DEER HARVEST REPORT 1999
THE BLACK ROCK FOREST

THE SEASON

November 22 to December 14

Seemingly a carbon copy of the 1998 Hunting Season, unseasonably mild weather throughout the season created comfortable temperatures but undesirable hunting conditions. The thermometer did not fall below 45^0 the entire opening week, with common highs of 60^0. This coupled with occasional fog and showers, reduced the effects of what was to be a productive week. The Thanksgiving holiday fell on the opening week this year, this usually brings more hunters into the woods, keeping the pressure on for a full week.

During the 23-day season 201 members from the Black Rock Fish & Game Club hunted at the forest, visiting 640 times. Hunters harvested 25 bucks and 24 does, totaling 49 deer.

ZONE	ACRES	HUNTER CAPACITY	HUNTER DAYS	HARVEST BUCKS	DOES
I	450	12	66	5	1
II	520	15	80	5	4
III	450	13	76	3	3
IV	460	16	92	2	3
V	400	11	74	2	1
VI	500	16	106	1	6
VII	150	7	29	1	1
VIII	330	11	101	4	5
Sanctuary IX	220	0	0	0	0
Mineral Springs	120	6	16	2	0
TOTALS	3600	106	640	25	24

SEASON HUNTING PRESSURE AND SUCCESS RATE

YEAR	PERMITS	HUNTERS	DMU#3P PERMITS	VISITS	VISITS PER HUNTER	SUCCESS RATE BUCKS	DMU	TOTAL
1993	395	186	90	577	3.1	12%	13%	18%
1994	434	198	110	619	3.1	8%	20%	19%
1995	351	190	86	543	2.8	7%	13%	13%
1996	275	153	72	384	2.5	16%	0%	16%
1997	369	164	52	515	3.1	18%	30%	28%
1998	489	203	101	670	3.3	16%	25%	29%
1999	453	201	127	640	3.2	10%	22%	24%

OPENING DAY - NOVEMBER 22

ZONE	HUNTER CAPACITY	HUNTERS	HARVEST BUCKS	DOES
I	12	12	1	0
II	15	11	3	0
III	13	13	1	1
IV	16	18	2	2
V	11	13	1	1
VI	16	16	1	1
VII	7	6	1	1
VIII	11	11	2	0
Mineral Springs	6	1	0	0
TOTALS	106	101	12	6

OPENING DAY HUNTING PRESSURE AND SUCCESS RATES

YEAR	PERMITS	HUNTERS	HARVEST BUCK	DOE	SUCCESS RATE BUCKS%	% OF TOTAL BUCK HARVEST
1993	68	97	13	0	13	56
1994	64	109	10	1	11	50
1995	63	102	8	1	8	57
1996	64	91	12	0	13	50
1997	57	86	14	0	16	42
1998	72	100	19	2	19	57
1999	68	101	12	6	12	57

1999 - DEER HUNTING SEASON - NOVEMBER 22 - DECEMBER 14

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I	450	12	66	5	1
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V	400	11	74	2	1
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VII	150	7	29	1	1
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Sanctuary IX	220	0	0	0	0
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TOTALS	3600	106	640	25	24

SEASON HUNTING PRESSURE AND SUCCESS RATE

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OPENING DAY - NOVEMBER ~~16~~ 22

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III	13	13	1	1
IV	16	18	2	2
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VI	16	16	1	1
VII	7	6	1	1
VIII	11	11	2	0
Mineral Springs	6	1	0	0
TOTALS	106	101	12	6

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Deer Harvest Report 1999 continued...

THE DEER

The harvest produced 49 kills, 25 bucks and 24 does all taken by rifle.

Bucks (25)

Fawns (4)

Of all biological data collected at the deer station this age class revealed the most important information pertaining to the population trend. Average fawns weights were only 45 lbs. (dressed). Since 1984, when deer first were weighed, a predictable trend has been established. Average fawn weights of under 50 lbs. (dressed) was followed by a decrease in the yearling take the following year. Concurring with an increase in the yearling take following a season of plus 50 lbs. average fawn weights.

