BLACK ROCK FOREST
2015 DEER HARVEST REPORT

THE SEASON

November 21 to December 13

The harvest produced 21 kills.

Bow Season --	0 Deer	0 Buck	0 Antlerless
Rifle Season –	21 Deer	16 Bucks	6 Antlerless
Muzzleloader season --	0 Deer	0 Bucks	0 Antlerless

SEASON HUNTING PRESSURE AND SUCCESS RATE

YEAR	HUNTERS	HUNTER VISITS	PERMITS (VEHICLES)	TOTAL TAKE	SUCCESS RATE	
					BUCKS	TOTAL
					Legal 3"+	Bucks and Antlerless
2015	128	402	281	21	10%	16%
2014	118	358	208	25	12%	21%
2013	172	497	347	33	13%	19%
2012	130	393	279	30	15%	23%
2011	154	449	311	48	14%	31%

PERMITS AND LICENSES FILLED

Type	Number Harvested
Big Game	
Rifle	13
Bow	0
Muzzleloader	0
Deer Management Unit Permit	3
Deer Management Assistance Program	5
	21

ZONE	ACRES	HUNTER VISITS	BUCKS	DOES
I	450	59	3	2
II	520	36	3	0
III	450	47	5	1
IV	460	67	1	3
V	400	66	0	0
VI	500	38	2	0
VII	150	7	0	0
VIII	330	39	0	0
MINERAL SPRINGS	120	11	1	0
SANCTUARY	220	27	0	0
STATE LAND		5	0	0
TOTAL	3600	402	15	6

YEARLING MALES

YEAR	TOTAL	ANTLER CLASS									BEAM	WEIGHT
		SPK	3	4	5	6	7	8	sub legal	UK	(mm)	(lbs)
2015	6	1	1	3	----	1	----	----	----	----	15	88
2014	5	2	1	----	----	----	----	----	2	----	14	90
2013	7	3	----	2	----	----	----	----	2	----	14.4	86
2012	4	----	2	----	----	----	----	----	2	----	16.5	77
2011	12	2	1	3	2	2	----	----	1	1	16	88
2010	14	2	2	4	3	----	1	----	2	----	16.6	93

2 ½ YEAR OLD MALES

YEAR	TOTAL	ANTLER CLASS										BEAM	WEIGHT
		SPK	3	4	5	6	7	8	9	10	UK	(mm)	(lbs)
2015	4	1	----	1	1	----	1	----	----	----	----	20.2	104
2014	6	----	----	2	1	2	----	1	----	----	----	23	114
2013	7	----	----	2	1	3	1	----	----	----	----	21.6	101
2012	11	----	1	2	2	2	----	1	1	----	----	20.5	108
2011	7	----	----	----	1	----	1	4	----	1	----	24.6	116
2010	8	1	----	1	1	----	2	2	1	----	----	21.7	103

