



**BLACK ROCK FOREST
1998
DEER HARVEST REPORT**

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FOREST MANAGER**

DEER HARVEST REPORT 1998
THE BLACK ROCK FOREST

THE SEASON November 16 to December 8

The 1998 deer season was influenced by the extremely mild conditions. The temperature was below freezing for only five days of the 23 day season. The nice weather may explain the increase in hunters visiting the forest this year. 203 hunters visited the forest 670 times, the highest hunter visitation rate in 6 years. Sixteen percent of hunters harvested a buck and two out of every five bucks was six points or better. One hundred-one (101) hunters possessed D.M.U. 3P permits harvesting 25 antlerless deer, a 25% success rate. Combined, 29% of all hunters harvested a deer.

SEASON HUNTING PRESSURE AND SUCCESS RATE

YEAR	PERMITS	HUNTERS	PERMIT	VISITS		SUCCESS RATE		
				DMU#54	VISITS	PER HUNTER	BUCKS	DMU
1991	703	208					24%	36%
1992	503	227		759	3.4		15%	29%
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%

THE DEER

The harvest produced 58 kills, 36 bucks (34 rifle, 2 bow) and 22 does.

Bucks (36)

Fawns (3) - Three (3) button bucks were taken on Deer Management Unit 3P Permits (previously D.M.U. 54) Three six month olds at an average weight of 54.7 pounds.

Yearlings (20) - Of the 33 adult bucks (1 1/2 years and older) taken, 20 were yearlings, a 60.6% yearling male frequency. This percentage of yearlings in the take is within the 12 year range of 56-82%. Physical measurements displayed 45% of yearling bucks were spikes (2 points). Yearling antler beam diameters (YABD) averaged 16.2 mm, an increase from the 15.5 mm in 1997. Dressed body weights averaged 88 lbs were within the previous 12 yr range of means, 80 - 94 lbs.

Mature Adults (13) - Those bucks 2 1/2 years and older comprised 39% of the adult buck take. Ranging from 98 - 146 lbs dressed, mature adults averaged 123 lbs. This is an 11 lb increase from last year's average of 112 lbs. Initial body development may have been affected by the mild winter and large acorn crop of 1997, causing the increase in average weight. Antler growth was quite productive, 10 of the 13 mature adults sported 6 points or better and five of those were 8 pointers. Average beam diameters were slightly larger than those of the previous harvest.

YEARS	TOTAL	MALES(BUCKS)						ANTLER POINT CLASS	SUB Spike 3 4 5 6 7 8	LEGAL			
		ANTER BEAM DIAMETER (mm)			WEIGHT (lbs)								
		1998	RANGE	1997	1998	RANGE	1996						
Fawn	3				55	(54-56)	53						
1.5	20	16.2	(12-22)	15.5	88	(68-106)	87	9 2 5 1 2 0 1		0			
2.5	8	23.1	(17-28)	21.4	115	(98-132)	109	0 0 1 2 1 2 2		0			
3.5-4.5	5	28.6	(26-33)	27.7	137	(132-146)	123	0 0 0 0 1 1 3		0			
Totals	36							9 2 6 3 4 3 6		0			

Does (22)

Twenty-two does were harvested this year. This large increase from last year may be due to twice as many hunters having D.M.U 3P permits. Two does were found killed on 9W during hunting season and their ages and weights are included in the calculations. Adults averaged 89 lbs dressed. Age classes from fawn to 6 1/2 years old were represented.

