucks taken in WMUs 3H and 3K did not meet the legal AR standard (DEC-Cornell unpublished data). This is slightly higher than the 13% of hunters in WMUs 3C and 3J who indicated they knew someone who took a buck that did not meet the legal AR standard in 2005, during the first year of the AR program (Brown 2006).
- Roughly one-third of hunters in the pilot AR program indicated that their frustration with other hunters not complying with ARs was too high for them to be satisfied.

### *Support for ARs to continue*

Despite many hunters having dissatisfying experiences and unmet expectations, most hunters prefer to have the antler restriction program continue as it currently exists:

- Continuation of mandatory antler restrictions was “very” or “moderately” acceptable to 62% of hunters in WMUs 3C and 3J and to 80% of those in WMUs 3H and 3K, whereas only 23% of hunters in WMUs 3C and 3J and 11% in WMUs 3H and 3K felt continuing the program was “not at all acceptable.”
- Discontinuing antler restrictions was “very” or “moderately” acceptable to 39% of respondents in WMUs 3C and 3J and to 25% of those in WMUs 3H and 3K, whereas discontinuing the program was “not at all acceptable” to 47% in WMUs 3C and 3J, and to 62% in WMUs 3H and 3K.
- A majority of hunters favor continuing ARs, though support has decreased slightly over time since program implementation (Figure 12).
- In 2010, 56% of respondents in WMUs 3C and 3J prefer that mandatory antler restrictions continue, whereas 30% prefer that they be discontinued. In WMUs 3H and 3K, 71% of respondents prefer that mandatory antler restrictions continue, whereas only 13% prefer that they be discontinued.



## Management Impacts

- In New York, deer managers typically use annual buck take density (bucks taken per square mile) as one index to track deer population trends. With ARs, a large segment of the yearling buck population was unavailable for harvest, and buck take density is no longer a sensitive index of deer population change. That is, with ARs, the observable effect on buck harvests of significant population events (e.g., antlerless harvest, winter mortality, poor or strong recruitment years) is delayed at least one year and diffused over multiple buck age classes.
- In WMUs with ARs, New York deer managers must rely on the Bowhunter Sighting Log as the primary index of deer population changes. Reliance on a single index is not ideal, and increases risk of misinterpreting population trends. While sighting rates provide useful information for some WMUs when viewed in conjunction with the buck take index, when used alone, they are substantially less reliable. Confidence intervals of the Bowhunter Sighting Log indices are generally wide (i.e., 80% CI > 30% of the sighting index). Therefore, it is critical that DEC develop additional methods to monitor deer populations if ARs are continued.
- Though antlerless harvest allocations were generally conservative in the AR units during the pilot program, ARs do not appear to be an effective tool to increase hunter willingness to harvest antlerless deer and improve deer management capacity.

## Summary

- The pilot AR program substantially reduced the proportion of yearling bucks in the harvest, and harvest composition shifted to older bucks.
- The number of 2.5+ year old bucks in the harvest has increased since implementation of ARs. However, the increase has not fully compensated for the reduction in yearling harvest, and total buck take has generally remained >20% below pre-AR levels. WMU 3H was the only unit where total buck take has returned to the level immediately prior to AR.
- A shift in sex ratios of deer observed in the pilot AR units was apparent, though a similar shift was observed in neighboring units without ARs.
- ARs had no effect on hunter participation for the majority of hunters, but overall participation by non-local hunters appeared to decline because of AR.
- The impact of ARs on hunter satisfaction was mixed. Satisfaction with buck-hunting was generally higher in the pilot AR units than the surrounding region, but similar increases in buck-hunting satisfaction were observed in the surrounding region as occurred within the pilot area. More hunters in the pilot AR area reported being satisfied than dissatisfied with the level of protection afforded to young bucks and with the level of safety they felt in the pilot area. However, a majority of hunters reported being dissatisfied with (1) the number of antlered bucks compared to antlerless deer seen, (2) the number of older, larger-antlered bucks seen, (3) their opportunity to shoot larger-antlered bucks, and (4) the number of older bucks compared to the number of young bucks seen.

- Hunter expectations for the pilot AR program were largely unmet.
- A majority of hunters in the pilot AR units prefer that the program continue. It appears that participants' belief that the AR program will eventually result in their desired outcomes has stronger influence than unmet expectations and mixed satisfaction levels on their willingness to have the program continue.
- Deer management population indices were compromised by ARs. DEC must develop additional methods for monitoring deer populations to manage effectively with ARs.

## Related Resources

- Brown, T. L. 2006. Ulster County deer hunters' satisfaction with pilot antler restriction program in Wildlife Management Units 3C and 3J. Human Dimensions Research Unit publication 06-5. Department of Natural Resources, Cornell University, Ithaca, NY. USA. [www.dec.ny.gov/docs/wildlife\\_pdf/hdruar06.pdf](http://www.dec.ny.gov/docs/wildlife_pdf/hdruar06.pdf)
- Enck, J. W. and T. L. Brown. 2008a. Evaluation of antler restrictions in DEC Region 3: 2nd year in 3C and 3J, and 1st year in 3H and 3K. Human Dimensions Research Unit series publication 08-04. Department of Natural Resources, Cornell University, Ithaca, NY, USA. [www.dec.ny.gov/docs/wildlife\\_pdf/hdruar07.pdf](http://www.dec.ny.gov/docs/wildlife_pdf/hdruar07.pdf)
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**Appendix 1.** Ten years of data from four Wildlife Management Units (WMUs) in Southeastern New York which were part of a pilot antler restriction program beginning in 2005 in WMUs 3C and 3J and in 2006 in WMUs 3H and 3K. Shaded areas illustrate the period during the pilot antler restriction program.

