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3-30-1984

An Evaluation of Fee Hunting as a Technique to Capitalize on the Value of Deer in Northern New York

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State: New York Project No: W-105-R

Project Title: Wildlife Ecology, Behavior and Habitat Improvement in New York.

<u>Study No. and Title</u>: XIII - Deer Management Research in Northern New York Ecosystems.

- <u>Study Objective</u>: To research selected aspects of deer resource dynamics that have been identified as key components in the re-definition and/or implementation of deer management strategic plans and programs in northern New York.
- <u>Job No. and Title</u>: XIII-10 An Evaluation of Fee Hunting as a Technique to Capitalize on the Value of Deer in Northern New York.
- <u>Job Objective</u>: To increase the income resulting from fee hunting to a net return of \$4.00/acre/year, while documenting hunter reaction and effects on the quality of the hunting experience.

Period Covered: April 1, 1981 - March 31, 1984.

Abstract: Gross income generated as a result of the 1981-1983 fee hunts at the Huntington Wildlife Forest ranged from \$1.07 to \$1.76/acre/year. Administrative and operational costs averaged 19.6% of gross income during the same period. Net income ranged from \$0.87 to \$1.40/acre/year and averaged \$1.12/acre/year. Efforts to increase revenues from this form of hunting resulted in a 154% increase over the 1978-1980 period, however this figure (\$1.12/acre/year) was considerably less than the established \$4.00/ acre/year goal. Increased revenues resulted primarily from escalating the fee charged to each hunter. Cost reductions associated with initiating a season pass system and eliminating special insurance coverage were also important factors. Efforts to increase the number of participating hunters were partially successful. Muzzleloader hunters increased by 94% over the 1978-1980 period, however a decrease in the number of archery hunters offset this gain. The use of a bid system, where hunters were required to submit bids reflecting the amount they were willing to pay for this hunting experience, resulted in an average bid of \$47.82 for a season hunting pass. Hunter success rates for deer averaged 12.3% during the 1981-1983 period. Population models developed for the hunting area suggest that the current hunting effort, employing both muzzleloader and archery hunters, is maintaining a stable deer population near the desired level of 12-13 deer/mi². Past research has shown that this population density is compatible with timber management objectives.

Background: While the white-tailed deer already constitutes an important resource in the Adirondack region, there is a high probability that its value can be enhanced through more effective management. This is the basic premise underlying New York's Strategic Plan for Management of White-tailed Deer in Northern Regions. A key aspect of this management is the manipulation of vegetative conditions. In the Adirondacks, extensive manipulation of vegetation is occurring on private lands through the harvest of wood fiber.

Much of the work already completed under Study XIII can provide the information necessary to suggest strategies for modifying forest management practices to enhance conditions for deer. However, as management decisions are heavily influenced by economic analysis, it is necessary to document the economic costs and benefits to integration of deer management objectives with those of wood fiber management. The objectives outlined in this research program will address this need by documenting the basic monetary return a landowner can expect from fee hunting management of deer. Combining these data with the cost figures associated with maintenance of a deer population will provide much of the information needed for economic analysis. This will place wildlife managers in a stronger position to assist forest landowners.

Past fee hunting under Job XIII-4 has provided valuable information on establishing and managing a system of fee hunting. Preliminary information on costs and returns to the private landowner were determined. Landowner return was calculated at approximately \$0.44/acre/year based on the past hunting experiences (1978-1980) associated with Job XIII-4.

Procedures: Using the 5,200 acre hunting area at the Huntington Wildlife Forest and the established fee hunting system, a variety of alternative fee schedules were tested. Hunter densities, fee schedules, numbers of days of hunting, and several payment procedures were evaluated. The following schedule relating to fees charged was used:

- 1981 \$10/day/hunter or \$50 season pass/hunter \$40 deposit/party
- 1982 \$50 season pass/hunter \$50 deposit/party
- 1983 Bid System \$25 season pass/hunter \$25 deposit/party

Under the set fee schedules, which were used in 1981 and 1982, it was difficult to assess hunter "willingness to pay" for the hunting experience offered at the Huntington Forest. In an effort to better identify the price hunters were willing to pay, all party leaders participating in any of the hunts held from 1980-1982 and any new hunters expressing an interest in the 1983 hunt, were sent bid forms and instructions along with the 1983 hunting information packet (Appendix I). A total of 185 bid forms were sent out. Fifty seven new hunters (30.8%) and 128 hunters (69.2%) who had participated previously in these fee hunts were included in this sample of both archery and muzzleloader hunters. Party leaders were instructed to submit a bid

reflecting the amount which all party members were willing to pay for a season pass to hunt during the 1983 season.

During the 3 year period of escalating hunting fees and associated procedural changes, we monitored the reaction of hunters to these changes and their effects on the quality of the hunting experience. This was done using questionnaires and personal interviews with participating hunters. Deer population estimates based upon the techniques described in a previous job under this same study (Job XIII-8), were associated with hunter reactions to this experience. Records of all costs and income attributed to the conduct of this fee hunting program were maintained.

Findings:

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<u>Income-Costs</u> - Gross income generated as a result of the 1981-1983 fee hunting program ranged from \$1.07 to \$1.76/acre/year. Net income ranged from \$0.87 to \$1.40/acre/year and averaged \$1.12/acre/year. This average net revenue figure represents a 154% increase over the \$0.44/acre/year average net income generated from the 1978-1980 fee hunts. A total of \$18,364 in net revenue was generated from the 3 years of fee hunting (1981-1983) resulting in an average annual net income of \$6,121 from the 5437 acre hunting area. A summary of the annual revenues, costs and other related statistics for all years of fee hunting (1978-1983) is presented in Table 1. Administrative and operational costs associated with the conduct of these hunts averaged 19.6% of gross income or approximately \$1500 annually (\$0.28/ acre/year) during the 1981-1983 period. A complete breakdown of the various costs directly related to the operation of the fee hunting program during the 1981-1983 period is presented in Table 2.

<u>Bid System Results</u> - Of the 185 bid forms distributed, 60 bids (32.4%) were returned. Archery hunters submitted 10 of these bids and muzzleloader hunters returned 50. These 60 responses returned by party leaders represented a total of 243 hunters (as determined from the list of party members returned with each bid). Responses from new hunters accounted for 36.5% (22) of the bids returned with past participants providing 63.5% (38).

The bids ranged from \$7 to \$101 (Fig. 1). There were no significant differences between the mean bids of archery hunters and muzzleloader hunters or between new hunters and past hunters. The mean bid for a season pass, based upon all respondents was \$47.82/hunter. Both the median and the mode were \$50.00 (Table 3).

Although the hunters were not informed prior to submitting their bid, a minimum acceptable bid of \$25/hunter had been established apriori. Fifty eight of the 60 bids received met or exceeded this minimum figure. A figure of \$25 was later used as the fee per hunter in 1983, regardless of the amount they bid. We set the fee at \$25 to avoid potential problems which may have resulted from hunters paying different fees for the same benefit.

Fee Schedule and Procedural Change - As shown in Table 1, the fee schedule in 1981 was increased to \$10/hunter/day or \$50 for a season pass. A \$40 deposit was required of each hunting party prior to arrival. In 1982, all hunters

were required to purchase a \$50 season pass and a \$50 deposit was required from each hunting party. These increases in the fee assessed each hunter, compared to the average fee charged during the 1978–1980 period, resulted in a corresponding increase in gross income.