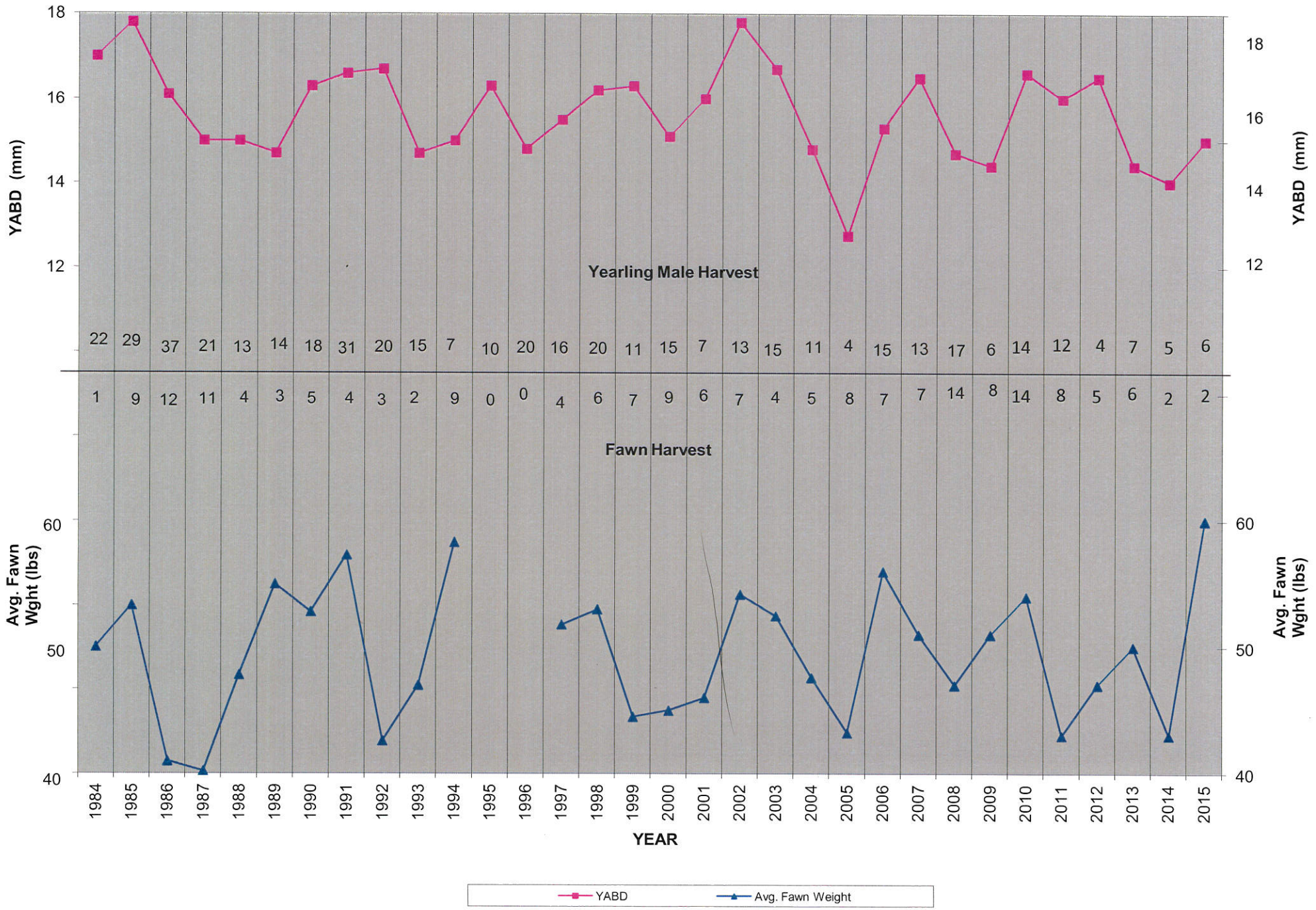
3 ½ + 4 ½ YEAR OLD MALES

YEAR	TOTAL	ANTLER CLASS										BEAM	WEIGHT
		SPK	3	4	5	6	7	8	9	10	UK	(mm)	(lbs)
2015	3	----	----	----	----	----	2	----	1	----	----	27.3	133
2014	3	----	----	----	----	1	1	1	----	----	----	26	112
2013	5	----	----	----	1	2	----	1	1	----	----	26	123
2012	3	----	----	----	----	----	----	1	1	1	----	28.3	123
2011	5	----	----	----	----	----	----	4	----	----	1	26.2	120
2010	4	----	----	----	----	----	2	2	----	----	----	29.2	132

ANTLERLESS

		ANTERLESS													
		MALES		FEMALES											
AGE CLASS	Total	BB	SUB LEGAL	Fawn	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	10.5	Unknown	% 3.5+
Number Harvested	8	2	0	0	1	1	3	1	0	0	0	0	0	0	50%
Avg. Dressed Weight		60				86	91	90							

POPULATION TREND



1984-2015 HARVEST DATA: FAWNS

YEAR	TOTAL FAWN HARVESTED	TOTAL ANTLERLESS TAKE (INCLUDES BB) (AND SUBLEGALS)	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	31%	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	28	25%	4	45	3	43
2000	9	24	37%	6	45	3	46
2001	6	25	24%	4	48	2	41
2002	7	26	27%	5	54	2	54
2003	4	13	31%	3	55	1	44
2004	5	25	20%	3	53	2	39
2005	8	18	44%	3	46	5	42
2006	7	23	30%	5	60	2	54
2007	7	25	28%	2	51	5	51
2008	14	42	33%	4	49	10	46
2009	8	38	21%	4	49	4	53
2010	14	35	40%	4	56	10	54
2011	8	24	33%	2	43	6	43
2012	5	14	36%	1	50	4	46
2013	6	16	38%	3	49	3	50
2014	2	12	17%	0	0	2	43
2015	2	8	25	2	60	0	0
TOTALS	192	702	27%	98		94	

