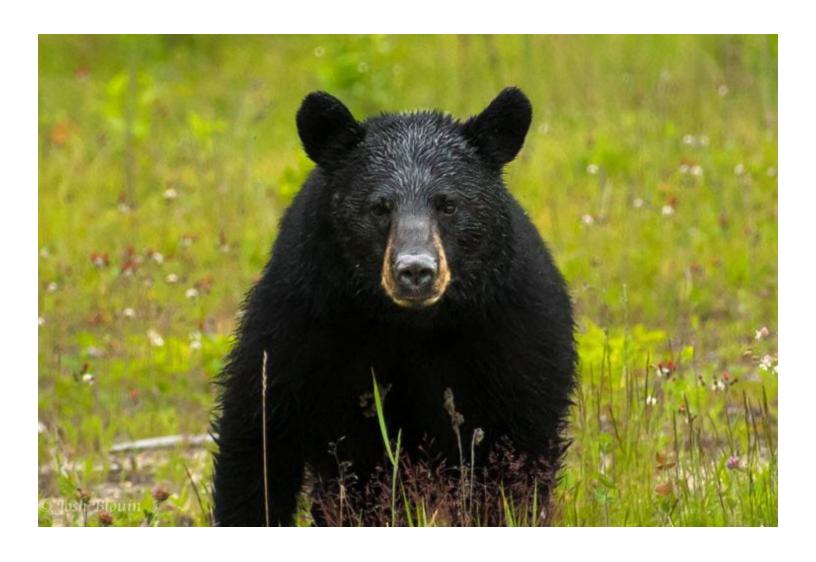


2023 VERMONT BLACK BEAR HARVEST REPORT





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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 more than one 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.

2023 VERMONT BLACK BEAR HARVEST REPORT

Contents

2023 Harvest Overview	1
Total Bear Harvest for Hunting Seasons 1963-2023	3
Harvest Distribution	3
Timing of Harvest	3
Biological Information Collected	4
Sex of Bears	4
Heaviest Bears	6
Appendix A. 2023 Vermont Black Bear Harvest by Tov	



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

Agency of Natural Resources 1 National Life Drive, Davis 2 Montpelier, Vermont 05620-3702 (802) 828-1000 / www.vtfishandwildlife.com

2023 Black Bear Harvest Report

2023 Harvest Overview

Hunters harvested 837 black bears in Vermont during the combined 2023 seasons resulting in an estimated 251,100 meals of local wild game meat. The harvest represents a decrease of 3 bears from the 2022 harvest of 840 bears and was 94 bears above the 10-year average harvest (743 bears, **Figure 1**). Of those harvested, 474 were males, 363 were females, yielding a harvest sex ratio of 1.31 males per female (**Table 1**). A total of 617 bears were harvested during the early bear hunting season and 220 during the late season that overlaps with the regular November deer season (**Table 2**). The 2023 bear harvest by county, town, and the sex of the bear is shown in **Appendix A**.

Table 1. 2023 Bear Harvest by Sex and WMU

Hunters WMU	Total Harvested	Percent of Harvest	Female	Male
В	22	2.63%	9	13
С	50	5.97%	21	29
D1	142	16.97%	67	75
D2	77	9.20%	43	34
E1	19	2.27%	6	13
E2	43	5.14%	25	18
F1	2	0.24%	2	0
F2	15	1.79%	5	10
G	28	3.35%	11	17
Н	58	6.93%	16	42
I	33	3.94%	9	24
J1	39	4.66%	10	29
J2	84	10.04%	37	47
K	26	3.11%	8	18
L	21	2.51%	10	11
M	52	6.21%	26	26
N	39	4.66%	22	17
0	23	2.75%	14	9
Р	41	4.90%	9	32
Q	23	2.75%	13	10
TOTAL	837	100%	363	474

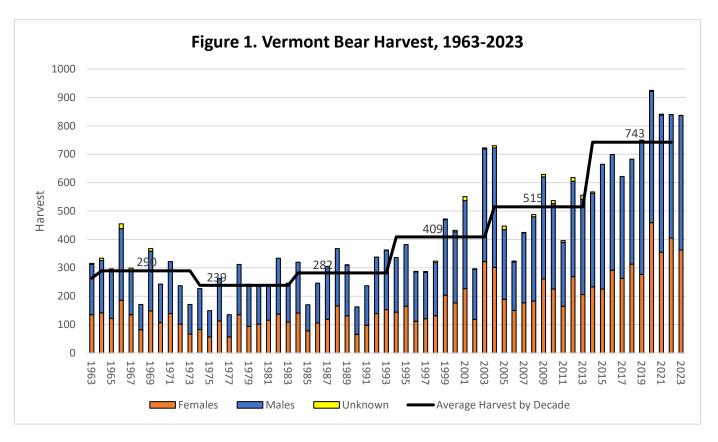
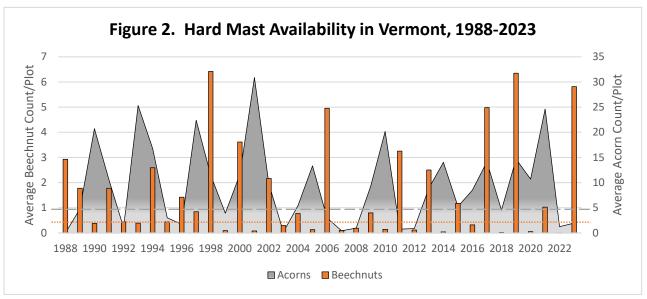