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Hunter participation did not decline; the mean number of hunters participating during the 1981-1983 period was identical to that of the 1978-1980 period. However, the average length of stay per hunter increased from 2.95 days in 1978-1980 to 4.50 days during the 1981-1983 period. The number of total hunter days/season was also higher during the 1981-1983 period (959.3) when compared with the 1978-1980 period (652.5).

Efforts to increase the number of hunters participating in these hunts in order to increase income were only partially successful. During the 3 year period, archery hunter numbers declined from 80 in 1981 to 31 in 1982 with a slight increase to 44 in 1983. All of these numbers are well below the average of 136 archers participating during the 1978-1980 hunts. Muzzleloader hunters, on the other hand, increased sharply averaging 171 during the 1981-1983 period as compared to an average of only 88 during the 1979 and 1980 hunts (no muzzleloader hunting permitted in 1978).

The number of days of hunting provided under the 1981-1983 fee hunting programs was increased by an average of 12 days over the 1978-1980 period. The number of hunting parties permitted on the hunting area during each hunt was increased each year beginning in 1981 to a maximum of 50 parties in 1983 (Table 1).

Responses by hunters returning questionnaires relating to their appraisal of hunter density were very similar between the 2 hunting periods. Less than 4% of the hunters indicated that hunter densities were too high (the highest hunter density experienced during these hunts was 1 hunter/ 40 acres). The highest percentage of hunters felt that hunter densities were about right (72.6%) and 20.3% indicated hunter densities were too low (based on the 1981-1983 hunts).

<u>Characteristics of Participating Hunters</u> - During the 6 years these hunts were conducted, a clientele of hunters has been developed. Currently (based on the 1983 season only) 50% of the participants are returning hunters. Nearly 67% of the hunters are from out-of-state with Pennsylvania and New Jersey accounting for the majority of this group.

Participating hunters averaged more than 20 years of hunting experience. A large majority hunt with at least 2 different weapons (i.e. bow and gun). Responses to the questionnaires show that these hunters spend more than 40 days afield annually in connection with non-hunting pursuits and more than 16 days each year involved in hunting activities (Appendix II).

Attitudes of Participating Hunters - In response to a suggestion offered by D.E.C. personnel, an additional set of questions used as part of a hunter opinion survey in northern New York (Smolka, R.A. Jr., D.J. Decker, N. Sanyal, T.L. Brown, 1983, Northern New York Deer Management: Hunters' Opinions and Preferences), were incorporated with the fee hunting program questionnaire. The 4 questions (Appendix III) were designed to assess hunter

attitude toward D.E.C. deer management activities in the northern zone. The evaluation of the responses to these questions was done in an identical manner to that used in the D.E.C. survey. The results based on the responses of the hunters participating in the 1983 fee hunt at the Huntington Forest, are presented in Table 4. A comparison of the responses of these hunters with the results of the D.E.C. survey of northern zone residents, and southern zone residents from the 6 counties adjacent to the northern zone, is shown in Table 5.

Chi square tests were used to analyze hunter's responses to these 4 questions. There was no significant difference ($\alpha = 0.05$) in the responses of archery versus muzzleloader hunters or between New York residents and nonresidents. However, when Huntington data were compared with D.E.C. data (northern and southern zone residents combined), we found that Huntington hunters were significantly more supportive of D.E.C. deer management activities than the sample of hunters polled in the D.E.C. survey. However, further breakdown of this data revealed no significant difference between New York resident hunters on the Huntington Forest and hunters from the D.E.C. survey. Non-resident fee hunt participants were significantly more supportive of D.E.C. activities than D.E.C. survey hunters.

Deer Harvest and Hunter Success - The total number of deer killed on the hunting area during the 3 years of fee hunting (1981-1983) was 81. This figure included 43 females (53.1%) and 38 males (46.9%). Deer harvest per square mile ranged from 2.82 in 1981 to 3.53 in 1983 (Table 6). The sex and age composition of the deer killed during the 1981-1983 periods is shown in Fig. 2. Archers accounted for 13.6% (11) of the total number of deer killed with muzzleloader hunters harvesting the remaining 86.4% (70). Pre-hunting season deer population estimates for the hunting area based on techniques similar to those described in a previous final report (PR Project W-105-R, Job XIII-8) ranged from 10 to 12 deer/mi² during the 1981-1983 period. Hunter success rates (for deer only) ranged from 10.0% to 14.0% and averaged 12.3% during the 1981-1983 fee hunts. This average figure is considerably higher than the average hunter success rate (3.5%) experienced during the 1978-1980 period when deer densities were lower and archery hunting constituted a major portion of the hunting effort (Table 6).

Analysis:

Income and Costs - Efforts to increase the revenue generated from fee hunting were partially successful, as evidenced by the 154% increase in income resulting from the 1981-1983 hunts when compared to the 1978-1980 period. However, the \$1.12/acre/year net revenue figure was still far below the \$4.00/ acre/year goal.

The 154% increase is attributed primarily to reductions in costs and increased fees charged to participating hunters. Cost reductions were associated with the initiation of a season pass system which reduced personnel time in checking hunters in and out and with the elimination of the special liability insurance carried during the 1978-1980 period. The cost of this insurance was \$2.25/hunter. The increase in the fee assessed each hunter, from \$5/day in 1980 to \$10/day in 1981 and to approximately \$11/day in 1982 $(\$50 \text{ season pass} \div \text{ average hunter stay of } 4.5 \text{ days}), resulted in a$

corresponding increase in gross revenue. Increases in the amount of the deposit required from each party did not contribute substantially to the increased income generated during the 1981-1983 period as relatively few "no shows" (less than 3 per season) were encountered.

Hunter Participation - The substantial increase in the number of muzzleloader hunters participating in the fee hunting program had the potential to increase revenues. However, this factor was offset by a dramatic decline in the number of archery hunters. The end result was that the total number of participating hunters (1981-1983) was unchanged when compared to the 1978-1980 period. Extremely difficult hunting conditions and "low" deer populations, resulting in low hunter success rates, appear to be the primary reasons for the decline in the number of archery hunters participating in the fee hunts.

<u>Procedural Changes</u> - Increases in the number of days of hunting offered during the 1981-1983 seasons and the number of parties permitted on the hunting area appeared to have little effect on increasing the total number of hunters. This is primarily due to the fact that the additional days provided were either during the archery season where interest appears to be low, or during the first 10 days of the northern zone rifle season (for bucks only) where other hunting seasons conflict with this added opportunity. The regular increases in the numbers of hunting parties allowed on the hunting area were accompanied by a gradual decrease in average party size.

<u>Bid System</u> - The results of the bid system initiated in 1983, clearly identify a season pass fee approaching \$50/hunter as the "acceptable" charge for the hunting experience provided, in the minds of most hunters. The argument that this figure resulted from "conditioning" of hunters as a result of past fees charged, is refuted by the fact that the average bid fee submitted by hunters with no previous experience with the hunting program (\$49.08), was nearly identical to that of hunters who had participated in the program (\$47.22). In addition, \$50 and \$51 were the most common bid figures (mode) received and \$50 was the median bid.

Informal interviews with several of the hunting parties participating in the 1983 fee hunts, indicated that transportation, food and hunting license fees (particularly out-of-state license fees), collectively represented a cost of nearly \$200/hunter. When discussing the \$50 season pass fee with these hunters, this charge was consistently viewed in the context of the total costs of the hunting trip. This suggests that the amount hunters are willing to pay for the hunting experience provided may be related to the total cost of their hunting trip, not just the value of the hunting experience.

