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2011 VERMONT WILDLIFE HARVEST REPORT - MOOSE



FISH & WILDLIFE DEPARTMENT
(802) 241-3700 / www.vtfishandwildlife.com



2011 VERMONT MOOSE HARVEST REPORT

Most of the programs described in this report are funded through the *Federal Aid in Wildlife Restoration Program*. This program was initiated in 1937 as the Federal Aid In Wildlife Act and created a system whereby taxes are paid on firearms, ammunition and archery equipment by the public who hunts. Today this excise tax generates over a hundred million dollars each year that are dedicated to state wildlife restoration and management projects across the United States. The State of Vermont uses these monies for acquiring land, and for restoring and managing wildlife. These excise tax dollars, coupled with state hunting license fees, have been the predominant source of money funding the successful restoration and management of Vermont’s wildlife resources.

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The MISSION of the Vermont Fish & Wildlife Department is the conservation of fish, wildlife, and plants and their habitats for the people of Vermont.

Vermont Fish & Wildlife Department

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2011 Moose Report

Two hundred and fifty-two moose were harvested in Vermont's 2011 moose seasons. Hunting conditions were not ideal with relatively warm, windy and wet conditions prevailing throughout opening weekend of the archery season and most of the six-day regular season. Nearly 38 tons (an estimated 75,600 lbs) of boneless moose venison was harvested.

Archery Season

Vermont held its first ever archery-only moose season in 2011. Fifty-three permits were issued and 16 moose were harvested. A total of 1,437 valid applications were received for the archery season lottery (990 residents and 447 non-residents). Ninety percent of the lottery permits (45) were allocated to residents and the remaining 10% (5) to non-residents. Three additional permits were won through the annual moose permit auction.

Harvest Dates & Success Rates

The archery moose season ran for seven days, from October 1-7, during the peak of the moose rutting season. Bulls are more responsive to calling at this time of year compared to mid-October, thus increasing the odds that bow hunters are able to call moose to within shooting distance. Fifty percent of the moose were taken on opening weekend (Table 1), and the overall success rate was 30%. Success rates by WMU are given in Table 2.

TABLE 2. 2011 VERMONT ARCHERY MOOSE HUNTER SUCCESS RATES BY WMU

WMU	Bulls	Cows	Male Calves	Female Calves	Total Harvest	Permits Issued	2011 Percent Success
C	1	1			2	3	67
D1					0	1	0
D2	1				1	2	50
E1	5	1	1		7	27*	26
E2	2				2	9	22
H1	1				1	1	100
I		1			1	4	25
L					0	1	0
M					0	1	0
P	2				2	4	50
Totals	12	3	1	0	16	53*	30

*Includes 3 auctioned permits

Harvest Data

The Vermont Fish & Wildlife Department does not operate official biological check stations during the moose archery season. This is because with the low permit numbers and statewide distribution of the archers, it would not be cost-effective to staff check stations. Instead, successful moose archers may report their kill to any authorized regular big game reporting station. Some of these stations are set up to weigh moose, and most also recorded antler spreads and point totals from the bulls. This data is presented in Table 3. Twelve (75%) of moose taken were adult



TABLE 1. ARCHERY MOOSE HARVEST BY DAY OF SEASON

Season Day	1	2	3	4	5	6	7
Moose Harvested	6	2	2	1	2	1	2

Scouting

Moose hunter surveys were returned by 23 of the 53 permittees, and all respondents reported they scouted prior to the hunting season. Average time spent scouting was 40 hours/party, and the average number of moose seen per hour scouted was 0.084, or approximately one moose seen for every 12 hours of scouting effort.

Hunting Information

All but two of the 23 survey respondents saw at least one moose during the open season; the total seen was 70 moose. Eight different hunters passed up on 13 moose (7 cows, 4 bulls, and 2 calves). Five of these hunters eventually tagged a moose and three did not. Hunting methods used included calling and still hunting (20 each), ground blinds (12), tracking (9), and tree stands (6).

bulls, three (19%) were adult cows, and one (6%) was a calf. Scaled carcass weights were obtained from six moose, with three bulls weighing over 800 pounds. The widest spread recorded was 52 inches on a bull taken in Lewis. Fourteen moose were taken by residents and two by non-residents (from Pennsylvania and Kansas).

