



BLACK ROCK FOREST

1996

DEER HARVEST REPORT

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FOREST MANAGER**

THE BLACK ROCK FOREST

1996

THE SEASON

November 18 to December 10

The first no-doe season in 20 years was undertaken in 1996. Perhaps as a result, hunting pressure decreased by 25% from the 1991-95 average of 200 hunters. Over the course of the 23 day season 153 hunters harvested 24 bucks resulting in a 16% success rate (approximately 1 of 6 hunters was successful), the highest in 5 years.

THE DEER

The harvest produced 24 bucks, twenty of which were yearlings. Such a high yearling frequency, (83%), in this case is likely the result of previous winter effects and low deer densities, rather than an indicator of intense hunting pressure.

Average yearling antler beam diameter and weights of 1995 indicated good potential for winter survival and reproductive success in the spring of 1996. These average measurements decreased in 1996, even with a high rainfall growing season and an abundant acorn crop (Fall '96) bolstering body weights. These statistical decreases are again likely due to the abnormally severe winter of 95-96. (See 1995-96 Winter Severity Report) Body weights and conditions were surely affected, lengthening normal recovery periods and causing a dramatic decrease in antler beam growth.

Yearlings

	<u>1995</u>	<u>1996</u>	<u>1984-1994</u>
Number	10	20	
YABD	16.3 mm (+/- 0.8)	14.7 mm (+/- .5)	15.9 mm
Avg Weight	91 lbs	88 lbs	86.5 lbs

Using a simple t-test, yearly weights were not significantly different between years, but the drop of 1.6 mm in YABD was significant (at the .1 level)

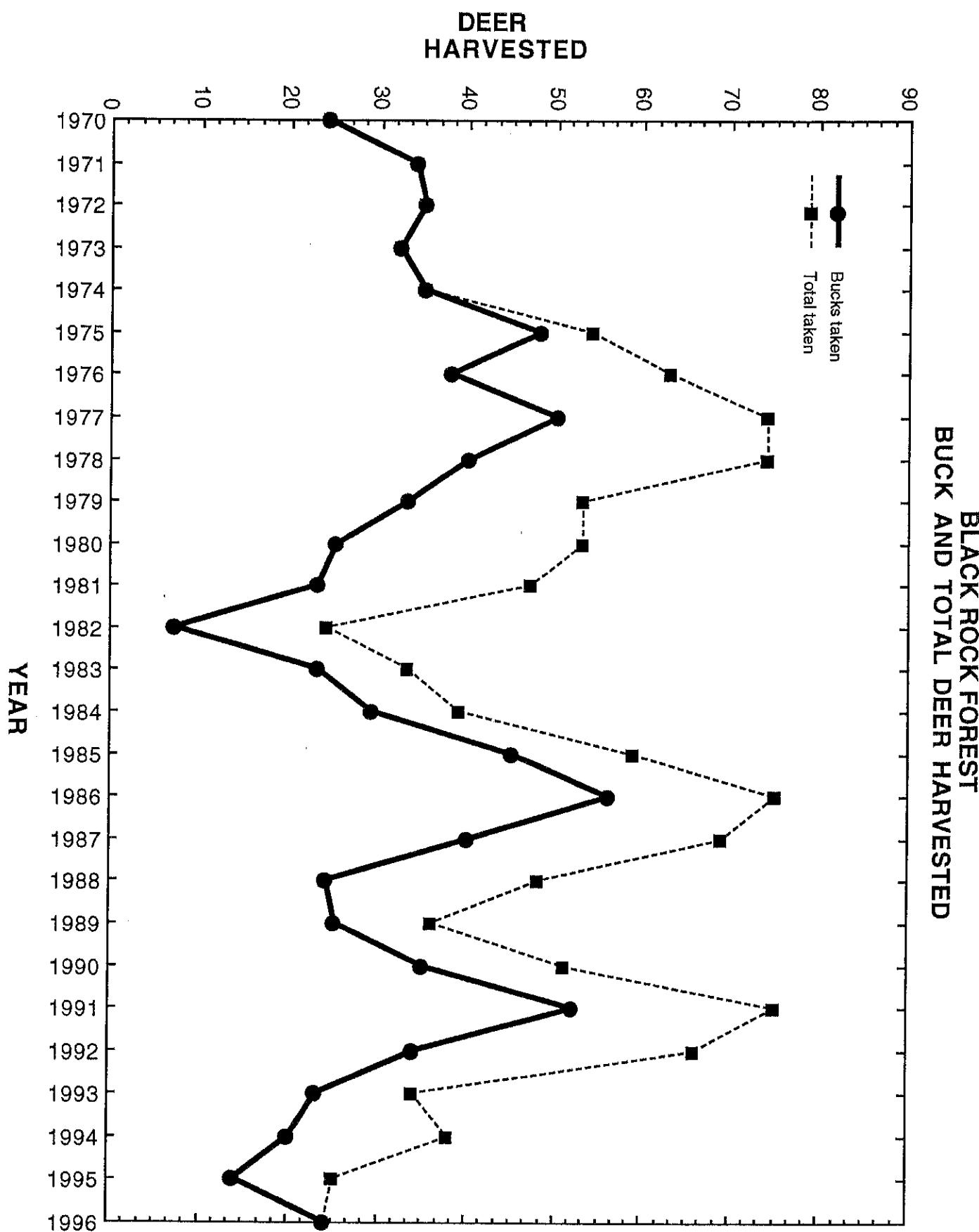
Analysis of these statistics could suggest over population and possible range degradation. But just the opposite is apparent. Present deer densities will be investigated during the winter months. Populations densities of ~~26-36~~ deer per square mile are expected.