Yearlings (11)

Below the 10-year average of 16 yearling bucks taken, these deer displayed a very healthy appearance. The average dressed weight of 89 lbs. was normal for the yearling deer of Black Rock Forest. The antler beam diameter averaging 16.3 mm is a healthy increment above the 15-year average of 15.8 mm. With average points of 3.5, duplicating a 15-year high, yearling bucks did not physically show any indication of being effected by the summer drought and lack of a fall acorn crop.

Adults (10)

Adult bucks were represented by 6 - 2 ½ yrs. old, 3 - 3 ½ yrs. old and a 4 ½ yrs old. All averaged measurements fell within each age class range, displaying a healthy adult component.

				MALES(BUCKS)												
AGE				ANTER BEAM					ANTLER POINT CLASS							SUB
YEARS	TOTAL			DIAMETER (mm)			WEIGHT (lbs)		Spike	3	4	5	6	7	8	LEGAL
			1999	RANGE	1998	1999	RANGE	1998								
				(hi-low)			(hi-low)									
Fawn	4					45	(36-56)	55								
1.5	11		16.3	(14-20)	16.2	89	(74-104)	88	3	1	7	0	0	0	0	0
2.5	6		22.5	(18-25)	23.1	111	(90-130)	115	0	1	0	1	2	0	2	0
3.5-4.5	4		26.3	(25-28)	28.6	122	(114-138)	137	0	0	0	0	1	0	3	0
Totals	25								3	2	7	1	3	0	5	0

Does (24)

Ironically, all age classes were represented in the 1999 Harvest (Fawn to 10 ½ yrs). The fawn age class is of concern, display much the same appearance as the male fawns, weighing an average of 43 lbs. Dressed. Yearling and adult weights were down an average of 10%. This may have been a result of the stress, brought on by the spring and summer drought, on milk production to sustain their young.

		ADULT FEMALE TO ADULT MALE HARVEST RATIO								
YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
AF/AM	0.44	0.45	0.91	0.45	0.81	0.78	0.00	0.40	0.64	0.86

Female (Does)											3 1/2+	
YEAR	Fawn	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	10.5	%	Total
1999	3	4	8	3	1	1	1	1	1	1	43%	24

Conclusion

The deer population appears to be entering a low in their cycle. The number of yearling bucks are low and the age class to replace them (fawns) next year are in poor physical state. Adult does reproduction potential is not optimum.

Underweight, with the lack of primary over-wintering food (acorns), physical conditioning outlook may be bleak. Over-wintering weather conditions will be critical to fawn survival and collective reproductive potential.

Deer Management Assistance Program (DMAP)

A new program, created by the New York State Department of Conservation to assist private land owners with management goals was implemented for the first time at the Black Rock Forest. The program provides antlerless permits to land owners, Black Rock Forest. The forest in turn provides these permits to deer hunters during the regular big game season. Hunters who do not possess the usual deer management unit permit (DMU 3P) or has already filled it are provided a tag to harvest an additional antlerless deer at the Black Rock Forest only. These permits are given to hunters at the BRF deer station upon signing and returned when signing out.

The effects of this program were beneficial to the management of the Whitetail Deer population. The availability of the permits increased the number of hunters entering the woods with an antlerless permit by 16%. From 1993 to 1998, 47% of hunter possessed antlerless permits, in 1999 63% of hunters had the potential to harvest an anterless deer when hunting Black Rock Forest.

Ten permits were issued to Black Rock Forest. Half were filled by Black Rock Forest hunters. Three were unfilled and two were not returned. Those permits (which only can be used at Black Rock Forest) not returned were probably accidental, but unacceptable. If this program is to continue at Black Rock Forest and function at its optimum potential an improved method of distributing permits, making holders more responsible, must be implemented next season.