Female (Does)

Year	Fawn	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5-9.5	10.5+	% 3.5+	Total
Harvest	3	5	5	4	2	3	2	0	0	0	46	24

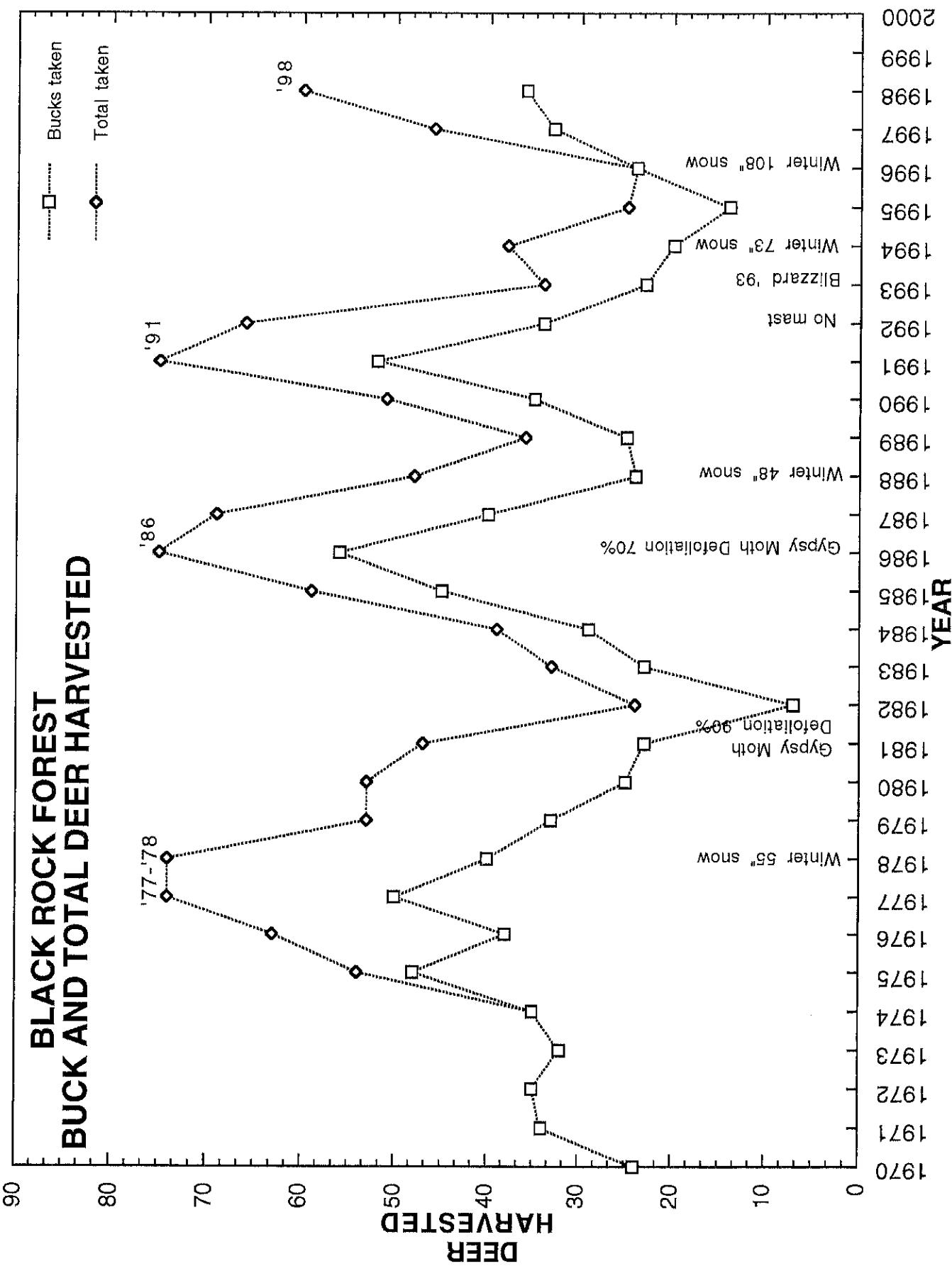
Adult Female to Adult Male Harvest Ratio

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
AF/AM	0.28	0.52	0.76	0.95	0.50	0.44	0.45	0.91	0.45	0.81	0.78	0.00	0.40	0.64