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

2000 - 2015 WHITE-TAILED DEER HARVEST REPORT

YEARLING MALES

YEAR	TOTAL MALES	ANTLER POINT CLASS								SUB	AVG.	AVG BEAM	AVERAGE	FREQ.
		SPK	3	4	5	6	7	8	9	10	LEGAL	PTS.	DIA. (MM)	WT. (LBS)	%
2000	15	4	3	6	1	0	0	0	0	0	1	3.2	15.1	84	50
2001	7	5	0	1	0	0	0	0	0	0	1	2.3	16.0	90	29
2002	13	6	1	3	2	0	0	0	0	0	1	3.1	17.7	88	52
2003	15	5	1	1	2	5	0	0	0	0	0	4.5	16.7	90	55
2004	11	4	0	1	1	0	0	0	0	0	5	2.8	14.8	80	55
2005	5	2	0	2	0	0	0	0	0	0	1	3.0	14.0	75	31
2006	15	7	1	2	3	1	0	0	0	0	0	3.2	15.3	89	56
2007	13	6	2	2	1	2	0	0	0	0	0	3.3	16.5	91	43
2008	17	9	1	4	0	0	0	0	0	0	1	2.6	14.7	91	57
2009	6	2	0	2	1	0	0	0	0	0	1	3.4	14.4	88	37
2010	14	2	2	4	3	0	1	0	0	0	2	4.0	16.6	93	54
2011	12	2	1	3	2	2	0	0	0	0	1	4.0	16.0	88	50
2012	4	0	2	0	0	0	0	0	0	0	2	3.0	16.5	77	22
2013	7	3	0	2	0	0	0	0	0	0	2	2.8	14.4	86	37
2014	5	2	1	0	0	0	0	0	0	0	2	2.3	14.0	90	36
2015	6	1	1	3	0	1	0	0	0	0	0	3.8	15.0	88	46

2 1/2 YEAR OLD MALES

YEAR	TOTAL MALES	ANTLER POINT CLASS								SUB	AVG.	AVG BEAM	AVERAGE	FREQ.
		SPK	3	4	5	6	7	8	9	10	LEGAL	PTS.	DIA. (MM)	WT. (LBS)	%
2000	11	0	0	3	1	6	0	1	0	0	0	5.5	20.7	106	37
2001	10	1	0	2	1	4	2	0	0	0	0	5.7	20.0	95	41
2002	3	0	0	0	1	2	0	0	0	0	0	5.7	21.7	103	12
2003	4	0	0	1	0	0	3	0	0	0	0	6.3	22.8	105	15
2004	9	1	0	3	0	3	2	0	0	0	0	5.1	20.9	106	45
2005	7	2	0	1	0	0	1	2	0	0	0	5.2	20.2	108	44
2006	7	1	0	0	3	1	0	2	0	0	0	5.6	23.6	111	26
2007	11	0	1	4	0	3	1	2	0	0	0	5.6	22.4	104	37
2008	7	0	1	4	0	0	1	1	0	0	0	4.9	20.7	107	23
2009	6	0	1	1	0	3	1	0	0	0	0	5.3	21.6	113	37
2010	8	1	0	1	1	0	2	2	1	0	0	6.2	21.7	103	31
2011	7	0	0	0	1	0	1	4	0	1	0	7.7	24.6	116	29
2012	11	0	1	2	2	2	0	1	1	0	0	5.6	20.5	108	61
2013	7	0	0	2	1	3	1	0	0	0	0	5.4	21.6	101	37
2014	6	0	0	2	1	2	0	1	0	0	0	5.5	22.7	114	43
2015	4	1	0	1	1	0	1	0	0	0	0	4.5	20.2	104	31