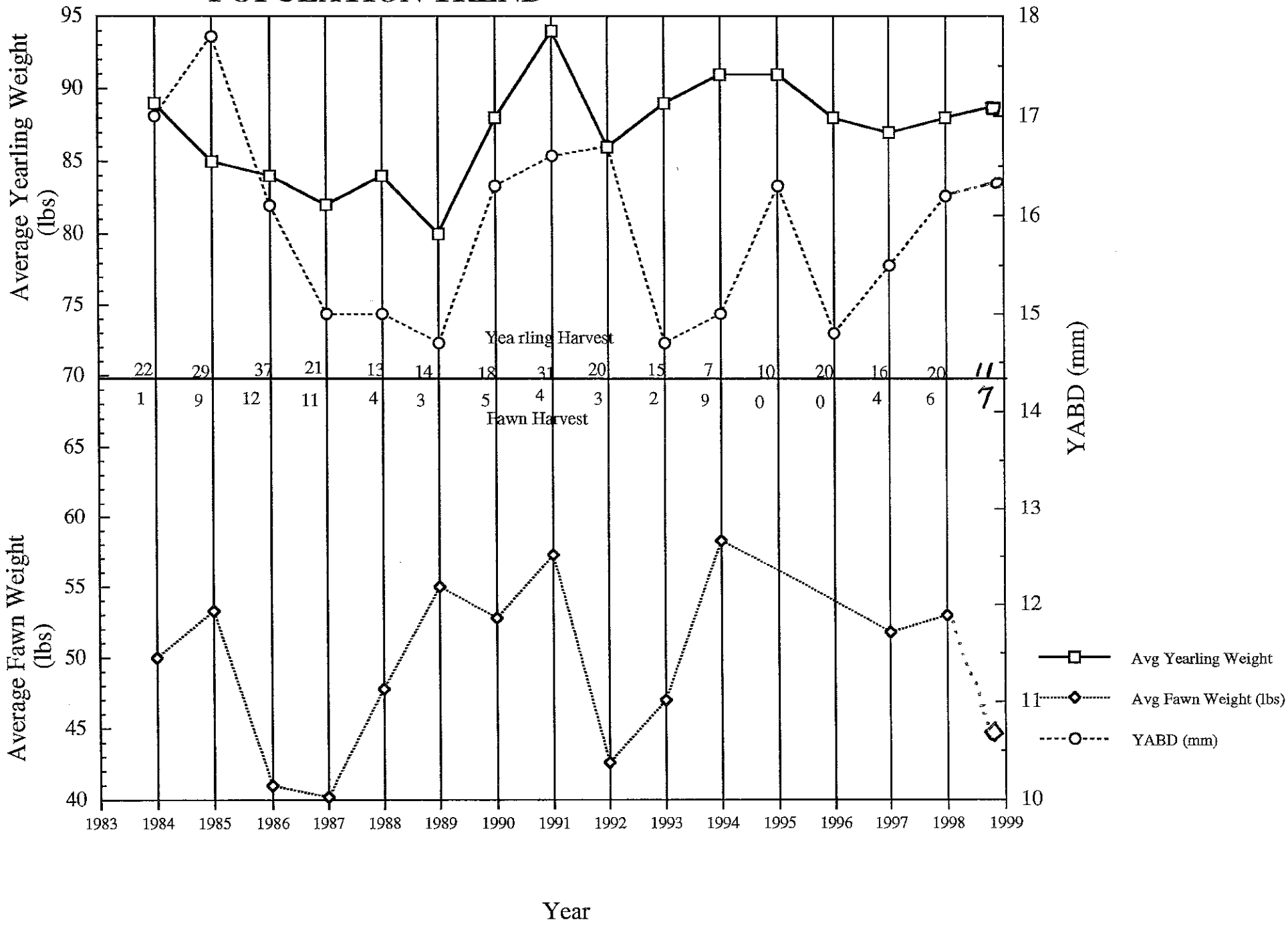
Management Experiment – Zone VI

This upper elevation zone of 500+ acres has repeatedly displayed a slow recovery rate due to hunting and environmental pressures. In an attempt to create better hunting opportunities, this zone will be isolated and new rules will possibly assist the recovery and development of deer in this area. Presently, Zone VI is bordered by the 220-acre sanctuary, were no deer are taken. In conjunction, a no doe and harvesting of bucks 4 points or better season will be applied to Zone VI only. The effects of this management change will be studied for the next two years and then re-examined.

New Maps

New zone maps have been developed by Kerri Barringer of Brooklyn Botanic Garden. The latest edition of these individual zone maps display, 10 meter contour lines, points of elevation in feet, parking areas and road directions, stone walls, trails, acreage and hunter capacity. These maps will continue to be modified and be available next hunting season.

POPULATION TREND



1984-1999 HARVEST DATA: FAWNS

YEAR	TOTAL FAWN HARVESTED	TOTAL ANTLERLESS TAKE	FAWNS AS % OF ANTLERLESS HARVEST	MALE		FEMALE	