TABLE 3. 2011 VERMONT LEGAL MOOSE ARCHERY SEASON HARVEST DATA

Last Name	WMU	Town of Kill	Age Class	Sex	Uncertified Weight (lbs)	Spread in Inches	Total Points
AUDET	E2	FERDINAND	Adult	M	820	42	14
BALLANTINE	P	SOMERSET	Adult	M		51.5	
BARLOW	D2	CHARLESTON	Adult	M		48	
BEACHARD	E1	AVERILL	Adult	F	530		
BEANE	E1	LEWIS	Adult	M	834	52	20
DONELLY	C	MONTGOMERY	Adult	M		39	9
HUBBARD	H1	MIDDLESEX	Adult	M		29.5	14
MELENDY	I	LINCOLN	Adult	F	442		
MONGEUR	E1	AVERILL	Calf	M			
OTIS	E2	BRIGHTON	Adult	M	818	44.5	12
PATENAUDE, JR	C	WESTFIELD	Adult	F			
PAUL, SR	E1	BLOOMFIELD	Adult	M	453		4
SCHERER	E1	AVERILL	Adult	M		28	11
SIPE	P	SUNDERLAND	Adult	M			4
TABOR	E1	BRIGHTON	Adult	M		36	12
YOUNG	E1	CANAAN	Adult	M		51	17

Regular Season

A total of 11,217 valid applications were received for the 2011 Vermont regular moose season lottery (8,630 residents and 2,587 non-residents). Unsuccessful applicants from the previous seasons were awarded bonus points if they applied again in 2011. Ninety percent of the lottery permits (365) were allocated to residents and the remainder (40) to non-residents. An additional permit was won by a bidder through an auction process, and two special opportunity moose hunt permits were issued to youths with sponsoring organizations.

Late deferments of two lottery winners resulted in a total of 406 either-sex permits being issued across 17 Wildlife Management Units (WMUs). No permits for antlerless moose were issued in 2011.

Biological Data

One hundred forty-one (60%) of moose taken were bulls, 75 (32%) were cows and 20 (8%) were calves (8 males and 12 females). Completely dressed carcass weights were obtained from 224 moose, or 95% of the total harvest. Five bulls weighed over 800 lbs, including the largest which was an 857-pound, 9-year old taken in Holland. The average completely dressed weight of 7 male calves, 26 yearling bulls and 108 older bulls was 219, 397 and 625 lbs, respectively. The widest spread was 60.5 inches on an 8-year old bull taken in Lowell.

The heaviest cow was a 679-pound, 7-year-old taken in Coventry. The average weight of 11 female calves, 12 yearling cows and 56 older cows was 209, 393 and 525 lbs, respectively. Average

Harvest Dates & Success Rates

Vermont's 19th moose season began on the third Saturday in October (15th). Sixty-seven moose were taken on opening day (Table 4). Overall success rate ended up at 58%, down from 64% the previous year. Success rates by WMU are given in Table 5.

TABLE 4. 2011 VERMONT MOOSE HARVEST DISTRIBUTION BY DATE, SEX AND AGE CLASS

Date	Bulls	Cows	Calves	Total	Percent
October 15	41	17	9	67	28
October 16	37	21	2	60	25
October 17	26	13	4	43	18
October 18	14	12	0	26	11
October 19	15	7	3	25	11
October 20	8	5	2	15	6
Totals	141	75	20	236	100

weights of yearling cows for the past 14 years are shown in Figure 1.

After a steady decline over a decade due to moose densities in the Northeast Kingdom exceeding the carrying capacity of the habitat, yearling cow weights rebounded from 2008 to 2010 with the planned reduction in moose numbers. In 2011 however, yearling cow weights dropped to the lowest average ever recorded in Vermont. This abrupt decline was also experienced in New Hampshire, and moose project staffs from both states believe a severe winter tick infestation combined with deep snows in March and April put many moose under stress and contributed to the declines in physical indices.

Complete sets of paired ovaries collected from 27 cows were sectioned and examined for evidence of ovulation. The ovulation rates (with 2010 rates shown in parentheses) were 0.25 ova/cow for 4 yearlings (0.13), 1.0 for 2 two-year-olds (1.0), and 0.76 for 21 cows > 3 years old (1.13). In healthy populations, prime-age cows (> 3 years old) generally have average ovulation rates from 1.25 to 1.75 ova/cow, and rates under 1.15 are indicative of a moose population that has exceeded the carrying capacity of the habitat.

Figure 2 shows annual statewide ovulation rates for prime-age cows over the past 13 years. Similar to body weights, ovulation rates had finally rebounded in 2010 after several years of decline. The 2011 decline in the ovulation rate for cows > 3 years old from 1.13 to 0.76 corpora lutea/cow is again suspected to have been caused by our most severe winter tick infestation on record. The late snowpack in 2011 may have helped to reduce tick densities as engorged females dropped off in late March and April onto snow and died. Body weights and ovulation rates may rebound if moose are not abnormally stressed again this winter.

A central incisor was also collected from 206 adult moose, then cleaned and shipped to Matson's lab in Montana for aging by the counting of cementum annuli. The average age of all adult moose was 4.2 years (Figure 3). Eighteen percent of these moose were yearlings, and 47% were > 4 years of age, which is well above the minimum goal of 25% as called for in the 10-year Big Game Plan. The two oldest moose were 13 years old (one of each sex).