Table 2. Timing of Harvest

Season	Month	Bear Harvest	Percent of Harvest
Early Season	September	308	36.8
Bear (Sept. 1-	October	275	32.8
Nov. 10)	November 1-10	34	4.1
	Total	617	73.7
Late Bear Season (Nov. 11-19)	November 11-19	220	26.3

Wild fall foods were variable in 2023. For a second-year, acorn surveys indicated poor production throughout much of Vermont with many of the potentially available acorns parasitized by acorn weevil larvae (Figure 2). An average of 1.96 acorns were found per survey plot, only slightly above 2022's average of 1.26 acorns per plot. For reference, acorn crops are considered excellent when an average of 15 or more acorns are found per survey plot. Beechnut availability was variable in northern and central Vermont, but consistently abundant in southern Vermont. Surveys across the Northeast Kingdom indicated poor beechnut availability (0.02 average per plot); however, there were observations of bears climbing beech trees to feed on the limited nuts. Surveys

throughout northwestern (NW) and central (C) Vermont varied depending on the survey location, but beechnuts were so abundant in areas with productive crops that the overall average for each region was excellent (2.84 nuts per plot-NW and 5.20 nuts per plot-C). Surveys across southern Vermont revealed excellent beechnut production with an overall average of 19.85 nuts per plot. For reference, beechnut crops are considered excellent when an average of 2 or more nuts are found per survey plot. Anecdotal assessments of wild apples, cherries, and mountain ash were generally abundant in many areas. The abundance of these wild fall foods significantly influences black bear movements during Vermont's bear hunting seasons. When these foods are abundant, black bears will spend time in abandoned apple orchards and oak forests during September. In October, they move into beech-dominated forests where they will forage on beechnuts until nuts are depleted or covered by winter snow. When these foods are scarce, bears will seek out alternate foods, such as corn crops, and will enter winter dens earlier – typically from late October through early November.



Below the gray dashed line is considered poor acorn production and below the orange dashed line is considered poor beechnut production.

Total Bear Harvest for Hunting Seasons 1963-2023

Total bear harvest is the combined harvest by still- and hound-hunters. The number of bears taken can fluctuate widely from year to year as illustrated in Figure 1. Periodic fluctuations in harvest generally occur due to differences in food availability (especially beechnuts) and weather conditions. The current trend is that the annual bear harvest has increased during recent decades and has been steady over the past three years. The highest bear harvests in the past 50 years have been achieved in the last four years, with the 2020 harvest being the largest to date. Although the 2023 harvest was down slightly from both the 2021 and 2022 harvests, it was still 94 bears higher than the past 10-year average. The consistent high harvests and increase from previous decades, combined with a concurrent increase in the estimated population, reflect a strong bear population that is larger than previous decades and represents a general increase in occupied bear range in the state. The highest harvest over the past four years may be in part due to a larger number of hunters specifically targeting bear. Early season license sales averaged 11,414 from 2013-2019. Sales of bear licenses jumped to nearly 14,000 in 2020 and remained above 13,000 in 2021 and 2022. The number dropped in 2023 with 12,274 early season licenses sold.

The department will communicate relevant social science research results related to this increase and will continue to track early season license sales in the coming years to determine the trend in Vermont bear hunter numbers in conjunction with monitoring bear population estimate trends to ensure bear management objectives are effectively addressed.

Harvest Distribution

Bears were harvested in all WMUs except for WMU A (Figure 3). Relatively few bears were also taken in the Champlain valley towns comprising WMU F1. The largest numbers of bears were taken in WMUs #D1 (142), J2 (84), D2 (77), H (58), and M (52) (Table 1). During 2023, bears were harvested in 197 towns compared to 202 towns the previous year. Towns with the highest harvests were Irasburg (20), Lunenburg (19), Hardwick (17), Sutton (15), Stowe (14), Lyndon and Peacham (12), and Coventry, Craftsbury, Reading, Richford, and St. Johnsbury (11). Counties reporting the highest harvests were Orleans (143), Caledonia (115), Windsor (84), Essex (74), and Bennington (65). Bears were harvested statewide except for portions of the Champlain Valley including no bears taken in Grand Isle County (Figure 3).