<u>Deer Density Control</u> - Based upon the estimates of the deer population on the hunting area (Table 1) during the 1981-1983 period, the combination of archery and muzzleloader hunting involving 200-250 hunters annually appears to have stabilized the population at a level of 10-12 deer/mi². The population model for combined archery and muzzleloader hunting (Table 7, Model A) indicates that an annual fall harvest of 25-30 deer (33% of the pre-season population) composed of nearly equal numbers of males and females has resulted in a stable population density. Previous research has shown that a deer density of 12-13 deer/mi² is compatible with timber management objectives.

The annual harvest achieved through archery hunting alone would not result in adequate deer density control (Table 7, Model C). It appears unlikely that the number of archery hunters could be increased to the point where effective control of deer densities would be possible on the hunting area. Severinghaus (1963) concluded that archery hunter densities of 100-200/mi² would be required to control deer densities on the Howlands Island Game Management Area. Such hunter densities would undoubtedly "destroy" the wilderness character of these hunts which has been identified as an important part of the hunting experience for which "our" hunters are willing to pay.

Muzzleloader hunters accounted for 86.4% of the deer harvested during the 1981-1983 period. As a result, the model (Table 7, Model B) developed for muzzleloader hunting is very similar to that for combined archery and muzzleloader hunting (Model A). Recognizing the limitations of these models, the differences between them are probably not significant. The advantage of including archery hunters in the fee hunting program is associated with increasing recreational opportunity and revenues. The contribution of this group to control of deer densities is minimal under the current level of participation.

Cost-Benefit Analysis of a Deer Density Control Program - To the forest land manager interested in producing high quality sawtimber, the income directly resulting from fee hunting may not be the most important economic consideration attached to a managed deer hunting program. Excessive deer densities which can result from insufficient harvest (Table 7 Model C and D), may prevent or delay the establishment of desirable regeneration, leading to a longer rotation age. Alternatively, deer browsing can reduce the stocking of desirable species in regenerating stands resulting in lower value wood products in the future. Selective deer browsing can result in the development of undesirable plant species in some stands which may require expensive site preparation treatments before adequate regeneration can be established. All of these situations result in either a reduction in income or an added cost to the forest land manager. For example, the average net income generated from timber production alone for northern hardwood stands on the Huntington Forest has been determined to be \$20.42/acre/year. Each year that regeneration is delayed by deer can be interpreted as a \$20.42 loss in revenue attributable to excessive deer densities.

If selective browsing alters species composition such that a low value species such as beech dominates the stand rather than sugar maple and yellow birch, average net income can decline to \$6.35/acre/year; a difference of \$14.07/acre/year. For sawtimber stands managed on a 100 year rotation, this could mean a loss of \$1407/acre.

In stands where deer browsing has led to the development of undesirable species as advanced regeneration or following a regeneration cutting, elimination of this unwanted vegetation in order to establish preferred species may cost anywhere from \$45 to \$115/acre.

When faced with these potential costs or losses in revenue, the benefits of a well managed deer density control program employing public hunting should

be attractive to forest land managers. Obviously, if deer densities are below the threshold at which negative impacts on vegetation occurs such costs or reductions in revenue are not a major concern. Maintenance of the deer population at a desired level compatible with timber management objectives provides opportunities for increased monetary returns from both the timber and white-tailed deer resource.

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<u>Recommendations</u>: This job has been terminated. The data collected and the information presented in this report should be useful in planning and developing future programs related to deer management in the northern zone as described in the Northern New York Strategic Deer Management Plan.

Year	# Hunters	<pre># Hunting parties permitted/hunt</pre>	<pre># Days of hunting</pre>	Hunter days	Type of hunting(\$	% of total hunter days)	
1978	225	25	16	670.5	archery	(100%)	
1979	164	25	24	479	archery muzzle.	(66%) (34%)	
1980	277	25	34	808	archery muzzle.	(33%) (39%)	
MEAN	222	25.0	24.7	652.5	rifle	(28%)	
1981	241	35	42	771	archery muzzle.	(29%) (71%)	
1982	193	45	35	910	archery muzzle.	(16%) (84%)	
1983	233	50	35	1197	archery	(16%)	
MEAN	222	43.3	37.3	959.3	muzzle	(84%)	

Table 1. Summary of Selected Statistics from Huntington Wildlife Forest Fee Hunting Program.

Year	Fee schedule per hunter In	ncome (per acre)	Net Income	Administrative costs (%)
1978	\$25 flat fee/4 day hunt \$20 deposit/party	\$5925 (1.10)	\$3754 (0.69)	36.6
1979	\$5/day \$10 deposit/party	\$2505 (0.46)	\$ 544 (0.10	78.3
1980	\$5/day \$10 deposit/party	\$4680 (0.86)	\$2958 (0.54)	36.8
MEAN		\$4470 (0.82)	\$2419 (0.44)	45.9
1981	\$10 day or \$50/season pass \$40 deposit/party	\$7380 (1.36)	\$5978 (1.10)	19.0
1982	\$50 season pass \$50 deposit/party	\$9650 (1.77)	\$7633 (1.40)	20.9
1983	Bid system \$25/season pass \$25 deposit/party	\$5825 (1.07)	\$4753 (0.87)	18.4
MEAN		7618 (1.40)	\$6121 (1.12)	19.6

	Table l.	Summary of	Selected Statistics	from Huntington	Wildlife Forest	Fee Hunting Program	(cont.).
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Personnel .	1981-1983 Mean (dollars)	% of Total Cost
Supervisor	210	14.0
Technicians (2)	185	12.4
Secretary	296	19.8
Temporary Service	247	16.5
Total Personnel	938	62.7
Other Costs		
Insurance	Not required	
Phone, postage	185	12.4
Maps, printing	89	5.9
Signs, repairs	50	3.3
Garbage bags	26	1.7
Outhouse maintenance/materia	ls 164	11.0
Misc. supplies	45	3.0
Total Supplies	559	37.3
GRAND TOTAL	1497	100.0

Table 2. Mean annual administrative and operational costs of fee hunts held on the Huntington Wildlife Forest 1981 - 1983.

Total # bid forms sent o	ut = 185	Total responses* = 60 (32	.4%)
New hunters	= 57 (30.8%)	New hunter responses =	22 (36.5%)
Past hunters	= 128 (69.2%)	Past hunter responses =	38 (63.5%)
# Responses by type of h	unters Minimum a	cceptable bids (>\$25/hunter)	Range in bids
Archers	= 10	58/60 (96.7%)	Overall \$ 7 - \$101
Muzzleloaders	= 50		Archery \$25 - \$ 80 Muzzle. \$ 7 - \$101
Mean bid by type of hunt	er		
Archers	= \$43.20 (N = 10)	New hunters = 49.08	
Muzzleloaders	= \$47.67 (N = 39)	Past hunters = 47.22	
Muzzleloaders (late hunt)	= \$52.54 (N = 11)	(No Significant Differe	nces)
Results based on all 60	responses		
Combined \overline{X} = \$47.82			
Median = \$50.00			*
Mode = \$50 and \$51			

Table 3. Summary of Huntington Wildlife Forest Fee Hunting Bid System Results.

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One bid sent in for entire party representing price all hunters in party were willing to pay. As a result, the 60 responses represent 243 hunters.

Table 4. Results of hunter opinion survey relating to extension of D.E.C. authority of deer management in the northern zone (based on Huntington Forest fee hunters only).