TABLE 5. 2011 VERMONT MOOSE HUNTER SUCCESS RATES BY WMU

WMU	Bulls	Cows	Male Calves	Female Calves	Total Harvest	Permits Issued	2011 Percent Success	2010 Percent Success
B	-	1		1	2	5	40	60
C	13	9	2	1	25	30	83	64
D1	7	6		1	14	40	35	75
D2	13	8	1	3	25	39	64	57
E1	33	22	5		60	92	65	72
E2	13	9		1	23	30	77	57
G	4	-			4	10	40	64
H1	16	4		1	21	40	52	64
H2	4	-			4	5	80	60
I	7	4		3	14	20	70	50
J1	5	-			5	15	33	40
J2	5	4			9	20	45	60
L	4	3			7	10	70	50
M	10	-		1	11	25	44	68
O	4	3			7	10	70	70
P	2	2			4	10	40	73
Q	1	-			1	5	20	20
Totals	141	75	8	12	236	406*	58	64

*Includes 1 auctioned and 2 special opportunity moose hunt permits

FIGURE 1. YEARLING COW CARCASS WEIGHTS

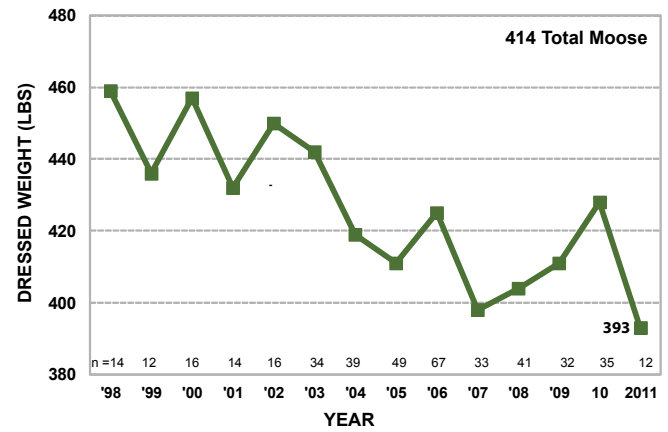


FIGURE 2. OVULATION RATE FOR LEGALLY HARVESTED COWS 1999 - 2011

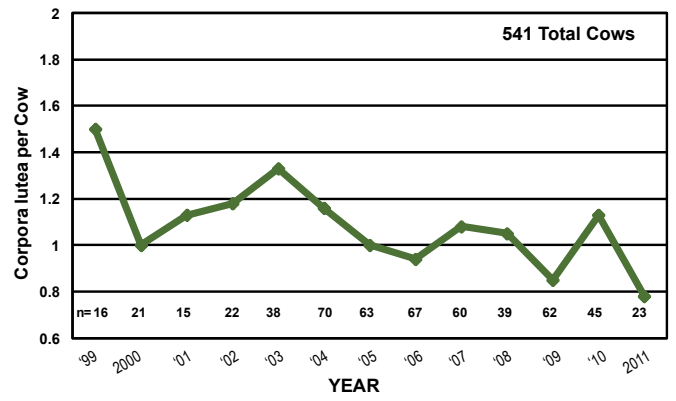
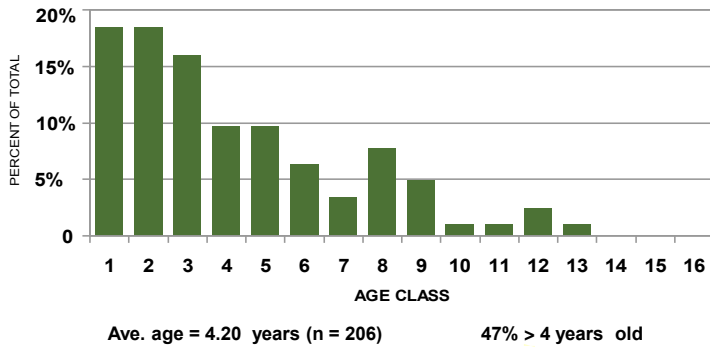


FIGURE 3. VERMONT MOOSE AGED BY CEMENTUM ANNULI 2011 LEGAL HARVEST



Town of Kill

Moose were taken in 90 different towns. The towns with the highest harvests were Bloomfield (14), Averill and Ferdinand (8 each), and Lemington, Orange and Warren Gore (7 each). Figure 4 shows the geographic distribution of the moose harvest by township and WMU.

Scouting

Moose hunter surveys were returned by 218 of the 406 permittees, 200 (92%) of whom reported that they scouted prior to the hunting season. Average time spent scouting was 28 hours/party, and the average number of moose seen per hour scouted was 0.066, or approximately one moose seen for every 15 hours of scouting effort. A comparison of scouting data between WMUs and previous years is presented in Table 6.