CONCLUSION

The Black Rock Forest deer herd has appeared to adhere to a cyclic population growth since 1974. Peaks in the buck takes of 1977, 1986, and 1991 have generated a 5-6 year cycle, interrupted only by the effects of the 90% forest defoliation by gypsy moths in 1981. Each peak has been followed by severe weather events (winters of '78,'88, and blizzard of '93) which have contributed to the fall in population numbers. Since the peak of 1991 the total lack of acorns in 1992, the blizzard of 1993, and the winter of 1996 have slowed the herd's recovery period. The consistent growth since the low of 1995, supported by sufficient acorn crops and soft winters of 1997 and 1998, has led to the near apparent peak condition of 1998. The data collected from mast crops and deer harvest of 1998 indicate a possible peak of the herd in 1999 (depending on winter severity).

BLACK ROCK FOREST BUCK AND TOTAL DEER HARVESTED



DEER HARVEST

1970-1998

DATE	BUCK	DOES	TOTAL HARVEST
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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

1997 DEER HUNTING SEASON---NOVEMBER 17 TO DECEMBER 9

ZONE	ACRES	HUNTER	HUNTER	HARVEST	
		CAPACITY	DAYS	BUCKS	DOES
I	450	12	81	2	4
II	520	15	100	2	3
III	450	13	68	6	3
IV	460	16	104	10	2
V	400	11	58	3	1
VI	500	16	98	3	4
VII	150	7	31	1	0
VIII	330	11	129	9	5
Sanctuary IX	220	0	0	0	0
Mineral Springs	120	6	0	0	0
TOTALS	3600	106	670	36	22

OPENING DAY - NOVEMBER 16

ZONE	HUNTER	HARVEST		
	CAPACITY	HUNTERS	BUCKS	DOES
I	12	11	1	0
II	15	20	1	0
III	13	11	1	0
IV	16	24	7	0
V	11	12	2	0
VI	16	7	2	0
VII	7	4	1	0
VIII	11	11	4	0
Mineral Springs	6	0	0	0
TOTALS	106	100	19	0

SEASON HUNTING PRESSURE AND SUCCESS RATE

YEAR	PERMITS	HUNTERS	DMU#54	VISITS		SUCCESS RATE		
			PERMITS	VISITS	PER HUNTER	BUCKS	DMU	TOTAL
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OPENING DAY HUNTING PRESSURE AND SUCCESS RATES

YEAR	PERMITS	HUNTERS	HARVEST		SUCCESS RATE		% OF TOTAL BUCK HARVEST	
			BUCK	DOE	BUCKS%			
1987	171	256	23	13	9			58
1988	139	208	17	10	8			77
1989	78	117	12	3	10			55
1990	88	132	17	1	13			53
1991	73	108	32	0	30			65
1992	71	109	18	0	17			55
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

1984 - 1998 WHITE-TAILED DEER HARVEST REPORT

YEARLING MALES

TOTAL YEAR MALES SPK	ANTLER POINT CLASS										SUB PTS.	AVG. DIA. (MM)	AVERAGE WT. (LBS)	FREQ. %	
	4	5	6	7	8	9	10	LEGAL							
1984	22	14	2	2	0	1	0	0	0	0	3	2.6	17	89	76
1985	29	12	3	8	3	2	1	0	0	0	0	3.4	17.8	85	82
1986	37	17	6	7	4	3	0	0	0	0	0	3.2	16.1	84	77
1987	22	14	1	2	0	0	0	1	0	0	4	2.6	15	82	66
1988	14	7	3	0	1	2	0	0	0	0	1	3.1	15	84	64
1989	15	8	2	0	0	1	0	0	0	0	4	2.5	14.7	80	68
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	0	2.6	14.7	89	68
1994	7	3	2	1	1	0	0	0	0	0	0	3	15	91	44
1995	10	6	0	2	1	1	1	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