18-22

NO DOES

The decision to not harvest anterless deer was resultant of several biological and management observations:

1. Harvest numbers indicate that the actual number of deer using the forest in 1994-95 was at its lowest density since 1982. Management techniques and natural limiting factors (weather, acorn crops, etc.) had effectively reduced the deer herd during the past 3 years.
2. Reconstruction of minimum population composition (p. 9) reveals the herd is presently a young community, yearlings and fawns representing an estimated 75 % of the population. Although older deer remain (5 1/2 years +) they are not in great number or proportion to the herd. Of great concern; the lack of deer in the 2 1/2, 3 1/2 and 4 1/2 age classes. These age classes experienced winter mortality, lower survival and birth rates due to abnormal winter conditions in 1993 and 1994. These under represented age classes are critical to the reproduction potential of the herd. Healthy components at these age parameters are capable of multiple fawns at birth therefore increasing herd reproduction potential.
3. Conditions that had arisen from 1993-5 caused extremely low densities of deer. It is conceivable that adult does were eradicated from their historical home ranges by antlerless hunting and winter mortality. Once vacant, these territories are not readily re-occupied during periods of low densities of deer, resulting in slow recovery in areas of marginal deer habitats, such as high elevation areas (Zone VI). The re-establishment of doe home range was therefore considered in 1995.



DEER HARVEST

1970-1996

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

1996 BLACK ROCK FOREST DEER HARVEST REPORT

YEARS	TOTAL	ANTLER BEAM AVERAGE			MALES (BUCKS)			ANTLER POINT CLASS			SUB LEGAL		
		DIA. (MM)	WT. (LBS)	SPIKE	3	4	5	6	7	8	9	10	10 LEGAL
Fawn	0	0	0										
1.5	20	14.8	88	11	6	2	1	0	0	0	0	0	0
2.5	2	21.5	119	0	0	1	1	0	0	0	0	0	0
3.5	1	26	138	0	0	0	0	0	0	0	1	0	0
4.5	1	26	138	0	0	0	0	0	0	1	0	0	0
Total	24				11	6	3	2	0	0	1	0	0

FEMALE (DOES)

YEARS	HARVEST	Fawn	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5-9.5	10.5+	TOTAL

ADULT FEMALE TO ADULT MALE HARVEST RATIO

YEAR	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
AF/AM	0.34	0.28	0.52	0.76	0.95	0.5	0.44	0.45	0.91	0.45	0.81	0.78	0

ADULT MALE HARVEST PER SQUARE MILE - (BLACK ROCK FOREST - 6 SQUARE MILES)