2000 - 2015 WHITE-TAILED DEER HARVEST REPORT

3 1/2 - 4 1/2 Year Old Males

Year	Total Males	Spike	Antler Point Class 3	4	5	6	7	8	9	10	Sub Legal	Average Points	Avg. Beam Dia. (mm)	Average Wt. (lbs.)	Freq. %
2000	4	0	0	1	0	0	1	2	0	0	0	6.7	21.7	113	13
2001	7	0	0	0	1	1	2	3	0	0	0	7.0	23.4	109	30
2002	9	0	0	1	1	1	2	3	0	1	0	7.0	26.4	117	36
2003	8	0	0	1	1	1	2	3	0	0	0	6.6	28.0	127	30
2004	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0	0
2005	4	0	0	0	0	2	0	1	0	1	0	7.5	25.3	115	25
2006	5	0	0	1	0	1	1	2	0	0	0	6.6	24.8	118	18
2007	6	0	0	0	1	0	1	2	1	0	1	7.4	28.2	134	20
2008	6	0	0	0	0	1	1	4	0	0	0	7.5	26.8	135	20
2009	4	0	0	0	0	1	2	1	0	0	0	5.3	26.0	119	25
2010	4	0	0	0	0	0	2	2	0	0	0	7.5	29.2	132	15
2011	5	0	0	0	0	0	0	4	0	0	0	8.0	30.0	126	22
2012	3	0	0	0	0	0	0	1	1	1	0	9.0	28.3	123	17
2013	5	0	0	0	1	2	0	1	1	0	0	6.8	26.0	123	26
2014	3	0	0	0	0	1	1	1	0	0	0	7.0	25.7	112	21
2015	3	0	0	0	0	0	2	0	1	0	0	7.7	27.3	133	23

FEMALE AGE CLASS IN YEARS

Year	TOTAL	Fawn	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5-9.5	10.5+	Unknown	% 3 1/2 yrs. +
2000	18	3	2	2	6	2	0	1	0	2	0	0	61
2001	21	2	1	7	5	2	1	0	2	0	0	1	50
2002	21	2	4	7	6	2	0	0	0	0	0	0	38
2003	10	1	3	4	1	0	0	0	0	1	0	0	20
2004	17	2	2	4	2	3	2	1	1	0	0	0	53
2005	14	5	0	2	2	1	1	2	1	0	0	0	57
2006	17	2	4	7	1	0	2	0	1	0	0	0	29
2007	23	5	2	8	4	1	0	0	1	2	0	0	35
2008	38	10	7	8	7	2	3	0	1	0	0	0	34
2009	34	4	7	11	4	4	3	1	0	0	0	0	33
2010	31	10	2	5	6	4	1	1	0	2	0	0	45
2011	19	6	6	3	2	1	2	1	0	0	1	0	32
2012	11	4	0	1	2	2	0	1	1	0	0	0	55
2013	11	3	1	2	4	0	1	0	0	0	0	0	45
2014	11	2	0	3	4	1	1	0	0	0	0	0	55
2015	6	0	1	1	3	1	0	0	0	0	0	0	66