Successful Hunters

Fifty-eight percent of resident and 56% of non-resident permits were successfully filled. The 22 successful non-resident permits were filled by hunters who hailed from eight different states as follows: CT (6), NY (5), NH (3), PA, ME and MA (2 each), and one each from KS and

TABLE 6. MOOSE SEEN PER HOUR SCOUTED BY 200 HUNTERS WHO SCOUTED, 2011 VERMONT MOOSE HUNT

WMU	Number Scouting	Moose Seen	Hours Scouted	Moose/Hr Scouted (MSHS) 2011	MSHS 2010	MSHS 2009	MSHS 2008	Hours/Hunter Scouting
B	2	0	22	0.00	0.07	0.04	0.08	11
C	12	25	224	0.11	0.07	0.09	0.09	19
D1	17	23	443	0.05	0.16	0.05	0.11	26
D2	16	43	500	0.09	0.08	0.08	0.09	31
E1	39	82	895	0.09	0.11	0.13	0.15	23
E2	19	55	609	0.09	0.06	0.08	0.10	32
G	3	1	50	0.02	0.07	0.06	0.10	17
H1	22	22	546	0.04	0.07	0.09	0.14	25
H2	4	2	136	0.02	0.01	0.00	0	34
I	13	26	450	0.06	0.10	0.09	0.07	35
J1	10	20	223	0.09	0.04	0.03	0.11	22
J2	10	7	315	0.02	0.22	0.06	0.04	32
L	6	11	172	0.06	0.01	0.06	0.03	29
M	14	23	388	0.06	0.06	0.04	0.04	28
O	7	19	336	0.06	0.12	0.12	0.05	48
P	5	5	248	0.02	0.06	0.05	0.07	50
Q	1	2	20	0.10	0.01	0.07	0.30	20
Totals	200	366	5,577	0.066	0.084	0.083	0.095	28
E1 & E2	58	137	1,504	0.091	0.085	0.105	0.122	26

VA. Subpermittees took 43 (18%) of the moose killed. Two-hundred twenty-nine moose were taken with rifles and the remaining eight with muzzleloaders. Physical measurements from all harvested moose are shown in Table 7 (males) and Table 8 (females).

Unsuccessful Hunters

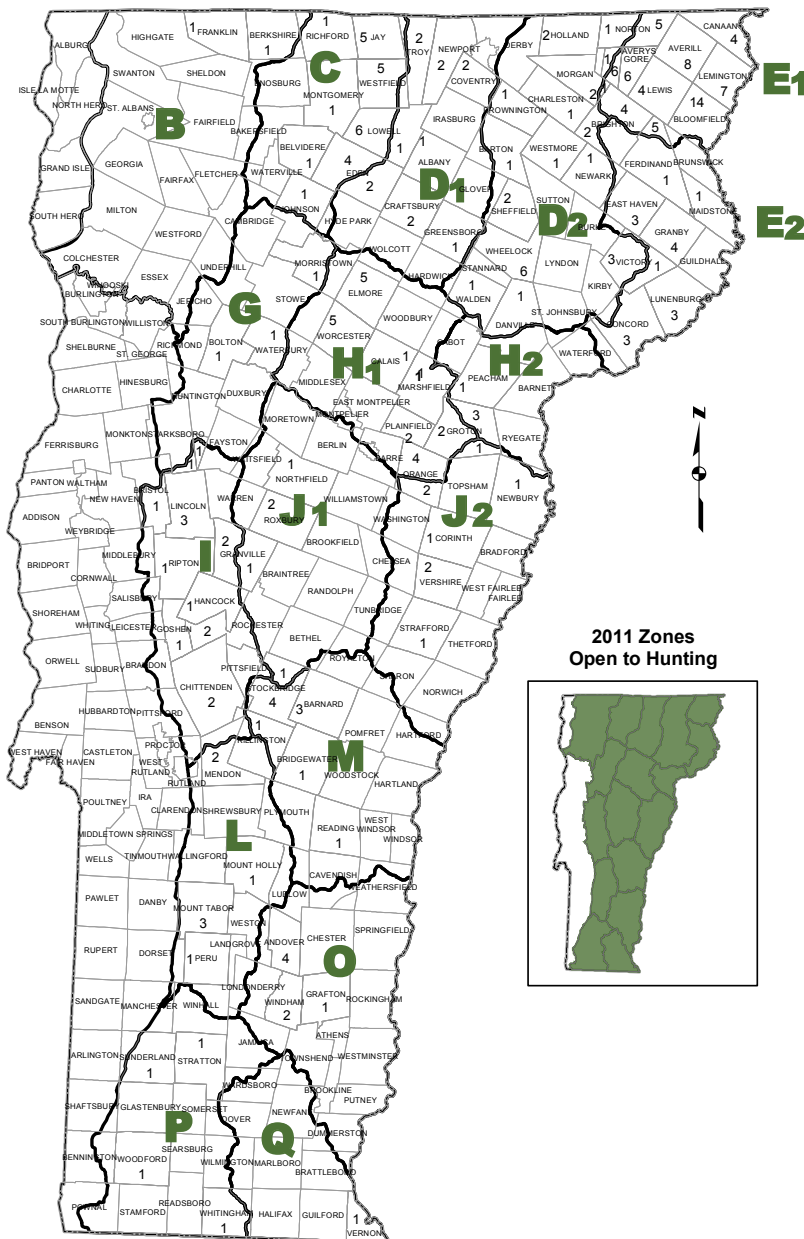
Overall, 170 hunters were unsuccessful, and 71 (42%) of them returned a survey. Thirty-one percent of these unsuccessful hunters did not hunt all available days. The number of days hunted by the 71 respondents is shown in the following table:

