

Maine 2021-22 Moose Kill

2021 Bull Harvest TOTAL HARVEST, AGE DISTRIBUTION Among the 1,718 antlered bulls killed during the Sep/ Oct 2021 season (totaling 81 less than the 2020 harvest of 1,799), biologists aged 1,363 of them by counting the cementum annuli on a canine tooth extracted from the animal. Ages were distributed as follows: • 1½ years old (yearlings sporting their first set of antlers): 6% (76) • 2½ years old: 23% (319) • 3½ years old: 17% (233) • Mature bulls (aged at 4½ to 15½ years): 54% (735)

TOTAL HARVEST

The 2021 statewide harvest of adult (yearling and older) cows was 809 (up from 565 in 2020). In addition, 81 calves (48 males and 33 females) were harvested for a total harvest of 890 antlerless moose, including those taken as part of the AMPs issued within the southern zones and the Adaptive Hunt.

Total Kill: 2,527

AVERAGE WEIGHT On average, breeding bulls lose approximately 15% of their body mass during the rut (September to October). In 2021, this translated to a 9% decrease in average dressed weights from the September to October seasons (707 in Sept. vs. 645 in Oct).

RECORD WEIGHT The heaviest bull weighed in at 1,038 lbs. field dressed (no digestive tract, heart, lungs, or liver). He was 7½ years old and was killed in WMD 5 during the September season.

RECORD ANTLER SPREAD The largest antler spread was 65 inches with 20 legal points.

ANTLER STATS Of the antlered bulls, 13% sported cervicorn antlers (antlers without a defined palm), 30% were yearlings, and 11% were mature bulls (>4 years old). The oldest was 12½ years old. **Antlerless Harvest TOTAL HARVEST** The 2021 statewide harvest of adult (yearling and older) cows was 809 (up from 565 in 2020). In addition, 81 calves (48 males and 33 females) were harvested for a total harvest of 890 antlerless moose, including those taken as part of the AMPs issued within the southern zones and the Adaptive Hunt. **MOOSE**

REPRODUCTIVE DATA Antlerless permits during the second October season allow MDIFW to collect reproductive data critical to assessing and monitoring moose population health and growth. In 2021, hunters in WMDs 1-6 and 8 removed and brought in 163 sets of moose ovaries for examination by biological staff. Typically, a cow moose will not become pregnant until 2½ years old. The number of offspring she will produce depends upon her body weight and condition – factors influenced strongly by diseases and parasites such as the winter tick. Of the cow moose examined in 2021, 90% of those older than 2½ years were pregnant. MDIFW biologists can forecast a cow's reproduction rates (number of calves being born to a cow) by

looking at corpora lutea, which are identifiable structures within the ovaries that indicate ovulation and potential pregnancy rates. Overall, there were 0.96 corpora lutea per cow for cows older than 3½ years (maturity). This is an increase from 2020, yet still represents depressed reproductive rates. We continue to evaluate the role of winter ticks and their impact on moose fitness, including their role in depressed reproductive rates.

2021 Maine moose season registered kill by WMD, season, permit type, and success rates.

WMD	SEASON	PERMIT TYPE	# OF PERMITS	2021 REGISTRATIONS	
				KILL	SUCCESS RATE
1	SEP	BOP	225	171	76%
	OCT	BOP	225	123	55%
	2nd OCT	AOP	175	159	91%
	*WMD Subtotals		625	453	72%
2	SEP	BOP	175	126	72%
	OCT	BOP	175	84	48%
	2nd OCT	AOP	175	137	78%
	*WMD Subtotals		525	347	66%
3	SEP	BOP	100	71	71%
	OCT	BOP	100	73	73%
	2nd OCT	AOP	125	95	76%
	*WMD Subtotals		325	239	74%
4	SEP	BOP	200	153	77%
	OCT	BOP	200	82	41%
	2nd OCT	AOP	100	63	63%
	*WMD Subtotals		500	298	60%
4a	SEP	AOP	169	96	57%
	OCT	AOP	143	84	59%
	2nd OCT	AOP	177	73	41%
	*WMD Subtotals		489	254	52%
5	SEP	BOP	125	106	85%
	OCT	BOP	125	83	66%
	2nd OCT	AOP	125	94	75%
	*WMD Subtotals		375	283	75%
6	SEP	BOP	100	83	83%
	OCT	BOP	100	51	51%
	2nd OCT	AOP	60	48	80%
	*WMD Subtotals		260	182	70%
7	OCT	BOP	125	75	60%
	*WMD Subtotals		125	75	60%
8	OCT	BOP	200	134	67%
	2nd OCT	AOP	50	46	92%
9	OCT	BOP	125	76	61%
	*WMD Subtotals		125	76	61%
10	SEP	BOP	30	24	80%
	OCT	BOP	30	20	67%
	*WMD Subtotals		60	44	73%
11	SEP	BOP	25	22	88%
	OCT	BOP	25	12	48%
	*WMD Subtotals		50	34	68%
12	OCT	BOP	25	16	64%
	*WMD Subtotals		25	16	64%
13	OCT	BOP	15	7	47%
	*WMD Subtotals		15	7	47%
14	OCT	BOP	30	19	63%
	WMD Subtotals		30	19	63%
15	NOV	AMP-B		4	NA
	NOV	AMP-C		2	NA
	WMD Subtotals		25	6	24%
16	NOV	AMP-B		0	NA
	NOV	AMP-C		3	NA
	WMD Subtotals		15	3	20%
17	OCT	BOP	10	4	40%
	WMD Subtotals		10	4	40%
18	SEP	BOP	20	14	70%
	OCT	BOP	20	10	50%
	*WMD Subtotals		40	24	60%
19	SEP	BOP	30	23	77%
	OCT	BOP	30	15	50%
	*WMD Subtotals		60	38	63%
27/28	SEP	BOP	20	16	80%
	OCT	BOP	20	11	55%
	WMD Subtotals		40	27	68%
TRADITIONAL WMD TOTALS			3,480	2,355	68%
PLUS ADAPTIVE			3,969	2,607	66%

BOP = Bull Only Permit – The holder may kill one male moose of any age.

AOP = The holder may kill a cow or a calf (male or female); by definition an antlerless moose is a moose without antlers.