POPULATION RECONSTRUCTION BY AGE CLASS FOR DEER KNOWN TO HAVE BEEN HARVESTED

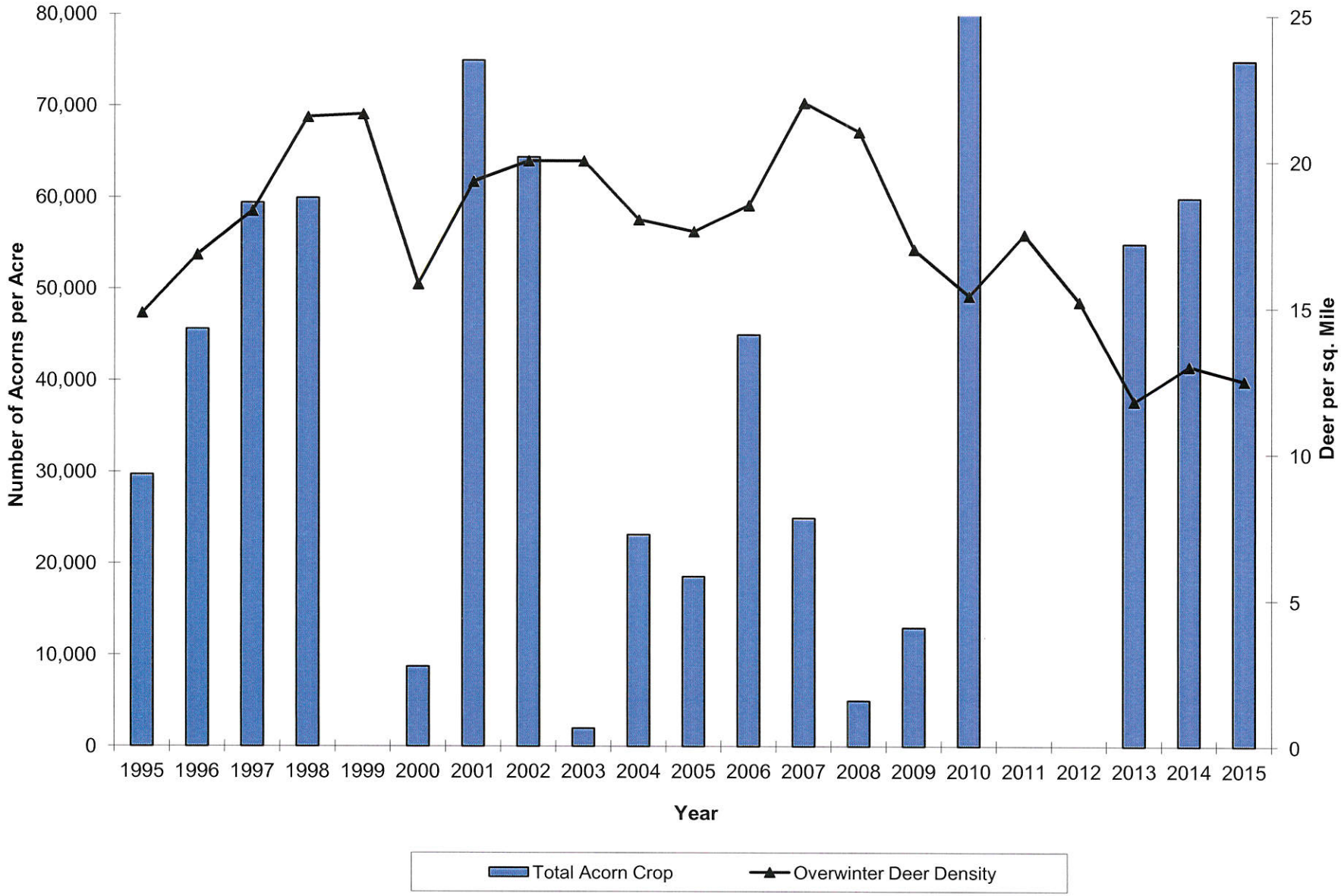
YEAR OF HARVEST

YEAR OF BIRTH

	2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		MIN POP KNOWN		TOTAL	AGE AS OF FALL 2015 (yrs.)
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			M	F		
2005	3	5	15	4	11	8	4	7	0	4	0	1	0	1	0	1	0	0	0	0			33	31	64	10.5
2006			5	2	13	2	7	8	4	4	1	4	1	2	0	1	0	0	0	0			31	23	54	9.5
2007					2	5	17	7	6	11	3	6	1	1	0	0	0	0	0	0			29	30	59	8.5
2008							4	10	6	7	8	5	3	3	1	2	0	1	0	0			22	28	50	7.5
2009									4	4	14	2	7	6	2	2	1	0	0	1			28	15	43	6.5
2010											4	10	12	6	11	1	4	4	1	1	1	0	33	22	55	5.5
2011													2	6	4	0	7	2	2	4	0	1	15	13	28	4.5
2012															1	4	7	1	6	3	2	3	16	11	27	3.5
2013																	3	3	5	0	4	1	12	4	16	2.5
2014																			0	2	6	1	6	3	9	1.5
2015																					2	0	2	0	2	FAWN
				TOTAL																			227	180	407	