WMU 3C		Area 316.1 sq mi									
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Deer Take	Adult Buck	798	866	986	834	299	508	490	433	514	538
	Fawn Buck	135	150	157	207	72	64	131	99	102	54
	Adult Doe	582	628	679	1,027	295	284	483	423	420	247
	Fawn Doe	110	146	162	218	64	55	101	91	76	41
	Total	1,625	1,790	1,984	2,286	730	911	1,205	1,046	1,112	880
# Bucks Aged	1.5	25	30	43	21	1	7	16	6	4	6
	2.5	12	17	17	15	5	18	12	13	15	8
	3.5+	5	5	8	4	5	10	12	12	9	11
	DMPs Issued	3,899	4,863	5,171	10,850	2,783	2,487	5,384	5,115	2,889	1,609
	DMP Success (%)	20.4	16.6	16.8	12.7	11.5	11.5	10.7	11.0	16.6	14.9
BowLog	# Hunter Logs	30	18	36	41	49	44	57	51	55	58
	Buck Index	110	82	73	73	82	88	82	106	90	106
	Doe/Fawn Index	494	504	543	308	320	354	382	257	219	289
	Total Index	681	669	669	417	451	504	521	412	347	444

WMU 3J		Area 355.6 sq mi									
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Deer Take	Adult Buck	1,138	1,268	1,316	1,082	626	712	679	684	797	769
	Fawn Buck	228	206	200	207	131	158	187	152	170	135
	Adult Doe	1,007	874	801	1,044	579	672	710	687	721	589
	Fawn Doe	187	196	188	224	122	141	167	144	134	109
	Total	2,560	2,544	2,505	2,557	1,458	1,683	1,743	1,667	1,822	1,602
# Bucks Aged	1.5	44	54	34	32	24	17	20	10	6	10
	2.5	24	18	22	12	20	15	38	17	26	26
	3.5+	9	7	11	4	13	6	15	7	21	22
	DMPs Issued	6,408	7,398	5,514	9,186	4,371	6,952	7,065	7,104	6,114	4,814
	DMP Success (%)	21.3	14.5	17.4	14.2	14.3	11.3	12.3	11.4	13.9	13.1
BowLog	# Hunter Logs	33	23	37	53	48	40	59	55	55	58
	Buck Index	160	122	176	155	180	175	164	163	186	223
	Doe/Fawn Index	788	503	662	481	596	561	588	558	571	554
	Total Index	1,082	802	975	751	873	831	837	792	869	855

WMU 3H		Area 554.1 sq mi									
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Deer Take	Adult Buck	1,862	1,954	1,483	1,084	1,297	876	1,181	1,127	1,245	1,361
	Fawn Buck	317	289	252	104	62	129	211	210	175	119
	Adult Doe	1,353	1,163	1,064	521	288	497	786	936	809	632
	Fawn Doe	257	270	258	109	49	106	177	190	147	117
	Total	3,789	3,676	3,057	1,818	1,696	1,608	2,355	2,463	2,376	2,229
# Bucks Aged	1.5	42	74	25	32	54	24	23	11	13	10
	2.5	20	25	19	10	32	16	49	32	40	50
	3.5+	6	3	6	6	11	10	12	16	27	29
	DMPs Issued	6,905	5,644	6,542	1,662	0	1,386	2,784	3,316	2,293	981
	DMP Success (%)	22.0	20.5	17.0	21.7	0.0	24.7	24.4	24.2	26.0	24.9
BowLog	# Hunter Logs	43	36	33	47	48	35	62	63	62	59
	Buck Index	160	154	152	81	83	94	149	172	125	160
	Doe/Fawn Index	676	731	752	571	459	434	634	613	388	596
	Total Index	911	927	989	698	580	602	833	823	541	802

WMU 3K		Area 381 sq mi									
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Deer Take	Adult Buck	1258	1332	1150	922	833	656	655	701	569	692
	Fawn Buck	177	190	145	103	27	77	102	85	73	53
	Adult Doe	770	774	608	495	112	331	409	360	313	213
	Fawn Doe	143	169	146	104	20	65	84	72	58	38
	Total	2348	2465	2049	1624	992	1129	1250	1218	1013	996
# Bucks Aged	1.5	41	29	6	8	19	10	10	7	6	7
	2.5	19	22	3	8	12	11	16	28	37	26
	3.5+	32	11	1	1	15	7	21	6	10	19
	DMPs Issued	5,103	4,864	4,527	3,899	0	1,295	1,883	2,134	1,405	703
	DMP Success (%)	18.7	18.9	15.9	14.6	0.0	21.8	20.9	16.6	21.5	24.2
BowLog	# Hunter Logs	22	21	28	42	42	40	57	58	51	47
	Buck Index	142	152	133	89	93	93	137	84	102	93
	Doe/Fawn Index	527	454	543	436	361	418	478	318	352	347
	Total Index	721	680	744	554	502	560	646	435	488	470