	Hunter Acceptance in percent ¹								
Hunter Group	Full Support	Conditional Support	Qualified Opposition	Full Opposition	Total				
Archery hunters	25 (6)	50 (12)	12.5 <u>(</u> 3)	12.5 (3)	100 (24)				
Muzzleloader hunters	26 (28)	40 (43)	24 (26)	10 (11)	100 (108)				
N.Y. residents	21 (11)	35 (18)	27 (14)	17 (9)	100 (52)				
Non-residents	29 (23)	46 (37)	19 (15)	6 (5)	100 (80)				

¹ Numbers in parentheses represent raw scores.

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	Hunter Acceptance in percent ¹								
Hunter Group	Full Support	Conditional Support	Qualified Opposition	Full Opposition	Total				
Huntington Forest Fee Hunters	26 (34)	42 (55)	22 (29)	10 (14)	100 (132)				
Respondents to N.Y.S.D.E.C Survey (Total northern and southern zones)	24 (540)	28 (630)	30 (676)	18 (405)	100 (2251)				

Table 5.	Comparison of hunter opinions towards extension of D.E.C. authority
	over deer management in the northern zone.

1 Numbers in parentheses represent raw scores.

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# Deer harvested		# Deer	Hunter	Estimated deer		
Year	Males	Females	Total	harvested/mi ²	success rate (%)	population/mi ²
1978	3	3	6	0.70	2.7	No estimate
1979	2	1	3	0.35	1.8	No estimate
1980	12	5	17	2.0	6.1	8
MEAN	5.7	3.0	8.7	1.02	3.5	-
1981	18	6	24	2.82	10.0	10
1982	8	19	27	3.18	14.0	10
1983	12	18	30	3.53	12.9	12
MEAN	12.7	14.3	27.0	3.18	12.3	10.7

Table 6. Summary of deer harvest statistics for Huntington Wildlife Forest fee hunts 1978 - 1983.

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	MODE	EL A	MODEI	B	M	ODEL C	MODI	EL D
	<u>Muzzleloader</u>	& Archery	Muzzleloader Only		Archer	ry Only	No Harvest	
Time	# males	# females	# males	# females	# males	# females	# males	# females
Fall 1981 ^a	42	42	42	42	42	42	42	42
Harvest 1981 ^b	18	6	14	4	4	2	0	0
Spring 1981	24	36	28	38	38	40	42	42
Recruitment ^C	15	15	15	15	16	16	17	17
all 1982	39	51	43	53	54	56	59	59
larvest 1982 ^b	8	19	8	17	0	2	0	0
Spring 1982	31	32	35	36	54	54	59	59
Recruitment ^C	13	13	14	14	22	22	24	24
all 1983	44	45	49	50	76	76	83	83
larvest 1983 ^b	12	18	10	17	2	1	0	0
Spring 1983	32	27	39	33	74	75	83	83
Recruitment ^C	11	11	13	13	30	30	34	34
-all 1984	43	38	52	46	104	105	117	117
Deer/mi² Fall	1984 9.	. 5	T	1.5	24	4.6	2	7.5

Table 7. Simulated deer population growth models under alternative harvest schemes for the Huntington Forest 8.5 mi² deer hunt study area.

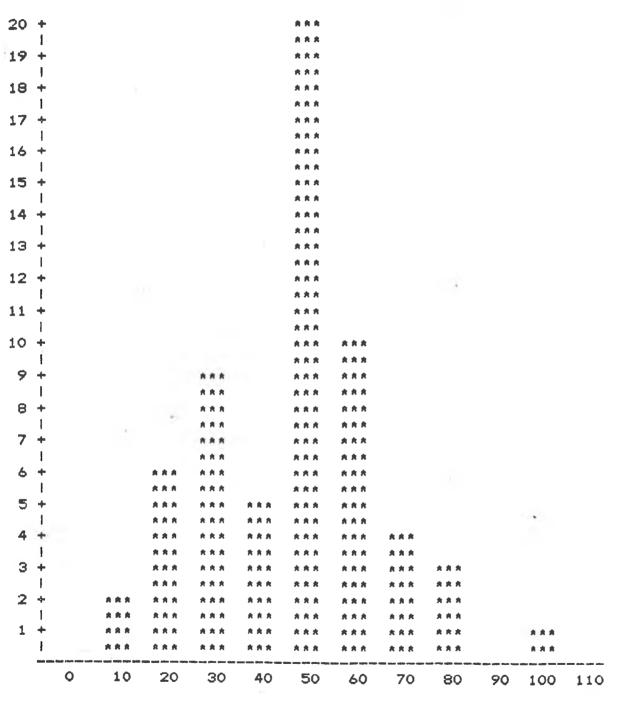
^a Pre-hunt population estimate (equivalent to 9.9 deer/mi²) based on Huntington Forest deer density calculation technique.

^b Harvest rates for models A, B, and C are observed rates for Huntington Forest fee hunts. Models assume only harvest mortality.

^C Recruitment rate = 1.10 (# of adult + yearling females). Number of breeding females estimated by reducing post-hunt population by 26% to account for non-breeding fawns. Recruitment rate and age composition of herd based on sample of 272 deer harvested on Huntington Forest 1966-1970.

Figure 1. Distribution of bids submitted by hunters for purchase of a season pass for the Huntington Wildlife Forest 1983 fee hunt.

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Amount of Bid (dollars) Class Midpoint

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	L			MMMMM	
20	+			MMMMM	
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	1	ммммм	ммммм	MMMMM	ммммм
	1	MMMMM	MMMMM	MMMMM	ммммм
16	+	ммммм	ммммм	ммммм	ммммм
	1	ммммм	ммммм	ммммм	ммммм
	1	ммммм	ммммм	ммммм	ммммм
	F	MMMMM	MMMMM	ммммм	ммммм
14	+	MMMMM	MMMMM	MMMMM	ммммм
	I	ммммм	MMMMM	MMMMM	ммммм
	I	ммммм	MMMMM	ммммм	ммммм
	1	ммммм	ммммм	MMMMM	ммммм
12	+	МММММ	MMMMM	МММММ	ммммм
	1	ммммм	ммммм	MMMMM	ммммм
	1	FFFFF	MMMMM	FFFFF	FFFFF
	ł	7777	ммммм	FFFFF	77777
10	+	FFFFF	ммммм	FFFFF	FFFFF
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		FFFFF	MMMMM	7777	FFFFF
8	+ MMMMM	FFFFF	ммммм	FFFFF	ㅋ ㅋㅋ ㅋ
	MMMMM	ㅋㅋㅋㅋ	ммммм	FFFFF	44777
	МММММ	FFFFF	MMMMM	FFFFF	FFFFF
	MMMMM	7777	MMMMM	FFFFF	FFFFF
6	+ MMMMM	FFFFF	MMMMM	7777	FFFFF
	I MMMMM	FFFFF	MMMMM	FFFFF	FFFFF
	HIR FEFE	77777	FFFFF	FFFFF	FFFFF
	ㅋㅋㅋㅋ {	7777	77777	7777	FFFFF
4	+ FFFFF	7777	FFFFF	ㅋㅋㅋㅋ	PFFFF
	FFFFF	ㅋㅋㅋㅋ	ㅋㅋㅋㅋ	ㅋㅋㅋㅋㅋ	FFFFF
	FFFFF	FFFFF	FFFFF	FFFFF	FFFFF
	ㅋㅋㅋㅋ /	4444	FFFFF	ㅋㅋㅋㅋ	FFFFF
2	+ FFFF	FFFFF	FFFFF	7777	FFFFF
	FFFFF	ㅋㅋㅋㅋ	ㅋㅋㅋㅋ		ㅋㅋㅋㅋ
	77777	FFFFF	FFFFF	FFFFF	77777
	ㅋㅋㅋㅋ	REFER	FFFFF	FFFFF	FFFFF
	Unknown	0.5	1.5	2.5-3.5	4.5+

Age Class (years)

No. of Deer Harvested

•

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1

Figure 2. Sex and age composition of deer harvested in the Huntington Wildlife Forest fee hunts 1981-1983. F = females. M = males.