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

Acorn Crop and Overwinter Deer Density



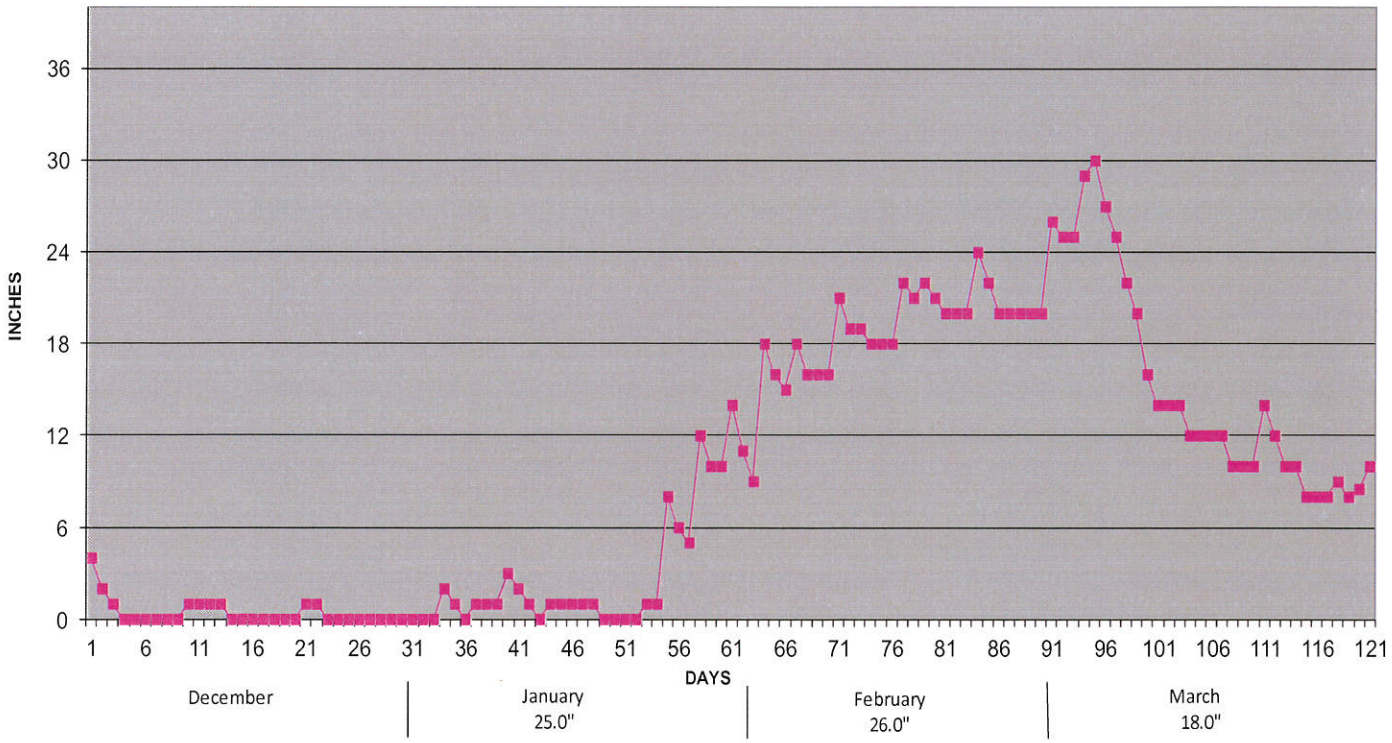
BLACK ROCK FOREST
SNOW FALL
November 1, 2014 -- March 31, 2015

NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
14.0"	2.0"	25.0"	26.0"	18.0"