2 1/2 YEAR OLD MALES

TOTAL YEAR MALES SPK	ANTLER POINT CLASS										SUB PTS.	AVG. DIA. (MM)	AVERAGE WT. (LBS)	FREQ. %	
	4	5	6	7	8	9	10	LEGAL							
1984	5	1	0	0	1	2	0	0	1	1	0	6.2	23.8	115	17
1985	3	0	0	1	0	0	0	0	0	0	0	7	23	114	8
1986	9	0	0	2	2	2	0	3	0	0	0	6	23.5	113	19
1987	10	1	2	4	1	0	2	0	0	0	0	4.5	19.4	101	30
1988	8	2	0	2	2	0	2	0	0	0	0	4.3	18.8	96	36
1989	7	0	0	3	1	1	1	1	0	0	0	5.4	20	95	32
1990	13	0	1	2	1	4	1	1	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	122	12
1995	2	0	1	0	0	1	0	1	0	0	0	5.5	22	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

1984 - 1998 WHITE-TAILED DEER HARVEST REPORT

1984 - 1998 HARVEST DATA: FAWNS

YEAR	TOTAL FAWN HARVESTED	TOTAL ANTLERLESS TAKE	FAWNS AS % OF HARVEST	TOTAL ANTLERLESS HARVEST	MALE	FEMALE	TOTAL HARVESTED WEIGHT (LBS)	TOTAL HARVESTED WEIGHT (LBS)	AVG DRESSED* HARVESTED WEIGHT (LBS)	AVG DRESSED HARVESTED WEIGHT (LBS)
1984	1	10	10%	0	0	1	50	50	50	50
1985	9	20	45%	6	56	3	48	48	48	48
1986	12	37	32%	8	45	4	33	33	33	33
1987	11	36	29%	7	38	4	44	44	44	44
1988	4	25	16%	1	44	3	49	49	49	49
1989	3	14	21%	3	55	0	0	0	0	0
1990	5	19	26%	3	56	2	48	48	48	48
1991	4	26	15%	3	59	1	52	52	52	52
1992	3	33	9%	1	48	2	40	40	40	40
1993	2	12	16%	1	46	1	48	48	48	48
1994	9	22	40%	4	65	5	53	53	53	53
1995	0	11	0%	0						
1996	NO ANTLERLESS TAKE									
1997	4	16	25%	3	53	1	48	48	48	48
1998	6	25	24%	3	55	3	51	51	51	51
TOTALS	73	279	22%	43	30					
AVERAGE				52	52					