				TOTAL HARVESTED	AVG DRESSED* WEIGHT (LBS)	TOTAL HARVESTED	AVG DRESSED WEIGHT (LBS)
1984	1	10	10%	0		1	50
1985	9	20	45%	6	56	3	48
1986	12	37	32%	8	45	4	33
1987	11	36	29%	7	38	4	44
1988	4	25	16%	1	44	3	49
1989	3	14	21%	3	55	0	0
1990	5	19	26%	3	56	2	48
1991	4	26	15%	3	59	1	52
1992	3	33	9%	1	48	2	40
1993	2	12	16%	1	46	1	48
1994	9	22	40%	4	65	5	53
1995	0	11	0%	0			
1996	NO ANTLERLESS TAKE						
1997	4	16	25%	3	53	1	48
1998	6	25	24%	3	55	3	51
1999	7	29	24%	4	45	3	43
TOTALS	80	308		47		33	
AVERAGE			26%		51		46

* DRESSED WEIGHT - Weight of animal with all internal body organs removed.
(Live weight calculaton = dressed weight x 1.25)

1990-1999 WHITE-TAILED DEER HARVEST REPORT

YEARLING MALES

YEAR	TOTAL MALES	SPK	ANTLER POINT CLASS 3	4	5	6	7	8	9	10	SUB LEGAL	AVG. PTS.	AVG BEAM DIA. (MM)	AVERAGE WT. (LBS)	FREQ. %
1990	17	5	5	3	2	2	0	0	0	0	0	3.5	16.3	88	56
1991	31	14	3	11	1	1	1	0	0	0	0	3.2	16.6	94	63
1992	20	6	3	7	1	3	0	0	0	0	0	3.7	16.7	86	61
1993	15	9	2	1	0	1	0	0	0	0	2	2.6	14.7	89	68
1994	7	3	2	1	1	0	0	0	0	0	0	3.0	15.0	91	44
1995	10	6	0	2	1	1	0	0	0	0	0	3.1	16.3	91	72
1996	20	11	6	2	1	0	0	0	0	0	0	2.6	14.8	88	83
1997	16	8	3	3	1	0	0	0	0	0	0	2.8	15.5	87	53
1998	20	9	2	5	1	2	0	1	0	0	0	3.5	16.2	88	60
1999	11	3	1	7	0	0	0	0	0	0	0	3.4	16.3	89	52