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- Appendix I. Procedure for initiating a bid system for hunter reservation for the 1983 Huntington Wildlife Forest fee hunt.
- 1. Contact all party leaders from the last three years (1980-82), both archers and muzzleloaders.
- 2. Each party leader will be instructed to pool party members to determine what their party is willing to bid <u>per person</u> for a season pass to hunt the north unit of the HWF.
- 3. A total of 50 parties will be accepted for each hunt.

· · ·

- 4. The top 50 bids will be accepted if 50 bids of \geq \$25.00 per person are received. We feel this is the minimum acceptable bid, however party leaders will not be informed of this miminum until all bids are received so as not to influence bidding.
- 5. If 50 bids of > \$25.00 are not received, a subsequent mailing will be initiated to all parties which did not submit a bid or submitted a bid below the acceptable bid level. This mailing will set the season pass fee at the minimum acceptable bid level. These hunters will then be able to hunt if they are willing to pay the minimum fee. Following these mailings, all new hunters expressing interest in these hunts will be invited to participate at the minimum acceptable bid if openings are still available.
- 6. Those parties who submitted acceptable bids will be guaranteed a reservation, with the remaining parties coming from the subsequent mailing and additional advertising and new hunters as required.
- 7. A deposit of \$25.00 per party will be required. The deposit will not be charged until all bids have been received and the 50 successful parties selected and notified.
- 8. All people submitting an acceptable bid will be charged the minimum acceptable bid fee. This will be done to minimize conflict between hunters and between hunters and staff, and because the research effort does not depend on actually collecting the money but in determining their willingness to pay. Successful hunters will only be informed of this after they have submitted an acceptable bid.
- 9. The above process will be used for both archery hunters and muzzleloader hunters.
- 10. The entire bid process will be conducted through the mail and should be completed by June 30, 1983.

Appendix I (cont.) Hunter information packet for 1983 Huntington Wildlife Forest

STATE UNIVERSITY OF NEW YORK

- 20 -

COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

NEWCOMB CAMPUS NEWCOMB, NEW YORK 12852

ADIRONDACK ECOLOGICAL CENTER

23 May 1983

SYRACUSE CAMPUS SYRACUSE, N. Y. 13210

Schools of:

• Biology, Chemistry, & Ecology

Continuing Education
Environmental and

Resource Engineering

• Environmental and Resource Management

• Landscape Architecture Applied Forestry Research Institute

Empire State Paper Research Institute Institute of Environmental Program Affairs State University

Polymer Research Center U.S. Forest Service Cooperative Research Unit

CRANBERRY LAKE CAMPUS CRANBERRY LAKE, N. Y. 12927

Charles Lathrop Pack Demonstration Forest Cranberry Lake Biological Station

NEWCOMB CAMPUS NEWCOMB, N. Y. 12852

Archer & Anna Huntington Wildlife Forest Adirondack Ecological Center

TULLY CAMPUS TULLY, N. Y. 13159

Heiberg Memorial Forest Genetic Field Station

WANAKENA CAMPUS WANAKENA, N. Y. 13695 Forest Technician Program

WARRENSBURG CAMPUS WARRENSBURG, N. Y. 12885 Charles Lathrop Pack Demonstration Forest Summer Field Program Dear Interested Hunter:

Enclosed are all the materials you need to complete a reservation application for for the fall archery/muzzleloader hunts at the Huntington Wildlife Forest (HWF). As you may or may not know, all hunting done on the HWF is done in conjunction with a cooperative research project with the New York State Department of Environmental Conservation. In order to complete the stated objectives of this project, we are initiating a fee schedule this year based on a competitive bid system. Party leaders are asked to submit one bid on behalf of the entire party, representing the amount each hunter in the party is willing to pay for a season pass to participate in the fall HWF big-game hunts. All party members must have the same bid. For example, if the party leader submits a bid for a specified amount, each party member will be charged that amount upon arrival in the fall. All bids will remain sealed until June 30, 1983. At this time all bids will be opened. The top 50 acceptable bids will be chosen for each hunt.

As was mentioned previously, the bid made is for a season pass which includes a campsite and hunting privileges for all hunts. If you make a reservation for the early archery hunt and wish to also hunt during the muzzleloader or late combined hunt (or wish to hunt during both the muzzleloader and late hunts), please include this information on the reservation application. For those who wish to reserve a particular campsite, this will be done on a first come first serve basis based on the date the reservation application is mailed to us.

Season dates and all other information is enclosed.

Sincerely, 2An

Steven J. Weber Wildlife Intern

SJW:dh Encl.

RESERVATION APPLICATION

- 21 -

HUNTINGTON WILDLIFE FOREST BIG GAME HUNTS - 1983 This reservation is for hunt number: (circle one or more) #1 #2 S.pt. 27 - Oct. 14 Oct. 15 - Oct. 21 #3 Oct. 22 - Oct. 31 If the party quota for the hunt you selected above is filled, indicate alternate dates you would be interested in: The bid for a season pass for each member of my purty is \$ Purty Loader: Name Address Date:_____Birth Date:_____ Signature: How did you have about these hunts? (check one) Hinted at HWF before ______Newspaper _____N.Y. Sportsman mag. _____ United Bouchunters of W.J.____ Other_____Specify______ Frone number No. in purty (area code) If you wish to request a particular compsite, please indicate the site no. here: Site no. We will do our best to schedule this site for you unless it has already been assigned to another party. Cther Members in Party: Name_____Nome_____ Address______ Address______ Name_____Name_____ Address /ddress Faminders: No deposit is required at this time and you will not receive anything back from us until after June 30, 1983. Hunting parties making reservations for Hunt #1 be sure to read <u>Special Note</u> on information sheet concerning license requirements. Also, remember Hunt #3 is for bucks only and black bear.

Return Completed Form To:

Steven J. Weber Huntington Wildlife Forest Newcomb, New York 12852

HURITEKSTON WILDLIFE FOREST 1983 ARCHERY-MUZZLELOADER HURITS

SCHIDULE AND ENTOMATION SHEET

- A. where: Nowcomb Campus of the State University of New York College of Environmental Science and Forestry, Huntington Wildlife Forest Station, Newcomb, New York.
- B. Mhcn: Three hunting periods are scheduled during 1983 as follows:

Archers Only Hunt #1

Sept. 27 - Oct 14

Any portion of this period (bucks, does, bear) (See Special Note)

Muzzleloaders Only Hunt 42

Oct. 15 - 21 Any portion of this period (bucks, does, bear)

Combined Archery and Muzzleloader Hint Hunt #3

Oct. 22 - Oct. 31

Any portion of this puriod (both archirs and muzzleloaders will be permitted to hunt during this period for bucks and bear only)

There is no rifle hunting scheduled during the 1983 hunting season.

SPECIAL MOTE: Munting parties making reservations for the first four days of Eunt #1 (Sept. 27 - Sept. 30). Due to the way in which the N.Y.S. license year runs (Oct. 1 - Sept. 30), all hunters who wish to hunt during the first 4 days of Hunt #1 must have an unfilled 1982 big gam, license and archery stamp. Remember bear can be hunted on last years unfilled bear tag also.