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

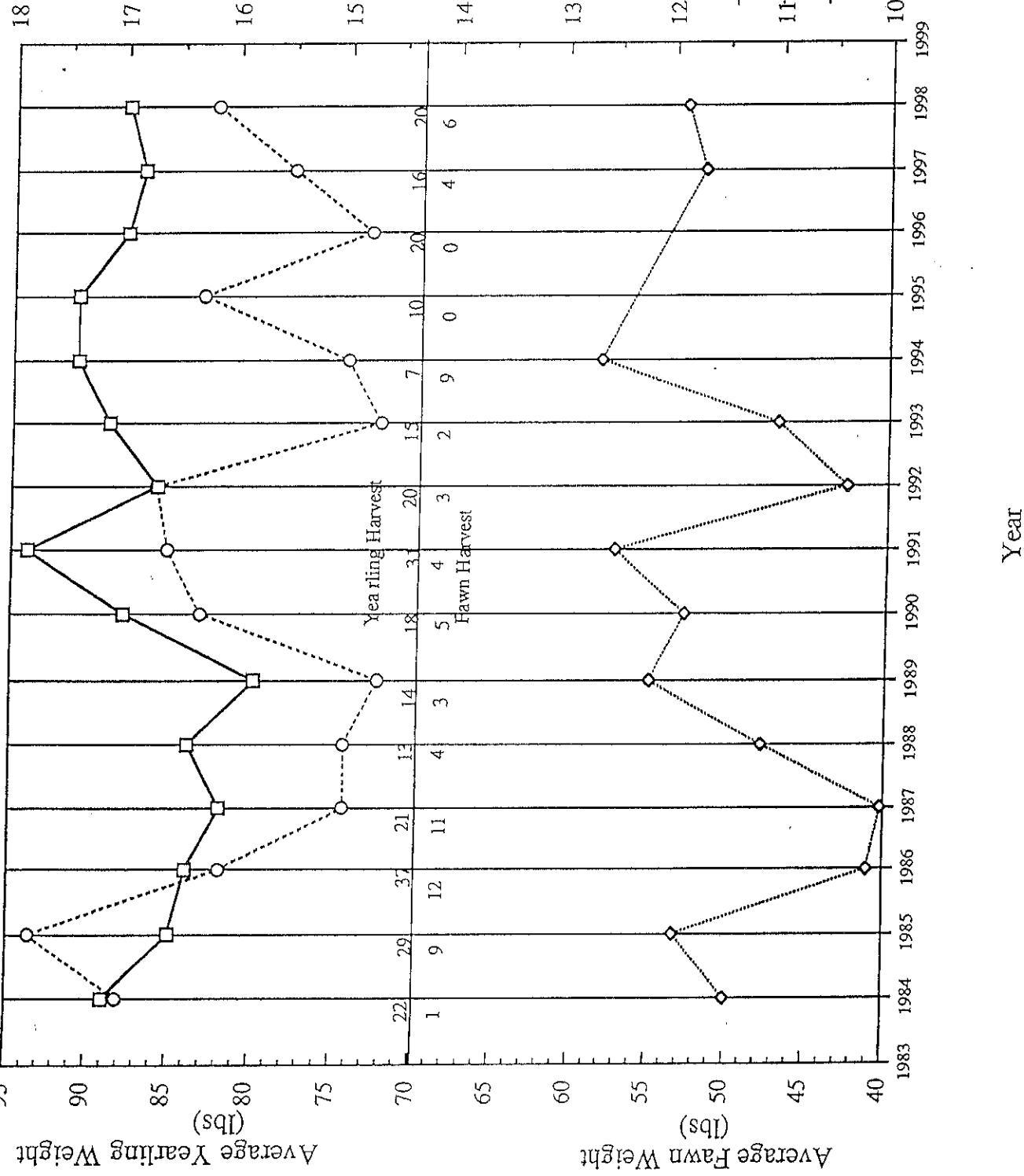
POPULATION COMPOSITION BY YEAR CLASS FOR DEER KNOWN TO HAVE BEEN REMOVED

BIRTH YEAR	YEAR OF DEATH												AGE AS OF FALL 1998																
	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				
1983	22	5	3	5	2	4	0	5			0	2			0	1													
1984	0	1	32	2	9	7	1	6	0	5	0	1	0	0	1	0	3								27				
1985		6	3	37	5	10	8	0	4	0	3	0	0	0	0	0	2	0	1	0	0				22				
1986			8	4	22	1	8	6	0	4	0	1	0	3	0	3	0	0	0	0	0				49				
1987				7	4	13	3	7	1	1	6	0	1	0	5	0	1	0	2	0	0				42				
1988					2	3	15	1	13	4	4	3	1	2	0	1	0	0	0	0	0				69				
1989						3	0	18	1	14	6	5	3	0	2	0	1	0	1							84			
1990							3	2	31	7	7	5	2	1	0	1	0	0	0	1						56			
1991								3	1	20	6	5	3	7	3	0	3	0	0	0	0						28		
1992									1	2	15	2	2	3	2	2	0	0	0	1	0	2	2	0	0	27			
1993										1	1	7	1	2	3	1	0	0	1	0	3	1	1	9	0	5.5			
1994											4	5	10	2	1	0	3	2	1	2	1	9	11	30	4.5				
1995												0	0	20	0	11	4	4	4	35	8	4.3			3.2				
1996													16	1	8	5	24	6	30	6	30	2.5							
1997														3	1	20	5	23	6	29	1.5								
1998																									FAWN				
TOTAL	29	8	45	14	56	26	40	29	23	24	25	11	35	16	52	23	34	32	23	11	24	0	33	13	36	24	4.88	25.9	74.7

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

*Known mortality Misc. - These are deer known to have died by other means than hunter kill. (Vehicle collision, starvation, predator kill, unknown)

POPULATION TREND



The most revealing data collected during the past fifteen years concerning the population trends of the White-tail herd are: Average fawn weight (AFW), average yearling weight (AYW), and yearling antler beam diameter (YABD). These three yearly averages are graphed together along with the listing of the yearling harvests.