TOTAL – 85.0 INCHES

SNOWPACK DEPTH

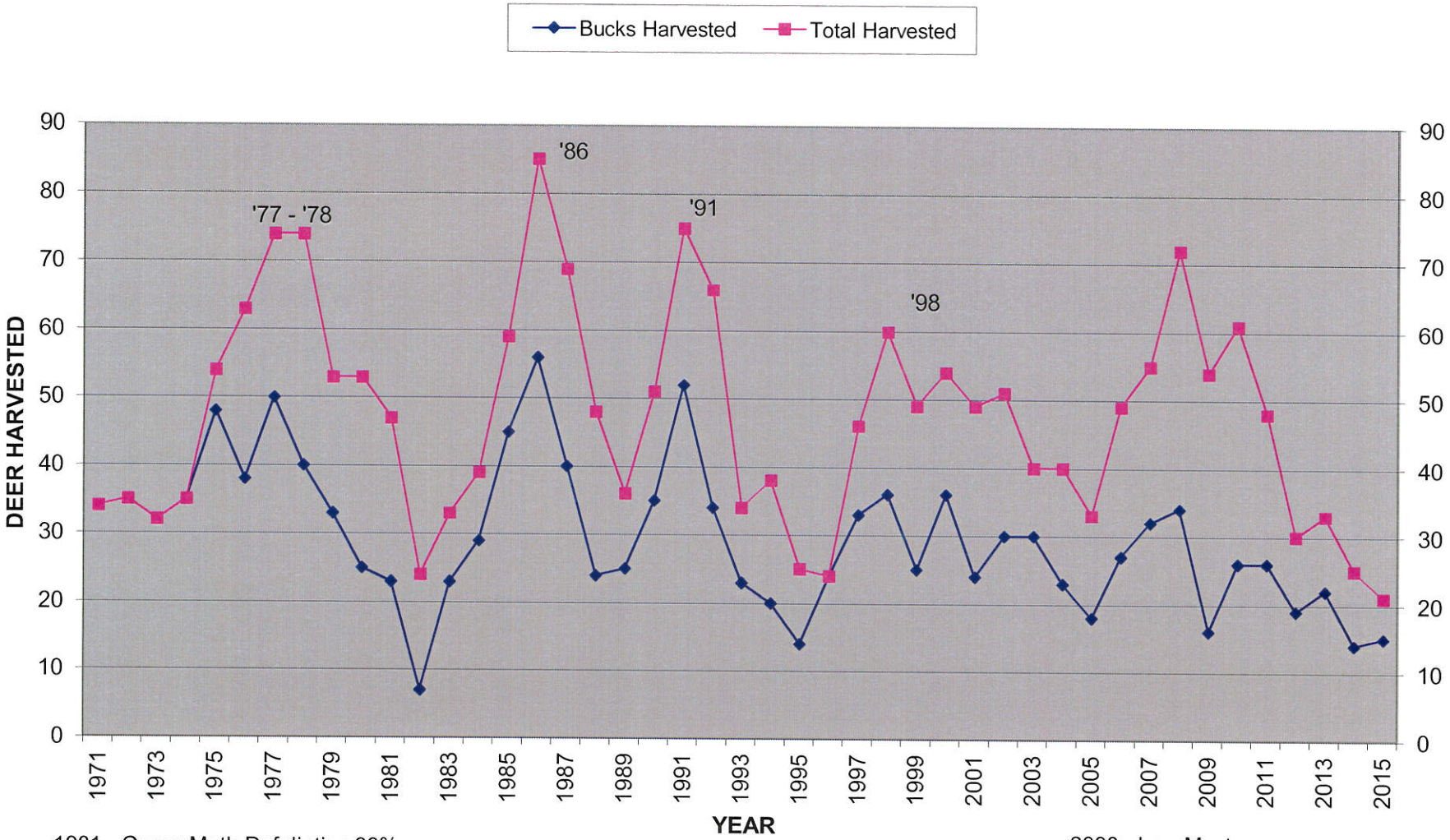
DECEMBER 01, 2014 -- MARCH 31, 2015
85.0 Inches Snow



Snow Events
23 snow events
First Snow – Nov. 14, 2014
Last snow – Mar. 31, 2015
14 Events < 2"
4 Event 6"+
0 Events 12" +
Largest Snow Event – Nov. 25 (11")

Snow Pack
102 days snow cover
70 Continuous days
73 Days 6" +
48 Days 12" +
31 Days 18" +
8 Days 24" +
0 Days 36"+

BUCK HARVEST VS TOTAL HARVEST
1971 - 2015



1981 - Gypsy Moth Defoliation 90%

1986 - Gypsy Moth Defoliation 70%

1992 - No Mast

1993 - March 13 - 14 Blizzard

1997 - 108" Snow

1999 - Drought, No Mast, Hurricane Floyd

2000 - Poor Mast

2001 - 81" Snow

2002 - Nov. 16 - 17, Ice Storm

2003 - No Mast, 90" Snow

2004 - Wooly Adelgid Infestation - Hemlock Mortality over 50%

2005 - Poor Mast

2008 - Low Mast

2008 - Dec. 12 Ice Storm

2010- Bumper Mast Crop

2011- No Mast

2012- No Mast

2014- Good Mast

2015- Very Good Mast

DEER HARVEST

1970 - 2015

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
2000	36	18	54
2001	28	21	49
2002	30	21	51
2003	30	10	40
2004	23	17	40
2005	19	14	33
2006	27	22	49
2007	32	23	55
2008	34	38	72
2009	20	34	54
2010	30	31	61
2011	26	22	48
2012	19	11	30
2013	22	11	33
2014	14	11	25
2015	16	6	21
TOTAL	**1368**	**787**	**2154**