Timing of Harvest

During the early season 617 (74%) bears were taken, while 220 (26%) were harvested during the late season, nine-day overlap with the regular November deer season (**Table 2**). This is in sharp contrast to the late season in 2022 when only 7% of the harvest occurred.

Historically, the bear harvest during the late bear season is significantly influenced by the abundance of hard mast production in combination with snow levels. In years with limited hard mast production and/or early deep snow, many bears will enter winter dens before the late bear season begins. While years of abundant hard mast and limited snow encourages bears to delay entering dens, making them more harvestable to opportunistic deer hunters. Abundant beechnuts in portions of Vermont and mild weather in 2023 help to

explain why 26% of the bear harvest occurred during the late season compared to 2022 when hard mast was scarce and only 7% of the harvest occurred during the late season.

Harvest by Hunting Opportunity

Bears in Vermont can be harvested with the aid of dogs, by hunters using firearms, and by archers. Trapping and hunting with the use of bait is prohibited. A late season bear tag is provided with every general hunting license sold making all licensed hunters potential bear hunters during the late bear season. A 2018 survey revealed that only 24% of Vermont hunters had hunted for bears in the past five years. Early season license sales indicate that 12,274 hunters potentially hunted for bears during the early bear season. This number doesn't account for permanent license holders who could potentially participate in the early bear season.

During the 2023 season, 582 bears (69.5%) bears were taken by hunters specifically targeting bears while 247 (29.5%) were taken by opportunistic deer hunters (Table 3). This was a decrease from 2022 when 80% of bears were taken by hunters specifically targeting bears but was in-line with the 2021 harvest when 67% of harvested bears came from hunters targeting bears instead of deer. In recent years, it has become common to see a decrease in the percentage of the harvest taken by hunters targeting bears in good beechnut years; likely because more opportunistic deer hunters successfully harvest bears in those years. Of the 582 bears taken by hunters targeting bears, 128 were taken with the aid of dogs while 454 were taken without dogs (**Table 3**). A total of 130 bear dog permits were issued in 2023 (6 more than 2022), with 9 of the permits going to nonresidents. An overall average of 0.98 bears were taken per bear dog permit. In addition, archers

took 112 bears with crossbows being used to harvest 82 of those.

Table 3. 2023 Bear Harvest by Hunting Opportunity

Principal Species Hunter was Seeking	Number Harvested	Percent of Harvest
Bear		
 Harvest with dog 	128	15.3
 Harvest with no dog 	454	54.2
Deer		
During Early Season	90	10.8
 During Late Season 	157	18.8
Other/Unknown	8	1.0

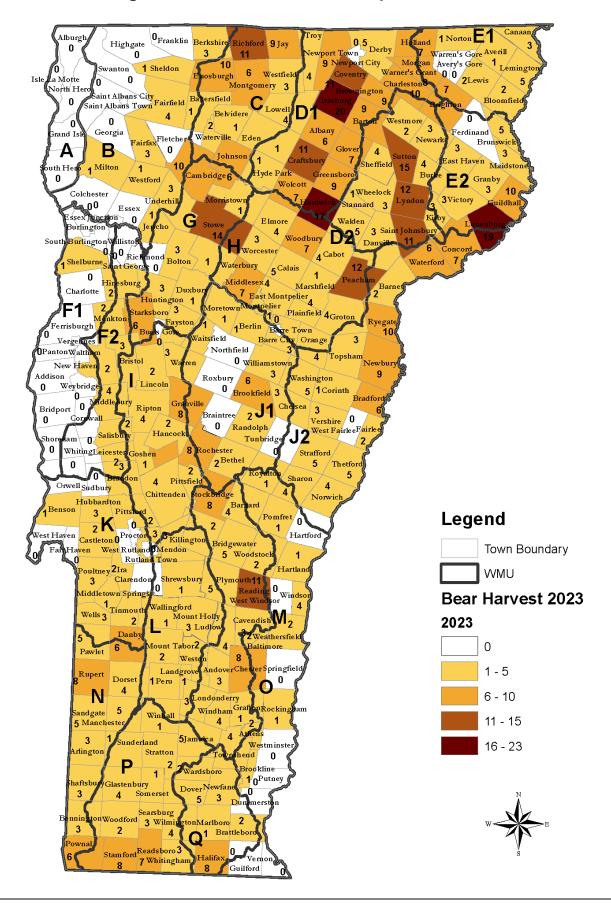
Biological Information Collected

Each fall department biologists collect information from hunters on harvested bears in cooperation with big game reporting stations throughout the state. These data are important for monitoring the status of Vermont's bear population and evaluating the effects of bear management strategies.