Notice in 1986 when 37 yearlings were harvested, herd health indicators (AFW and YABD) were much lower than they had been the previous year. The result was the reduced yearling take of 21 in 1987. A continuation of falling AFW and YABD in 1987 produced a further reduction in the yearling take of 1988. As fawn weights increased 1987 to 1989, YABD and yearling weights followed in 1989-1991. The harvest responded with the harvest of yearlings peaking out at 31 in 1991.

Year

Acorn Production

October 7, 1998

	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
% 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

BLACK ROCK FOREST - BIG BUCKS

YEAR	HUNTERS NAME	POINTS	AGE/YRS	BEAM	
				WEIGHT(lbs)	DIAMETER (mm)
1988	BOB SMITH SR.	7	2 1/2	138	25
1989	JEFF PAVIA	8	2 1/2	147	26
1990	DAVE RICE	8	2 1/2	138	27
1991	STEVE OTLOWSKI	10	3 1/2	124	27
	JOHN O'ROURKE	8	3 1/2	138	25
	JOE SWANSON	7	3 1/2	140	21
	JEFF PAVIA	8	2 1/2	120	28
	BOB BATES	6	2 1/2	122	26
	DAVE BARKI	8	2 1/2	114	26
1992	FURMAN CONKLIN	5	4 1/2	162	31
	RALPH DEPEW	7	3 1/2	154	28
	DOUG SPAULDING	8	3 1/2	150	23
	BOB SHERMAN JR	8	3 1/2	120	27
	LOU GIZZARELLI	6	3 1/2	132	25
	TONY TALLARICO	8	3 1/2	122	24
	JEFF PAVIA	8	2 1/2	116	25
1993	HENRY MESEROLE	8	3 1/2	134	25
	AL CRUDELE	7	3 1/2	118	22
1994	AL CRUDELE (BOW)	8	3 1/2	130	26
	AL CRUDELE	6	3 1/2	142	27
	PAT PURCELL	8	3 1/2	130	23
	JOHN VITEK	8	3 1/2	110	23
1995	JAMES FURGUSON	9	3 1/2	152	28
	RALPH BREDEN	8	3 1/2	122	28
	SAM VRIESEMAN	8	2 1/2	124	22
1996	RON JURAIN	10	3 1/2	138	26
	ANTHONY TALLARICO	8	4 1/2	138	26
1997	GLENN SHEARER	6	3 1/2	140	31
	AL GHIOTTI	8	3 1/2	112	30
	EUGENE GHIOTTI	6	2 1/2	132	27
	DAVID ROULANGER	8	2 1/2	114	24
	SEAMUS LEAVEY	8	2 1/2	102	25
	JOE SWANSON	8	2 1/2	100	25
	FARREL HOPKINS	8	3 1/2	116	22
	HENRY MESEROLE	7	2 1/2	122	23
	DOUG SPAULDING JR.	7	2 1/2	112	23
	AL WOODRUFF	6	2 1/2	110	22
1998	JOHN STAPLES	8	4 1/2	146	30
	EUGENE GHIOTTI	8	3 1/2	135	33
	BILL FRANK	8	3 1/2	136	26
	JEFF WALKER	7	3 1/2	136	28
	EUGENE CONKLIN	8	2 1/2	122	24
	HARRY JONES	7	2 1/2	126	26
	CHRIS KIRWAN	8	2 1/2	110	23
	BOB SHERMAN	7	2 1/2	118	26
	TERRY McELROY	6	3 1/2	132	26
	DOUG SPAULDING	8	1Y 7M	102	22