2 1/2 YEAR OLD MALES

YEAR	TOTAL MALES	SPK	ANTLER POINT CLASS 3	4	5	6	7	8	9	10	SUB LEGAL	AVG. PTS.	AVG BEAM DIA. (MM)	AVERAGE WT. (LBS)	FREQ. %
1990	13	0	1	2	1	4	1	4	0	0	0	6.1	21.6	105	40
1991	14	0	0	2	1	6	1	4	0	0	0	6.3	21.8	112	28
1992	7	0	0	1	4	0	1	1	0	0	0	5.6	20.9	110	21
1993	5	1	1	1	0	2	0	0	0	0	0	4.2	18.4	103	23
1994	2	0	0	1	1	0	0	0	0	0	0	4.5	20.0	122	12
1995	2	0	1	0	0	0	0	1	0	0	0	5.5	22.0	118	14
1996	2	0	0	1	1	0	0	0	0	0	0	4.5	21.5	119	8
1997	11	2	0	1	0	3	2	3	0	0	0	5.8	21.4	109	37
1998	8	0	0	1	2	1	2	2	0	0	0	6.3	23.1	115	24
1999	6	0	1	0	1	2	0	2	0	0	0	6.0	22.5	111	29

1990 - 1999 WHITE-TAILED DEER HARVEST REPORT

3.5 - 4.5 YEAR OLD MALES

Year	Total Males	Antler Point Class								Sub Legal	Average Points	Avg. Beam Dia. (mm)	Average Wt. (lbs.)	Freq. %
		Spike	3	4	5	6	7	8	9	10					
1990	1	0	0	0	1	0	0	0	0	0	0	5.0	22.0	94	3
1991	4	0	0	0	0	1	1	1	0	1	0	7.8	24.3	117	8
1992	6	0	0	0	1	1	1	3	0	0	0	7.0	26.3	140	18
1993	2	0	0	0	0	0	1	1	0	0	0	7.5	23.5	126	9
1994	7	0	0	1	1	2	0	3	0	0	0	6.4	23.1	124	44
1995	2	0	0	0	0	0	0	1	1	0	0	8.5	28.0	137	14
1996	1	0	0	0	0	0	0	0	0	1	0	10.0	26.0	138	4
1997	3	0	0	0	0	1	0	2	0	0	0	7.3	27.7	123	10
1998	5	0	0	0	0	1	1	3	0	0	0	7.4	28.6	137	15
1999	4	0	0	0	0	1	0	3	0	0	0	7.3	26.3	122	19

FEMALE AGE CLASS IN YEARS

Year	Fawn	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5-9.5	10.5+	TOTAL	% 3 1/2 yrs. +
1990	2	1	4	6	1	0	0	2	0	0	16	56
1991	1	7	6	3	1	3	0	1	0	1	23	39
1992	2	6	5	3	2	5	3	2	3	1	32	59
1993	1	2	3	1	2	1	1	0	0	0	11	45
1994	5	1	3	3	1	1	1	2	1	0	18	50
1995	0	2	3	2	3	0	1	0	0	0	11	54
1996			NO DOES TAKEN								0	
1997	1	1	4	2	1	1	0	1	0	0	13	45
1998	3	5	5	4	2	3	2	0	0	0	24	46
1999	3	4	8	3	1	1	1	1	1	1	21	43