Deer Report 2015 by John Brady, Forest Manager

Summary and Observations

Signs of deer population recovery were evident during the Fall 2015 hunting season. Although the 21 deer harvest appears low, healthy weights of fawns and yearlings along with antler beam diameters demonstrate a positive, yet delayed response from the third year of very good acorn production. Since 1995 deer health and numbers have shown a strong correlation to acorn crops with a one year delay. Giving support to the statement: this year's acorns are next year's deer. The past three years have contradicted that statement. Abundant availability of acorns has supplied only a slow increase of health and population. Also evident in rodent populations such as squirrels.

Further investigations into factors effecting deer movement and numbers have become increasingly influential.

Fall hunting has traditionally maintained a harvest equaling fawn recruitment in spring. Since the year 1999, the NYS Department of Conservation has issued additional antlerless permits to Black Rock Forest (BRF) through the Deer Management Assistance Program (DMAP). Increasing the number of hunters entering the forest with antlerless permits has made hunting a more effective management practice. Recent hunting pressure has decreased. Black Rock Fish and Game Club members appear to have transitioned, favoring competitive target shooting along with stock and shoot hunting (ex. Pheasant hunting and trout fishing) over woodland deer hunting. Even with less hunters, the core deer hunters of BRF are a hardy and productive bunch. With the proper application of DMAPS's by hunters, the effects of decrease of hunting pressure are alleviated.

Extremes in climate have affected herd movement. The drought of 1999, subsequent summer fires cumulating with Hurricane Floyd forced movement to residential areas that are still occupied today.

Forest health influences have been apparent. Mortality of hemlocks, by the Wooly Adelgid, has altered critical deer sheltering habitats from summer heat and winter snowfall. Oak dominated forests have become over mature. Susceptible to canopy breakdown caused by ice, wind, insects and disease creating unreliable acorn crops known to be a driving force of deer health and reproduction.

Human encroachment into deer range frequently enhances habitat by landscape plantings, fertilized lawns and sheltered escapes. Luring deer from undesirable conditions in the changing forests.

Coyotes have become a prominent factor concerning deer movement and mortality. Arriving in the Hudson Highlands during the late 1970's, became firmly established through the 1990's. Recent DNA research of the Northeastern Coyote has confirmed the hybridization of western and eastern wolf, domestic dog and western coyote, naming the animal "Coywolf". Evolutionists marvel at the swift development of this super year-round survivalist, filling a longtime void in the northeast ecosystems. Behavioral and survival traits called upon by the "Coywolf" have presented themselves to deer. Communing hunting strategies by family groups (packs) herding of winter deer groups, and the predation on fawns in spring to supply whelping pups. This may help explain the number of deer remaining in residential areas despite over-browsing and sub-healthy deer. Observations during winter tracking censusing confirm coyotes chase and harass deer; suburbia may be a sanctuary. The forest deer hunting sanctuary has demonstrated similar deer behavior, congregating in this area as a result of not being harassed by hunters.

The evolution of deer survival behavior has become more evident with the adaptations of present day low population densities. As in the past, adjustments to external influences: food, shelter, climate, hunting and predators have only proven the resilience of the species to adapt.

Population management practices must also adapt as influences become better understood. Antlerless harvests of the past were applied to control deer over-population and forest health. Future doe harvest will appear more directed to deer herd health and distribution with serious considerations to "Coywolf" effects.

The lower deer densities effects on the forest have not gone unnoticed. Allowing for the establishment of understory growth, stimulated by light penetration through broken canopy cover. As forest health continues to improve deer will eventually re-populate forest communities and adapt to renewed preditore influences.

CORNWALL-ON-HUDSON 2015

Does (13)				
	Fawns (1)	64		
	Yearling (2)	76,80	**Avg. 78**	
	2 1/2 (6)	76,76, 88, 96,100,102	**Avg. 89.67**	
	3 1/2 (2)	88, 98	Avg. 93	
	4 1/2 (1)	92		
	5 1/2 (1)	100		
Fawns (2) 1 doe + 1 bb		64, 70	**Avg. 67**	
Bucks (2)				
	Fawn (1)	70		
	Yearling (1)	96	beam (16 mm)	SPK