No. of Days Hunted by 71 Unsuccessful Hunters							
Days Hunted	0	1	2	3	4	5	6
No. of Respondents	1	2	2	2	8	12	44

Thirty-two (45%) of the responding unsuccessful hunters saw a total of 71 moose, and 14 (or 20% of all unsuccessful hunters

who hunted at least 1 day) passed up 32 moose that they believed they could have taken (5 bulls, 18 cows, and 9 calves).

FIGURE 4. 2011 VERMONT MOOSE HARVEST BY TOWN AND WMU



2012 Permit Numbers

After many years of overpopulation the Northeast Kingdom moose herd has been brought under control. To achieve this, a high number of permits were required from 2004 through 2010. Permit numbers proposed for 2012 are similar to 2011, and the Fish and Wildlife Board has given its initial approval to a statewide total of 385 permits for the 2012 moose season.

TABLE 7. 2011 VERMONT MOOSE LEGAL HARVEST DATA—BULLS ONLY

Name Last	WMU	Town of Kill	Age	Weight	Beam	Pts/Left	Pts/Right	Spread
ADAM	J2	ORANGE	6	682	51	8	7	48
AREMBURG	E2	CONCORD	--	--	--	--	--	--
BAILEY	E1	LEMINGTON	12	835	60	5	4	56
BARBER	H1	WORCESTER	6	714	70	5	6	42.5
BEAUREGARD	M	STOCKBRIDGE	5	629	43	3	3	37
BELIVEAU	E2	CONCORD	2	516	36	2	2	30
BENJAMIN	E1	AVERY'S GORE	2	530	43	2	3	25
BERGERON	H1	ORANGE	3	507	43	4	4	30
BERRY	E2	VICTORY	1	472	55	2	4	24.5
BESSETTE	I	LINCOLN	4	586	31	5	4	31
BOUSQUET	D2	WHEELOCK	2	--	29	1	2	15
BROE	E1	BLOOMFIELD	1	498	31	1	3	--
BUCKNER	E1	LEWIS	3	573	42	3	3	30.5
BUKER	E1	AVERILL	0.5	211	--	--	--	--
BUTLER	I	RIPTON	4	568	44	5	3	33
CALCHERA	E2	GRANBY	4	635	41	5	5	24
CAMPISI	E2	VICTORY	5	712	50	5	3	36
CARPENTIER	E2	GRANBY	2	495	32	2	2	24
CHESNEY	D2	CHARLESTON	3	707	45	5	6	36.5
CICHON	E1	AVERILL	1	423	31	2	2	20
CRAPO	E1	LEMINGTON	2	487	32	1	2	20
DAGG	M	KILLINGTON	3	--	45	5	5	32.5
DAVIS	I	CHITTENDEN	6	407	45	3	3	35
DESLANDES	C	WESTFIELD	1	439	35	2	2	25
DICKINSON	E1	LEWIS	7	790	55	10	6	41
DODGE	C	JOHNSON	2	563	39	3	3	30.5
DOMENICHELLI	H1	WORCESTER	9	672	48	7	7	45
DUFF	E1	LEMINGTON	9	804	61	11	9	55
DUFFY	C	LOWELL	3	410	30	--	--	15
DUNN	E1	BLOOMFIELD	12	690	51	4	4	39
EGRIE	E1	LEWIS	2	528	48	6	4	31
ELLIS	P	WHITINGHAM	2	469	36	2	2	17.5
EMERSON	J2	NEWBURY	1	337	38	2	2	19
ERNST	J1	GRANVILLE	3	582	48	4	4	29.5
FAULKNER	L	MT HOLLY	--	840	56	12	11	50
FAUTEAUX	E1	WARREN GORE	4	716	50	5	5	35
FOOTE	H1	ORANGE	2	482	40	3	4	29.5
GABORIAULT	D1	NEWPORT	2	496	40	2	2	22
GAIOTTI	L	PERU	8	586	51	3	3	34.5
GARDNER	E1	NORTON	0.5	281	--	--	--	--
GARULLI	E1	BRIGHTON	1	469	35	3	2	25
GAUDETTE	E1	BLOOMFIELD	2	554	43	3	4	29
GAUTHIER	J1	NORTHFIELD	1	429	28	3	2	23.5
GETTY	E1	AVERILL	2	582	42	4	3	36
GILLIES	E1	NORTON	2	528	39	2	2	--
GODDA	M	BRIDGEWATER	5	800	50	9	9	50
GOMO	H1	ORANGE	2	482	44	2	3	27.5
GRACIE	I	STARKSBORO	5	677	57	7	7	43
GRAY	E2	FERDINAND	6	706	48	8	9	42
GREGORY	O	ANDOVER	1	387	33	1	1	18
HAGER	Q	VERNON	3	666	47	6	7	40