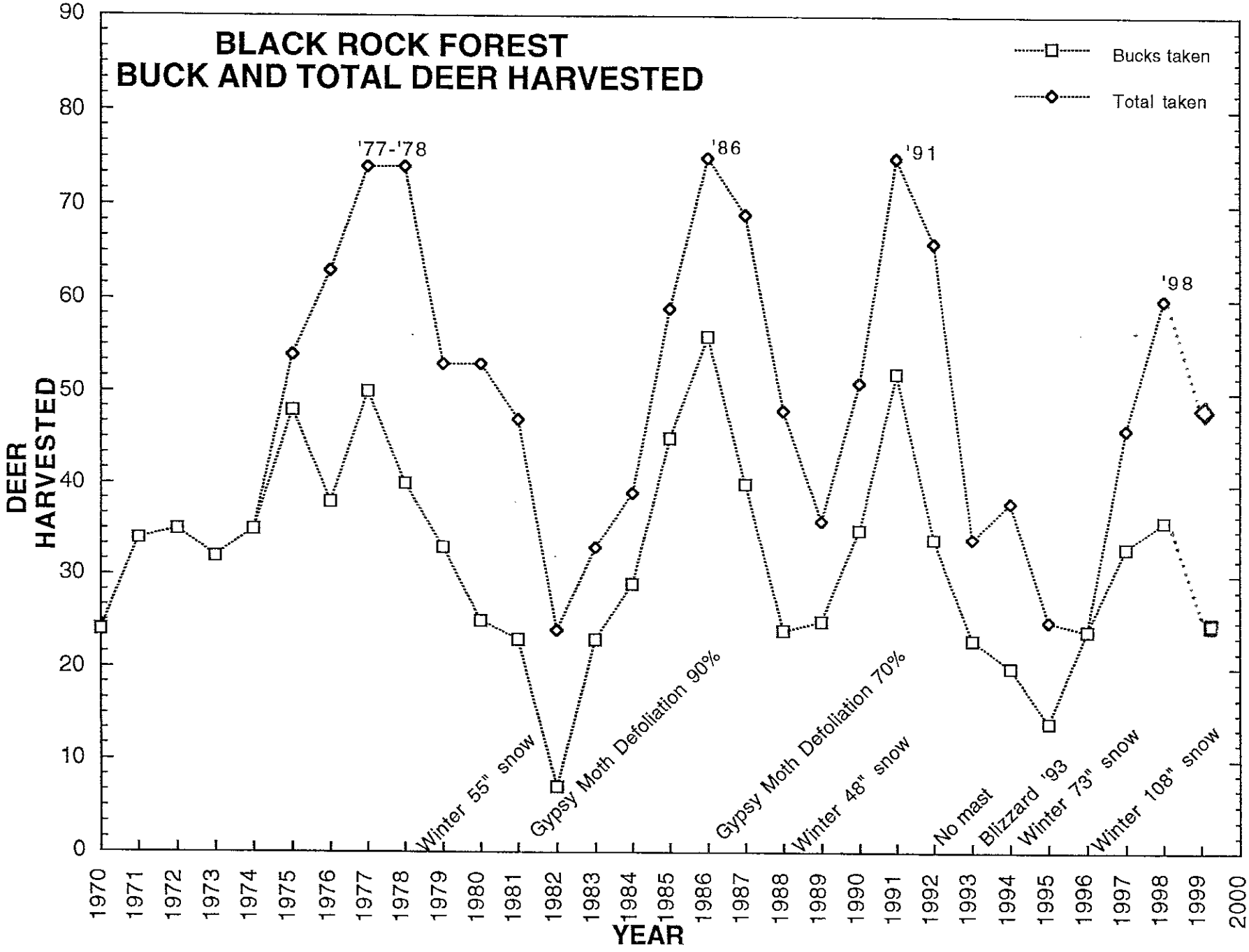
POPULATION COMPOSITION BY YEAR CLASS FOR DEER KNOWN TO HAVE BEEN HARVESTED

BIRTH									YEAR OF DEATH																				MIN POP			AGE AS OF
YEAR	19	84	19	85	19	86	19	87	19	88	19	89	19	90	19	91	19	92	19	93	19	94	19	95	19	96	19	97	19	98	19	99	KNOWN		TOTAL	FALL 1999
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		(yrs)
1983	22	5	3	5	2	4	0	5					0	2			0	1															27	22	49	
1984	0	1	32	2	9	7	1	6	0	5	0	1	0	0	0	1	0	3															42	27	69	
1985			6	3	37	5	10	8	0	4	0	3	0	0	0	0	0	2			0	1	0	0									56	28	84	
1986					8	4	22	1	8	6	0	4	0	1	0	3	0	3			0	0	0	0									41	28	69	
1987							7	4	13	3	7	1	1	6	0	1	0	5	0	1	0	2	0	0									29	25	54	
1988									2	3	15	1	13	4	4	3	1	2	0	1	0	1	0	0									36	16	52	
1989											3	0	18	1	14	6	5	3	0	2	0	1	0	1							0	1	42	17	59	10.5
1990													3	2	31	7	7	5	2	1	0	1	0	0			0	1			0	1	44	18	62	9.5
1991															3	1	20	6	5	3	7	3	0	3	0	0	0	0			0	0	36	18	54	8.5
1992																	1	2	15	2	2	3	2	2	0	0	0	1	0	2	0	1	23	23	46	7.5
1993																			1	1	7	1	2	3	1	0	0	1	0	3	0	1	11	10	21	6.5
1994																					4	5	10	2	1	0	3	2	1	2	0	1	19	12	31	5.5
1995																							0	0	20	0	11	4	4	4	1	1	36	9	45	4.2
1996																											16	1	8	5	3	3	27	9	36	3.5
1997																											3	1	20	5	6	8	29	14	43	2.5
1998																													3	3	11	4	14	7	21	1.5
1999																															4	3				FAWN
TOTAL	29	8	45	14	56	26	40	29	23	24	25	11	35	16	52	23	34	32	23	11	20	18	14	11	24	0	33	13	36	24	25	24	513	283	796	

*The data represents the population compositon each year at the time fawns were born.