- These hunts are restricted to bowhunters/muzzleloaders, both resident and non-residents. Each hunter must possess a valid, unfilled N.Y.S. resident C. Who: or non-resident big game license and archery/muzzlelonder stamp. No special purmits are required. All hunting activities, hours, licenses, equipment, bar-limits, etc. are as described by New York State Conservation Law for the Northern Zone of New York.
- D. What: Soth white-tailed deer and black bear hunting will be permitted. One deer of either sex and one black bear may be taken per license during Hunts #1 and #2. During flunt #3, only legally anthread bucks and bear may be taken. No small game hunting will be permitted on the hunting area.
- E. Area: An area of over 5,400 acres of managed private forest land in Newcomb, NY adjoining several thousand acres of public wilderness land will be open to hunting. This area is in the "heart" of the Adirondack Region of N.Y.S. Maps of the hunting area will be provided to each hunter upon arrival.
- F. Hunting: <u>Camping Parties</u>: A maximum of 50 camping parties will be permitted on the hunting area during any one hunt. The minimum party size (camping parties) is two persons. Hunting is by prior reservation only, reservation applications will be accepted through Sept. 25, 1983.

Camping parties may arrive after 12:00 noon on the day preceding their first scheduled day of hunting to set up camp and look over the area. Parties will be required to be off the hunting area by 12:00 noon on the day following the last day of their scheduled hunt. All parties participating in Hunt #1 only must leave the hunting area by 1:00 pm on Oct. 14, 1983.

Private camping areas, accessible by gravel road, are distributed throughout the hunting area. Each party will be assigned to a camping area, however party members may hunt anywhere within the 5400 acre hunting area. Campsites will consist of reasonably level, cleared ground with an outdoor toilet. No electricity or running water will be available. Water may be obtained from any of a number of brooks, streams and lakes within the hunting area. Firewood will be available at at least two locations within the hunt area.

G. Fee and Each party loader is required to submit a bid for what each member of his/ Payment: her party is willing to pay for a season pass (see attached letter and reservation application.

A deposit will be required for all <u>successful parties</u>. The mount of this deposit will be outlined and collected by return mail after June 30th. No deposit is required to submit the enclosed reservation application.

All parties are advised that the bid which they submit will be considered binding if they are among the top 50 bidders.

A purty (or a portion of the original party or a reorganized party) wishing to return and hunt on a second or third occasion during the hunting period may make a reservation in writing or may call anytime in advance of their arrival to let us know when they plan to hunt. No deposit is required for these returning hunting parties. However, these hunters must encok-in at our office or make special arrangements with us before going on the hant area.

- H. Theck-iN: The check station will be open from 9:00 am to 8:00 pm on Sept. 26 and from 12:00 noon until midnight on Oct. 14. In addition, hunters may checkin anytime between 8:00 am - 4:30 pm on week days throughout the hunting period. Any hunter who cannot check in during these times should indicate this on their reservation form or by calling us directly. We will try to accommodate you if at all possible. However, if your plans change before arrival, planse inform us as soon as possible.
- I. Sow to Following the receipt of a completed reservation form, a letter will be find us: sent to the party leader confirming your reservation. Included with this letter will be a map explaining how to get to our main office building to check-in. Specific directions to the hunting area and campsites will be available upon arrival. All hunting parties must check in at the Adironduck Ecological Center (our office building) located on the north side of Route 28N just outside of Newcomb, heading towards Long Lake.
- J. Then: Due to a busy schedule of research and management activities throughout the summer and early fall, we cannot allow hunters access to the hunting area for scouting purposes prior to Sept. 26.

All door and bear taken on the hunt area will be checked by staff personnel. Age, weight, anticr development, kill location, etc. will be recorded. All female deer will be dressed by staff personnel.

Portable tree stands will be permitted.

No firearms of any kind will be permitted on the area during Hunt #1. Muzzleloading firearms only will be permitted during Hunts #2 and 3.

The roads in the hunt area are narrow, gravel roads. If possible, please come in a vehicle which has good ground clearance. Hunters participating in Hunt #3 should be aware that snow is a real possibility. Please plan accordingly!

If you have additional questions regarding these hunts, contact:

Richard W. Sage Jr. Huntington Wildlife Forest Newcomb, New York 12852 Steven J. Weber Huntington Wildlife Forest Newcomb, New York 12852

Phone: Office (518) 582-4551 Home (518) 582-5471 Office (518) 582-4551 Home (518) 582-4602



Appendix I. (cont.)

STATE UNIVERSITY OF NEW YORK

- 24 -

COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

NEWCOMB CAMPUS NEWCOMB, NEW YORK 12852

SYRACUSE CAMPUS

ADIRONDACK ECOLOGICAL CENTER

21 July 1983

SYRACUSE, N.Y. 13210 Schools of: Biology, Chemistry, & Ecology Continuing Education Environmental and **Resource Engineering** Environmental and Resource Management Landscape Architecture **Applied Forestry Research Institute Empire State** Paper Research Institute Institute of Environmental **Program Affairs** State University Polymer Research Center U.S. Forest Service Cooperative Research Unit CRANBERRY LAKE CAMPUS CRANBERRY LAKE, N. Y. 12927

Charles Lathrop Pack Demonstration Forest Cranberry Lake Biological Station

NEWCOMB CAMPUS NEWCOMB, N. Y. 12852

Archer & Anna Huntington Wildlife Forest Adirondack Ecological Center

TULLY CAMPUS TULLY, N. Y. 13159

Heiberg Memorial Forest Genetic Field Station

WANAKENA CAMPUS WANAKENA, N. Y. 13695 Forest Technician Program

WARRENSBURG CAMPUS WARRENSBURG, N. Y. 12885 Charles Lathrop Pack Demonstration Forest Summer Field Program Dear Hunter:

The season dates printed in our previous literature are incorrect for hunts # 1 and 2. The correct dates are:

Hunt #1	Sept.	26	-	Oct.	13			
Hunt #2	0ct. 1	4	-	Oct.	20			
Hunt #3	0ct. 2	2	-	Oct.	31	(same	as	before)

The reasons for these changes are complicated and not worth bothering you with at this time. We hope this does not cause too much of a problem for anyone. As a result of these changes, the registration station will be open late on Sept. 25 and October 13.

We apologize for this last minute change in schedule and are looking forward to seeing you this fall.

Sincerely,

Steven J. Weber Wildlife Technician

SJW:dh

Appendix II.	Huntington	Wildlife	Forest	six	year	hunter	questionnaire
	summary.						