TABLE 7. 2011 VERMONT MOOSE LEGAL HARVEST DATA—BULLS ONLY

Name Last	WMU	Town of Kill	Age	Weight	Beam	Pts/Left	Pts/Right	Spread
HARLOW	J2	STRAFFORD	4	686	50	5	4	40
HARRAN	D2	WHEELOCK	1	251	22	2	1	15
HARRIS	E1	LEMINGTON	1	452	34	4	2	24
HASLAM JR	D1	LOWELL	8	838	57	7	8	60.5
HAYWARD	E1	BLOOMFIELD	3	603	40	6	5	30
HILL	M	STOCKBRIDGE	4	799	44	9	8	36
HISMAN	C	WESTFIELD	3	513	42	4	6	30.5
HUBBARD	E1	WARREN GORE	9	619	53	6	7	51
JACKSON	C	JAY	1	337	32	2	2	24
JANSEN	E1	CANAAN	2	548	42	6	6	29
JUSIANIEC	I	ROCHESTER	5	616	44	7	6	41
KADNAR	M	BARNARD	4	659	47	8	6	36.5
KATRICK	D2	VICTORY	5	685	44	3	3	35
KEMPF	M	READING	2	463	35	2	3	20
KEMPTON	E2	EAST HAVEN	1	454	38	2	2	23
KENNEDY	E1	BLOOMFIELD	4	651	54	5	6	36
KENT	L	MT TABOR	7	537	47	2	3	31
KIMBALL	E1	AVERILL	2	558	44	3	4	32
KITCHEN	H1	MIDDLESEX	8	762	51	6	6	49
KITTREDGE	D2	DANVILLE	6	753	50	8	8	46
KRAWCZYK	D2	BROWNINGTON	3	715	45	4	3	40.5
LAKE	E1	LEMINGTON	1	419	36	2	2	28
LANIER	D2	VICTORY	3	585	43	6	6	35.2
LARSEN	D1	GREENSBORO	5	506	39	1	2	33
LEHMER	E1	BLOOMFIELD	1	367	42	2	2	22
LENO	O	WINDHAM	4	737	46	5	5	36
LEWIS	D2	WHEELOCK	3	643	44	4	4	31.5
LOGAN	P	WOODFORD	4	597	52	9	9	48
LOMBARD	E2	FERDINAND	13	657	48	4	--	--
MACCORMACK	D2	HOLLAND	9	857	62	8	13	58.5
MACHIA	C	BELVIDERE	2	565	42	3	3	25
MACKEY	J1	ROXBURY	1	292	23	1	1	12
MACLURE	D1	ALBANY	3	637	41	5	3	30
MAGOON	E1	WARREN GORE	0.5	220	--	--	--	--
MANCHESTER	C	EDEN	3	626	40	3	3	31
MAST	H1	PLAINFIELD	1	390	34	2	--	17
MAYO	H1	ORANGE	6	784	53	6	6	35.5
MCALLISTER	C	RICHFORD	0.5	232	--	--	--	--
MCCRAY	I	HANCOCK	5	665	58	12	11	46
MCGARVIN	D2	NEWARK	1	369	35	1	1	22
MCHUGH	E1	BRIGHTON	0.5	167	--	--	--	--
MCKENZIE	D2	MORGAN	1	478	38	3	4	31
MCLANE	C	MONTGOMERY	5	667	49	8	8	35
MCLAUGHLIN	J2	CORINTH	4	748	43	6	4	43
MENARD	E1	BLOOMFIELD	3	556	43	6	6	29
MEUNIER	C	EDEN	2	628	43	6	5	28.5
MONTGOMERY	D1	CRAFTSBURY	3	619	44	5	5	36
MORRISON	H2	GROTON	3	553	39	4	3	36
MYERS	D2	WESTMORE	0.5	--	--	--	--	--
NELSON	E1	BLOOMFIELD	10	731	60	9	7	50
NELSON	H2	PEACHAM	3	485	27	1	1	19.5