DEER HARVEST
1970 - 1999

DATE	BUCK	DOES	TOTAL HARVEST
1970	24	0	24
1971	34	0	34
1972	35	0	35
1973	32	0	32
1974	35	0	35
1975	48	6	54
1976	38	25	63
1977	50	24	74
1978	40	34	74
1979	33	20	53
1980	25	28	53
1981	23	24	47
1982	7	17	24
1983	23	10	33
1984	29	10	39
1985	45	14	59
1986	56	29	85
1987	40	29	69
1988	24	24	48
1989	25	11	36
1990	35	16	51
1991	52	23	75
1992	34	32	66
1993	23	11	34
1994	20	18	38
1995	14	11	25
1996	24	0	24
1997	33	13	46
1998	36	24	60
1999	25	24	49


BLACK ROCK FOREST
BUCK AND TOTAL DEER HARVESTED
Bucks taken
Total taken
DEER HARVESTED
YEAR
'77-'78
'86
'91
'98
Winter 55" snow
Gypsy Moth Defoliation 90%
Gypsy Moth Defoliation 70%
Winter 48" snow
No mast
Blizzard '93
Winter 73" snow
Winter 108" snow
0
10
20
30
40
50
60
70
80
90
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000

Acorn Production

October 7, 1999

	Year	Northern Red Oak	Black Oak	Chestnut Oak	White Oak	Total
Number of acorns per acre	1995	23,501	6,221			29,722
	1996	2,626	3,870	27,233	11,888	45,619
	1997	31,864	27,579			59,443
	1998	29,816	13,974	6,848	9,339	59,977
	1999	Zero	Zero	Zero	Zero	Zero
% of sound acorns	1995	0.6	0.1			
	1996	0.6	0.1	0.9	0.9	
	1997	0.58	0.1			
	1998	0.45	0.1	0.99	0.96	
Number of sound acorns per acre	1995	14,100	622			14,722
	1996	1,575	387	24,509	10,699	37,170
	1997	18,481	2,757			21,238
	1998	13,417	1,397	6,780	8,965	30,559
Number of sound acorns per pound	1995	100	250			
	1996	100	250	74	154	
	1997	102	250			
	1998	93	250	74	154	
Pounds of acorns per acre	1995	141	2.5			143.5
	1996	15.7	1.5	331.2	69.5	417.9
	1997	181	11			192
	1998	144.2	5.5	91.6	58.2	299.5