		1978	1979	1980	1981	1982	1983	Total	Percent
1.	ARE YOU	A MEMBER	OF AN ORG	ANIZED HUN	TING CLUB?				
		54 76	39 73	13 96	17 63	32 82	-	155 390	28 72
2.	DO YOU I	HUNT WITH:							
	Gun Bow ML N		88 88 40 112	98 61 61 231	70 56 62 142	97 79 100 116	- - -	456 413 263 731	62 56 36 36
3.	NUMBER (OF YEARS H	IUNTED:					Ave	<u>e</u> .
	Total Gun Bow ML		16	17.7	18 17.3 7.7 2.2		24.2	20. 19. 9. 3.	.0 .9
4.	WHERE DO) YOU NORM	ALLY HUNT?	I					
	NY PA NJ CT VT W.VA. N.H.	93 8 18 1 4 0 0	93 3 0 3 0 0	66 13 7 0 3 1 0	35 36 9 0 0 0 0	43 44 20 0 0 0 6	53 66 22 4 3 1 11	383 170 82 5 13 2 17	57.0 25.3 12.2 0.7 2.0 0.3 2.5
5.	DO YOU E	BELONG TO	A CLUB WHI	CH LEASES	LAND FOR H	HUNTING?			
	Yes No	36 92	25 84	22 85	23 54	34 82	-	140 397	26 74
	1982 ONL	Y – IF YE.	s ноw мисн	ARE YOUR	ANNUAL DUE	ES?			
	0-\$50 \$50 - \$100 \$100-\$20 > \$200					20 9 2 2			61 27 6 6
6.	HOW MANY	DAYS DO	YOU SPEND	BOW/ML HUN	NTING PER Y	'EAR?		Ave	
			16.3	14.4	23.4	21.1	16.0	18.	
7.	HOW MANY	DAYS PER	YEAR SPEN	T AFIELD N	ION-HUNTING	i?			
		35.0	36.6	47.3	48.6	-	40.4	41.	6

								14
				- 26 -				
÷								
	1978	1979	1980	1981	1982	1983	Total	Percent
8. HAVE YOU	J PAID A	FEE TO HUN	T BEFORE?					
Yes No	54 76	44 68	35 73	29 50	40 75	0.21	202 342	37 63
Big game Small game Water Other	35 3 -	28 4 1	25 5 7 0			-	88 12 11 1	66 9 8 1
Big & small	15	6	-	-	-	-	21	16
9. DO YOU U	ISUALLY H	IUNT BIG GA	ME ON PUBL	IC OR PRIV	ATE LAND?			
Public Private Both	52 51 26	43 52 17	51 60 3	32 36 12	52 64 13	-	230 263 71	41 47 12
10. DO YOU P	REFER TO	HUNT BIG	GAME ON PU	BLIC OR PR	IVATE LAND	?		
Public Private Both No Opinion	32 80 10 2	9 62 5 36	14 61 2 34	4 15 - 1	21 63 6 32	- - -	80 281 23 105	16 57 5 22
11. WAS YOUR	CAMPSIT	E ADEQUATE	?					
Yes No	113 15	90 1	100 4	75 4	1	ā	378 24	94 6
12. WERE ACC	ESS ROAD	S ADEQUATE	?					
Yes No	130 0	111 1	110 0	78 2	-	-	429 3	99 1
13. A. RESE	RVATION	PROCEDURE:						
Convenient Inconvenient Okay No Opinion	90 1 33 3	89 1 14 4	86 0 21 1	62 0 18 0	-	-	327 2 86 8	77 0.5 20 2.5
B. CHEC	K-IN CHE	CK-OUT PRO	CEDURE					
Convenient Inconvenient Okay No Opinion	94 0 29 3	95 1 12 2	86 1 17 2	62 0 16 0	-		337 2 74 7	80 0.5 17.5 2

				- 27 -				
121	1978	1979	1980	1981	1982	1983	Total	Percent
C. HUNI	TING AND	CAMPING RU	LES AND R	EGULATIONS				
Convenient Inconvenient Okay No Opinion	96 1 28 1	87 1 18 2	84 0 22 4	59 0 20 0	- - -	-	326 2 88 7	77 0.5 21 1.5
D. NUME	BER OF H	UNTERS						
Too many Too few Okay No Opinion	1 52 71 6	1 35 68 6	10 23 76 4	3 25 49 2	1 18 91 5	8 29 117 6	24 182 472 29	3.3 25.7 66.8 4.2
E. HUNT	ING CON	DITIONS						
Tough Average Easy No Opinion	103 25 - 1	65 42 2 1	66 40 2 3	25 55 0 3	33 70 2 7	99 46 9 6	391 278 15 21	55.5 39.4 2.1 3.0
F. MAPS								
Useful Okay Useless No Opinion	103 19 3 3	94 14 1 2	93 16 2 1	59 17 1 1	-		349 66 7 7	81 15 2 2
G. DEER	POPULAT	FION						
High Low All right No Opinion	2 91 15 15	4 75 14 14	2 56 45 15	0 45 21 10	5 66 31 11	6 96 37 23	19 429 163 88	2.7 61.4 23.3 12.6
H. BEAR	POPULAT	TION						
High Low All right No Opinion	17 43 19 44	12 38 16 37	2 50 17 47	0 49 5 23	4 58 14 39	0 57 11 62	35 295 82 252	5.3 44.4 12.3 38.0
14. DID YOU	HUNT ON	HUNTINGTON	FOREST ON	NLY OR ALSO	ON ADJACEI	NT STATE L	AND?	
Hunt. only State only Both	108 3 15	82 2 27	72 0 34	65 0 15	80 1 34	- - -	407 6 125	76 1 23

		1978	1979	1980	1981	1982	1983	Total	Percent
15.	DID YOU	HUNT FROM	1 A PORTABL	e tree sta	ND?				
	Yes No	100 30	34 71	6 101	12 68	22 93	-	174 363	32 68
16.	DID YOU	USE THE (GRID SYSTEM	?					
	Yes No	53 75	37 75	52 58	44 35	66 49	-	252 292	46 54
17.	DURING	YOUR HUNT	HERE WERE	YOU PRIMAR	ILY INTER	ESTED IN:			
A11		only	24 39 27 39 -	47 109 31 80	12 37 29 70 -	2 14 20 58 21	0 24 15 65 26	85 223 122 312 47	10.8 28.3 15.5 39.5 5.9
18.	HOW MAN	Y HOURS DI	D YOU HUNT	?					
		Mean	Sum	SD	SE	N			
1978 1979 1980 1981 1982 1983 Tota)) }	23.54 28.80 21.00 24.94 35.30 42.45 27.68	3013 2309 4851 3541 4059 6749 24522	15.48 21.63 12.00 12.38 18.91	1.37 2.05 0.79 1.04 1.76	128 111 231 142 115 159 886	7.56 h	ours/day	
19.	HOW MAN	Y DAYS DIE	YOU HUNT?						
1978 1979 1980 1981 1982 1983 Tota)) }	2.98 2.90 2.96 3.50 4.71 5.14 3.66	381 322 683 496.5 547 807 3236.5	1.25 1.75 3.25 1.53 2.66 2.09	0.11 0.17 0.21 0.13 0.25 0.17	128 111 231 142 116 157 885			
	SD = Sta	andard Dev	viation						
	SE = St	andard Err	ror						
20.	A. HOW	MANY DEEF Bear	R AND/OR BE	AR DID YOU Bucks	SEE? Does	Unknown	N		
		Dear		Digord				_	

	Bear	Deer	Bucks	Does	Unknown	N
1978	17	216	62	121	33	130
1979	32	237	44	163	30	112
1980	16	393	57	288	48	231
1981	5	374	55	240	79	142
1982	25	378	35	261	72	116
1983	4	581	50	353	178	128
Total	99	2179	303	1426	440	859
Mean/Yr.	16.5	363	50.5	237.7	73.3	143.2
Mean/Hunter	0.11	2.54	0.35	1.66	0.51	

B. HOW MANY SHOTS WERE TAKEN?

	Bear	Deer	N
1978	8	55	130
1979	3	13	112
1980	4	61	231
1981	0	56	142
1982	2	76	116
1983	1	90	160
Total	18	351	891
Mean/Yr.	3.00	58.50	148.50
Mean/Hunter	0.02	0.39	

C. HOW MANY HITS?

1978			
1979]	2	112
1980	3	27	231
1981	0	24	142
1982	2	22	116
1983	1	25	160
Total	7	100	761
Mean/Yr.	1.40	20.00	152.20
Mean/Hunter	0.010	0.13	