TABLE 7. 2011 VERMONT MOOSE LEGAL HARVEST DATA—BULLS ONLY

Name Last	WMU	Town of Kill	Age	Weight	Beam	Pts/Left	Pts/Right	Spread
NUTBROWN	D2	SHEFFIELD	3	600	40	4	4	37
PAQUETTE	H1	ELMORE	7	680	52	3	2	33
PARKER	M	PITTSFIELD	4	567	46	2	4	32
PARKHURST	H1	PLAINFIELD	4	526	44	3	3	28
PATCH	M	STOCKBRIDGE	2	474	40	5	5	28
PEAKE	E1	FERDINAND	8	716	58	6	8	50
PERRY	C	LOWELL	7	782	59	8	7	50
PLANTE	E1	BLOOMFIELD	6	757	53	6	6	34
PUTNAM	H2	GROTON	7	604	49	4	5	32.5
REMBISZ	H1	MARSHFIELD	2	259	34	1	0	--
REXFORD	M	STOCKBRIDGE	3	606	45	3	5	31.5
RHOADES III	M	BARNARD	3	--	42	3	3	30.5
ROCHFORD	C	WESTFIELD	0.5	274	--	--	--	--
RUSSELL	G	WATERBURY	1	430	38	2	1	18
SALLS	G	CAMBRIDGE	--	--	--	--	--	--
SCHUR	E2	GRANBY	4	596	36	4	4	45
SLAYTON	J2	GROTON	6	665	48	1	2	22
SLOCUM	J1	ROXBURY	5	729	51	7	6	43.5
SMITH	H1	ELMORE	7	448	38	1	1	--
SMITH	G	MORRISTOWN	1	400	27	2	1	19
SNYDER	C	EDEN	2	552	38	4	4	28
SPENCE	E2	LUNENBURG	8	783	52	6	5	48
STENDER	E2	EAST HAVEN	5	729	65	7	9	47
STETSON	E1	LEWIS	8	741	61	11	12	53
STONE	E1	AVERILL	9	787	69	7	7	46.5
STRUBLE	G	BOLTON	1	326	35	2	1	20
TAN	H2	GROTON	11	693	58	7	9	41
TEACHOUT JR	E1	BLOOMFIELD	3	608	45	5	4	36
TETREALT	D1	COVENTRY	5	555	46	5	7	39
THURBER	H1	GROTON	5	585	46	5	6	43.5
TOOLE	H1	CALAIS	3	659	44	6	4	30
TOWNE	L	MENDON	8	700	59	7	6	53
TOWNE	H1	WORCESTER	1	275	15	2	1	11
WARD	E1	AVERY'S GORE	6	628	55	12	11	43
WARD	D2	MORGAN	3	593	40	4	5	37
WEHNER	O	WINDHAM	2	488	18	5	5	27
WHELAN	D1	EDEN	6	670	50	7	6	44
WHITAKER	J1	STOCKBRIDGE	1	416	38	2	2	24.5
WHITMAN	I	GRANVILLE	4	601	42	2	2	24
WHITTAKER	E1	AVERY'S GORE	0.5	146	--	--	--	--
WILKINS	O	ANDOVER	1	374	37	1	2	16
WILLSON	E2	CONCORD	--	650	48	5	4	--
WOOD	C	EDEN	5	738	54	3	4	41
WOODARD	C	EDEN	2	663	43	--	6	--
WRIGHT	E1	BLOOMFIELD	2	522	43	4	5	32
WRIGHT	E1	BLOOMFIELD	1	455	37	3	3	27
YEARMAN JR	H1	WORCESTER	1	390	31	1	1	18.5

Weight is carcass weight completely dressed in lbs.; **Beam** is in millimeters; **Pts./Left and Right** are number of points at least 1-inch long; **Spread** is in inches measured to the nearest half-inch; **Age** is cementum age except for 0.5 is a calf aged by tooth replacement at department-operated check station; -- = unknown or missing data.