YEAR	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
AM/SM	4.8	6.5	8	5.5	3.7	3.7	5.3	8.2	5.5	3.6	2.7	2.3	4

1996 DEER HUNTING SEASON---NOVEMBER 18 TO DECEMBER 10

ZONE	ACRES	HUNTER	HUNTER	HARVEST	
		CAPACITY	DAYS	BUCKS	DOES
I	450	12	85	4	0
II	520	15	46	6	0
III	450	13	53	3	0
IV	460	16	45	4	0
V	400	11	48	4	0
VI	500	16	59	3	0
VII	150	7	14	0	0
VIII	330	11	26	0	0
Sanctuary IX	220	0	0	0	0
Mineral Springs	120	6	8	0	0
TOTALS	3600	106	384	24	0

OPENING DAY - NOVEMBER 18

ZONE	HUNTER	HARVEST		
	CAPACITY	HUNTERS	BUCKS	DOES
I	12	13	0	0
II	15	17	2	0
III	13	7	3	0
IV	16	16	2	0
V	11	17	4	0
VI	16	17	1	0
VII	7	1	0	0
VIII	11	3	0	0
Mineral Springs	6	0	0	0
TOTALS	106	91	12	0

SEASON HUNTING PRESSURE AND SUCCESS RATE

YEAR	PERMITS	HUNTERS	DMU#54	VISITS	VISITS PER HUNTER	SUCCESS RATE		
			PERMITS			BUCKS	DMU	TOTAL
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%		16%

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

1984 -1996 WHITE-TAILED DEER HARVEST REPORT

YEARLING MALES										2 1/2 YEAR OLD MALES										
YEAR	TOTAL MALES	SPK	ANTLER POINT CLASS							SUB PTS.	AVG. DIA. (MM)	AVERAGE WT. (LBS)	FREQ. %	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	3	2.6	17	89	76	17	23.8	115	117		
1985	29	12	3	8	3	2	1	0	0	0	3.4	17.8	85	82	16.1	23	114	114	8	
1986	37	17	6	7	4	3	0	0	0	0	3.2	16.1	84	77	15	23.5	113	113	19	
1987	22	14	1	2	0	0	1	0	0	4	2.6	15	82	66	1	19.4	101	101	30	
1988	14	7	3	0	1	2	0	0	0	0	1	3.1	15	84	64	1	21.6	105	105	40
1989	15	8	2	0	0	1	0	0	0	0	4	2.5	14.7	80	68	1	18.8	96	96	36
1990	17	5	5	3	2	2	0	0	0	0	0	3.5	16.3	88	56	1	21.6	105	105	40
1991	31	14	3	1	1	1	1	0	0	0	0	3.2	16.6	94	63	1	18.8	96	96	36
1992	20	6	3	7	1	3	0	0	0	0	0	3.7	16.7	86	61	1	21.6	105	105	40
1993	15	9	2	1	0	1	0	0	0	0	0	2.6	14.7	89	68	1	18.8	96	96	36
1994	7	3	2	1	1	1	0	0	0	0	0	3	15	91	44	1	21.6	105	105	40
1995	10	6	0	2	2	1	1	0	0	0	0	3.1	16.3	91	72	1	18.8	96	96	36
1996	20	11	6	2	2	1	0	0	0	0	0	2.6	14.8	88	83	1	21.5	119	119	8