D. HOW MANY KILLED?

)	0 1 2 0 1 5 0.83 0.005	7 1 16 17 12 22 75 12.50 0.08	130 112 231 142 116 160 891 148.50					
		1978	1979	1980	1981	1982	1983	Total	Percent
21.	WAS THIS	HUNT WEL	L RUN?						
	Yes No	124 4	105 0	222 4	136 1	-	÷	587 9	98 2
22.	ASSUMING	YOU CAN	GET AWAY,	WOULD YOU	COME BACK	K NEXT YEAR	??		
	Yes No	80 45	89 16	97 7	74 3	-	-	340 71	83 17
23.	WOULD YOU	J BUY A S	SEASON PASS	COSTING \$	50.00?				
	Yes NO	-	16 91	20 80	24 48			60 219	22 78

				-	30 -				
		1978	1979	1980	1981	1982	1983	Total	Percent
24.	WOULD YOU	PAY \$3.00	TO DRIVE	THE ROADS	IN SUMMER	, IF HEF	RE?		
	Yes No	÷	57 48	61 43	50 22	-	4	168 113	60 40
25.	IF PERMIT	TED, WOULD	YOU COME	AND SCOUT	IN THE PR	E-SEASON	1?		
	Yes No	-	80 30	79 25	54 22	-	-	213 77	73 27
26.		AS OPEN TO HE FUTURE?		NTERS, WOU	LD THIS EFI	FECT YOU	R DECISI	ON TO HUN	Т
	Yes No	2	62 46	45 55	51 24	-	4	158 125	56 44
27.	DID YOU H	UNT HERE I	N PREVIOUS	S YEARS?					
	Yes No	-	25 86	61 164	62 30	58 58	79 80	285 468	37.8 62.2
28.	DO YOU NO	RMALLY TAK	E A HUNTI	NG TRIP LAS	STING ONE V	WEEK OR	MORE ANN	UALLY?	
	Yes No	74 55	-	-	-	79 35			
29.	DO YOU HU	NT SMALL G	AME WITH:						
	1978 only	- Bow Gun Both Not at	all	4 (3%) 60 (46%) 43 (33%) 22 (18%))				
30.	HOW DOES	LOGGING AF	FECT DEER	NUMBERS?					
	Increase Decrease No Effect No Opinio					89 1 4 20		162 13 16 48	68 5 6 21
31.	WOULD YOU	LIKE TO S	EE THESE H	IUNTS EXTER	NDED TO ONE	E WEEK R	ATHER TH	AN JUST 4	DAYS?
	Yes No	61 65							48 53
32.		PARTICIPA NTERS ONLY		BUCKS ONLY"	HUNT ON T	THIS PRO	PERTY DU	RING MID-M	NOVEMBER
	Yes No	42 84							33 67
33.	IS 12/DEE	R/MI ² ADEQ	JATE TO MA	AINTAIN YOU	JR INTEREST	?			
	Yes No	32 79							29 61

	1978	1979	1980	1981	1982	1983	Total	Percent
34.	DID YOU PASS U	P A GOOD SHOT	?					
	Yes		7 deer 2 bear					4
	No		161 dee	r				96
35.	WOULD YOU BE I	N FAVOR OF A	"ONE DEER	OF EITHER	SEX" SEA	SON IN N	ORTHERN N	IEW YORK?
	Yes No		67 45					60 45
36.	WOULD YOU BE I IN NORTHERN NE DIRECTLY TO DE	W YORK WHERE						
	Yes No		93 14					87 13
37.	SHOULD BOWHUNT IN ADDITION TO SEASON?							
	Yes No		32 83					28 72
38.	WOULD YOU BE IN A DEER OF EITHN LICENSE?							
	Yes No		96 15					86 14
39.	BASED ON YOUR I NUMBER OF DEER							
	More Less Same			31 4 23				53 7 40
40.	WOULD YOU FAVOR WOULD DESIGNATE MEAN THAT WHEN VICE VERSA, UNT	E THE NUMBER (THE BUCK QUOT)F BUCKS / TA WAS RE/	AND DOES TO ACHED, ONLY	BE HARVI	ESTED EA	CH YEAR?	THIS WOULD
	Yes No No Opinion			21 34 7	29 49 36	-	50 83 42	29 47 24

- 31 -

34										
		1978	1979	1980	198	31	1982	1983	Total	Percent
41.		J FAVOR A JCTION OF			PROGRAM	(ON	THIS PRO	PERTY)	AIMED AT M	AXIMIZING
	Yes No No Opinic	on			26 28 8		45 43 26	-	71 71 34	40 40 20
42.	UNDER A F SHOOTING		TROPHY В	UCK MAN	AGEMENT,	WOU	ld you bi	E MOST I	INTERESTED	IN
		vy bodied large an n			5 39 17					8 64 28
43.	WOULD YOU OF FAWNS?		POLICY (O	N THIS	PROPERTY) WH	ICH WOULI	DISCOL	JRAGE THE	SHOOTING
	Yes No No Opinio	n			47 10 5		79 25 11	-	126 35 16	71 20 9
44.	WOULD YOU	FAVOR A	POLICY (O	N THIS	PROPERTY) WHI	CH WOULD) RESTRI	CT THE SHO	OOTING OF:
	A. SPIKE	HORNS?								
	Yes No No Op	inion			27 33 1		38 64 13	-	65 97 14	37 55 8
	B. SPIKE	HORNS AND	FORKHORN	S?						
	Yes No No Op	inion			13 29 3		20 71 13	- -	33 100 16	22 67 11
45.	WOULD YOU DURING SE			FABLISH	ING A PRO	OGRAM	1 TO FEED) DEER (ON THIS PF	ROPERTY)
	Yes No No Opinio	n			44 15 3		70 24 21	- - -	114 39 24	64 22 14
46.	HAVE YOU	EVER PAID	A DAY USE	E HUNTIN	NG FEE?					
	Yes No						25 87			22 78
47.	HAVE YOU	EVER LEASI	ED LAND IN	DEPENDE	ENT OF AN	N ORG	ANIZED C	LUB?		
	Yes No						6 106			5 95
	IF YES, H	OW MUCH DI	ID YOU SPE	IND ANNU	JALLY?					
	0-\$50 2 (3	33%)	\$50-\$1	00 1 (17%)	\$1	00-\$200	0 (0%)	> \$200	3 (50%)

Appendix III. Questions from 1983 Huntington fee hunt questionnaire used to assess hunter attitudes toward D.E.C. deer management activities in northern zone.

1. What level of authority should New York State Department of Environmental Conservation (D.E.C.) biologists have for northern zone deer management?

full authority limited authority no authority

2. What is your opinion about antlerless deer harvest through the use of a deer management permit in New York State?

favor anywhere in N.Y._____ favor in northern zone only_____

favor in southern zone only_____ do not favor anywhere in N.Y._____

don't really care

- 14

3. Do you think there should be a law change to allow antlerless deer harvests in the northern zone of New York?

Yes No Not sure

4. If no, would you give your conditional approval for antlerless deer harvests in the northern zone of New York?

Yes____No____

Ids Forest Ecology Intern Title B. Reynolds Prepared by: 2MM

and

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Program Coordinator Title end)

March, 1984 Pater (dh) 30 Approved by:_ William F. Porter Project Leader

Approved by:

Gary Parsons, Acting Leader Game Species Section

Date

Date

Approved by:

Stuart Free, Chief Bureau of Wildlife

Date