TABLE 8. 2011 VERMONT LEGAL MOOSE HARVEST DATA—COWS ONLY

Name Last	WMU	Town of Kill	Age Cem	Weight	Total CI
AGAN	D2	NORTON	3	539	1
ALLEN	E1	WARREN GORE	5	533	0
AMADON	D2	SHEFFIELD	5	552	
ARLETH	E1	NORTON	1	421	
ARMSTRONG	J2	ORANGE	9	519	
ATWOOD	I	GOSHEN	0.5	166	
BANFIELD	E2	EAST HAVEN	1	362	0
BARAW	D1	COVENTRY	7	679	2
BASHAW	O	GRAFTON	4	515	1
BESSETTE	C	JAY	--	541	
BOLDUC-WILDEY	I	LINCOLN	9	543	
BOULET	E1	CANAAN	1	353	
BROOKS	D2	HOLLAND	0.5	166	
BURNS	E1	LEMINGTON	3	517	1
CACACE	C	JAY	5	558	
CARPENTER	E1	AVERILL	3	483	1
CLARK	E1	BLOOMFIELD	--	--	
CLEARY	E1	BRIGHTON	8	600	
COLI	E2	GRANBY	2	561	
COLUMBIA	D1	TROY	0.5	223	
COMFORT	C	WESTFIELD	0.5	186	
COREY	E2	MAIDSTONE	--	664	1
COTA	C	JAY	1	511	
CRAIG	B	FRANKLIN	4	476	
CRAMER	E2	CONCORD	5	592	
DAGGETT	E1	WARREN GORE	8	431	
DEVOST	E1	AVERY'S GORE	6	526	
DIMICK	M	BARNARD	0.5	163	
DROWN	D2	WHEELLOCK	4	642	1
DUFFY	E2	FERDINAND	8	661	1
EITENAN	J2	TOPSHAM	--	--	
FILLION	O	ANDOVER	2	546	
GENDRON	E2	FERDINAND	3	594	
GRANGER	P	STRATTON	2	506	
GREEN JR	C	LOWELL	1	342	
HAHN	I	BRISTOL	0.5	192	
HALL	P	SUNDERLAND	5	530	
HALL	E1	CANAAN	2	554	
HICKS	L	MT TABOR	12	336	0
JACOBS	J2	VERSHIRE	4	485	
JEAN	E1	NORTON	8	578	1
KEITH	O	ANDOVER	8	666	1
KENNEDY	I	LINCOLN	2	544	
LACROSS	H1	ELMORE	2	489	
LAMOUREAUX SR	L	MT TABOR	1	284	
LEBRUN	E2	LUNENBURG	11	533	
LEMBKE	E1	BRIGHTON	1	418	
LONGE	B	BERKSHIRE	0.5	245	
LOWELL	H1	ELMORE	--	--	

TABLE 8. 2011 VERMONT LEGAL MOOSE HARVEST DATA—COWS ONLY

Name Last	WMU	Town of Kill	Age Cem	Weight	Total Cl
LYON	D1	TROY	1	409	
MACPHAIL	J2	VERSHIRE	6	486	
MADORE	E1	WARREN GORE	2	513	
MARTEL	E1	LEMINGTON	9	467	
MAYHEW	C	WESTFIELD	3	431	1
MCALLISTER	H1	ELMORE	3	516	1
MCLEAN	D2	WALDEN	2	496	
MOODY	H1	ELMORE	4	379	
MORSE	I	GRANVILLE	9	396	1
NADEAU	E1	AVERY'S GORE	3	436	
NORRIS	E1	MORGAN	8	624	1
NUGENT	C	LOWELL	2	527	
PARADIS	D1	CRAFTSBURY	2	513	1
PATTEN	D2	WHEELOCK	8	496	1
PERRIGO	H1	ORANGE	2	460	
PEYTON	E2	LUNENBURG	1	447	
PHILLIPS	D2	BRIGHTON	0.5	279	
POWERS	E2	CONCORD	5	553	
PRESSON	D2	BRIGHTON	0.5	282	
PROVOST	C	LOWELL	3	496	0
RHEAUME	I	STARSBORO	0.5	250	
RING	E2	FERDINAND	0.5	144	
ROGERS	E1	NORTON	6	456	
SARGENT JR	D2	WHEELOCK	12	470	
SARNA	C	EDEN	--	--	1
SHERIDAN	E1	AVERILL	9	554	
SICARD	D2	BARTON	12	503	
SPENCER	E1	AVERILL	8	578	
STEIN	L	MENDON	13	546	0
SYLVESTER SR	C	JAY	1	379	0
TASSIE	D2	WARREN GORE	1	438	1
THERRIEN	E1	CANAAN	2	502	1
TIBBITS	D1	NEWPORT	10	531	0
TRACY JR	E1	BLOOMFIELD	2	529	
TREMBLEY	D1	EDEN	8	669	
VADNAIS	I	ROCHESTER	1	349	0
WARD	E1	AVERY'S GORE	3	--	1
WEHR	D1	CRAFTSBURY	--	--	

Weight is carcass weight completely dressed in lbs; **Total CL** is number of corpora lutea; **Age** is cementum age except for 0.5 is a calf aged by tooth replacement at department-operated check station; -- = unknown or missing data.