1984-1996 WHITE-TAILED DEER HARVEST REPORT

3.5 - 4.5 YEAR OLD MALES

Total	Year	Males	Spike	3	4	5	6	7	8	9	10	Legal	Sub	Average Points	Avg. Beam Dia. (mm)	Average Wt. (lbs.)	Freq. %
1984	2	0	0	0	0	0	0	2	0	0	0	0	7	27	120	7	
1985	4	0	0	0	0	1	1	0	2	0	0	0	6.8	26.8	119	10	
1986	2	0	0	0	0	0	0	0	0	1	0	0	9	30.5	145	4	
1987	1	0	0	0	0	0	0	0	1	0	0	0	8	35	152	3	
1988	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1989	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1990	1	0	0	0	0	1	0	0	0	0	0	0	5	22	94	3	
1991	4	0	0	0	0	0	0	1	1	1	0	1	0	7.8	24.3	117	8
1992	6	0	0	0	0	1	1	1	3	0	0	0	7	7	26.3	140	18
1993	2	0	0	0	0	0	0	0	1	1	0	0	0	7.5	23.5	126	9
1994	7	0	0	0	1	1	2	0	3	0	0	0	0	6.4	23.1	124	44
1995	2	0	0	0	0	0	0	0	0	1	0	0	0	8.5	28	137	14
1996	1	0	0	0	0	0	0	0	0	0	1	0	10	26	138	4	
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. +			
1984	1	5	1	0	1	0	0	0	0	1	1	0	0	10	30		
1985	3	2	5	3	1	0	0	0	0	0	0	0	0	14	28		
1986	4	5	7	4	1	3	2	2	2	0	1	0	1	29	45		
1987	4	1	8	6	5	1	2	2	0	0	0	0	0	29	55		
1988	3	3	6	4	5	0	2	1	0	0	0	0	0	24	50		
1989	0	1	1	4	3	1	0	0	0	1	0	0	0	11	82		
1990	2	1	4	6	1	0	0	0	2	0	0	0	0	16	56		
1991	1	7	6	3	1	3	0	1	0	1	0	0	1	23	39		
1992	2	6	5	3	2	5	3	2	3	1	0	0	1	32	59		
1993	1	2	3	1	2	1	1	0	0	0	0	0	0	11	45		
1994	5	1	3	3	1	1	1	1	1	1	1	0	0	0	18	50	
1995	0	2	3	2	3	0	1	0	0	0	0	0	0	0	11	54	
NO DOES TAKEN																	

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

BIRTH YEAR	YEAR OF DEATH												KNOWN			MORTALITY			MIN POP			AGE AS OF							
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	TOTAL FALL 1996	KNOWN	MISC.	M	F	(yrs)			
1980	0	1			0	2	0	2												0	6	6							
1981	2	0	0	1	0	3	0	2	0	1	0	1								2	9	11							
1982	5	1	4	3	0	1	0	1	0	2										9	9	18							
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	0	2				56	28	84					
1986		8	4	22	1	8	6	0	4	0	1	0	3	0	3	-	0	0	0			41	28	69					
1987		7	4	13	3	7	1	6	0	1	0	5	0	1	0	2	0	0	0			29	25	54					
1988		2	3	15	1	13	4	4	3	1	2	0	1	0	0	0	0	0	0			36	16	52					
1989			3	0	18	1	14	6	5	3	0	2	0	1	0	1	0	1	0			42	16	58					
1990				3	2	31	7	7	5	2	1	0	1	0	0	0	0	0	0			44	17	61					
1991					3	1	20	6	5	3	7	3	0	3	0	3	0	0	0			36	18	54					
1992						1	2	15	2	2	3	2	2	2	2	0	0	0	0			24	19	43					
1993							1	1	7	1	2	3	2	3	1	0	1	0	0			11	6	17					
1994																4	5	10	2	1	0	16	7	23					
1995																0	0	0	0	0	0	0	0	1.5					
1996																				0	0	0	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	435	253	688

*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, predatore kill, unknown)

YEAR	HUNTERS NAME	BLACK ROCK FOREST BIG BUCKS			BEAM DIAMETER (mm)
		POINTS	AGE/YRS	WEIGHT(lbs)	
1984	GREG LUDATO	8	2 1/2	126	29
	LARRY KIRWAN	7	3 1/2	120	29
1985	RAY KENNY	10	2 1/2	130	27
	AL PALUMBO	8	3 1/2	123	36
	JOEL TRUNCALI	8	3 1/2	130	24
1986	FURMAN CONKLIN	10	3 1/2	157	31
	TOM STEED	8	3 1/2	132	30
	JIM BOTHWELL	8	2 1/2	121	28
	PETE VETERE	8	2 1/2	125	27
1987	GENE CONKLIN	8	3 1/2	152	35
	CHARLES CHATFIELD	8	2 1/2	135	28
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