Sex of Bears

Since 1963, the department has tracked the sex composition of the harvest as a component of monitoring the size and structure of Vermont's bear population. During the 2023 season, 474 (57%) male bears and 363 (43%) females were harvested, yielding a harvest sex ratio of 1.37 males per female (**Table 1**). This is above the 2022 harvest (1.07), but consistent with Vermont's overall average harvest sex ratio of 1.37 (1963 to 2022). Overall, male bears are consistently harvested at higher rates than female bears, typically accounting for 57% of the harvest. This can vary from year to year, most notably in 2015 when males were 66% of the harvest and in 2020 when males dropped to 50%.

Figure 3. 2023 Bear Harvest by Town and WMU



Ages of Bears

Since 1968, the department has collected premolar teeth from harvested bears for the purpose of evaluating age composition of the harvest and for estimating the size of the population. The teeth are sent to a laboratory in Montana for aging by cementum analysis. Beginning in 2017, it became mandatory for successful bear hunters to collect and submit a tooth from each harvested bear. The following spring the list of ages is posted on the department's website so that hunters can learn the age of the bear they harvested. The average age of bears submitted for aging in 2022 was 3.59 down slightly from an average of 4.00 in 2021 and an overall decade average of 3.85 (2012-2021). The oldest bear harvested in 2022 was a 26-year-old female. The oldest bear on record is a 39-year-old male taken in the town of Maidstone in 1985. Ages for bears harvested in 2023 should be available to the public by the end of May 2024.

During 2023, bear management activities continued to generate the information required to ensure the population is managed at a sustainable level consistent with public desires. The current management program is based primarily on biological data collected from the mandatory bear harvest registration, through population and habitat indexes, as well as from occasional surveys of public desires derived through a detailed public input process undertaken every ten years.

Heaviest Bears

The average weight for all bears in the 2023 harvest was 149 pounds – 8 pounds heavier than in 2022. A total of 29 bears weighing over 300 pounds (scaled/dressed weight) were taken during the 2023 season (**Table 4**). The heaviest field-dressed bear weighed 428 pounds and was taken in the town of Lunenburg in WMU E2. The heaviest bear on record was harvested from Mendon in 2021 and weighed 527 pounds. The largest bears harvested in Vermont are males and typically range in ages from 8-16 years of age.

For more information on large bears harvested in Vermont, visit the Vermont Big Game Trophy Club website at

https://vermontbiggametrophyclub.godaddysites .com/



Table 4. Heaviest Bears Harvested in Vermont

Weight	Town	WMU	County	Date of Kill	Sex	Target Species	Using Dogs
428	Lunenburg	E2	Essex	9/23/2023	М	Bear	Yes
420	Holland	D1	Orleans	9/18/2023	М	Bear	No
396	Sutton	D2	Caledonia	10/8/2023	М	Bear	Yes
388	Peacham	J2	Caledonia	10/28/2023	М	Bear	Yes
375	Stowe	G	Lamoille	10/4/2023	M	Deer	No
370	Peacham	J2	Caledonia	9/14/2023	М	Bear	Yes
370	Mendon		Rutland	11/11/2023	М	Deer	No
366	Starksboro	G	Addison	9/23/2023	М	Bear	No
347	Pownal	N	Bennington	9/24/2023	М	Bear	No
345	Newbury	J2	Orange	9/20/2023	М	Bear	Yes
345	Walden	D2	Caledonia	10/10/2023	М	Deer	No
340	Waterville	С	Lamoille	10/26/2023	М	Bear	No
335	Chittenden		Rutland	11/19/2023	М	Deer	No
335	Hardwick	D1	Caledonia	10/14/2023	М	Bear	No
327	Searsburg	Р	Bennington	11/14/2023	М	Deer	No
325	Strafford	J2	Orange	11/11/2023	М	Deer	No
324	Elmore	Н	Lamoille	10/10/2023	М	Bear	No
320	Bristol	F2	Addison	10/5/2023	М	Deer	No
320	Hancock		Addison	11/11/2023	М	Deer	No
315	Jericho	В	Chittenden	10/15/2023	М	Bear	No
313	Enosburg	В	Franklin	11/11/2023	М	Bear	No
310	Stratton	Р	Windham	11/16/2023	М	Bear	No
310	Barre	J1	Washington	9/16/2023	М	Bear	No
310	Irasburg	D1	Orleans	9/23/2023	М	Bear	Yes
307	Danby	K	Rutland	9/16/2023	М	Bear	No
306	Cabot	Н	Washington	10/24/2023	М	Bear	Yes
305	Charleston	D2	Orleans	9/12/2023	М	Bear	Yes
304	Mendon	L	Rutland	10/19/2023	М	Bear	No
301	Hardwick	D2	Caledonia	9/1/2023	М	Bear	No



County	Town	Males	Females	Total Harvested
ADDISON	ADDISON	0	0	0
	BRIDPORT	0	0	0
	BRISTOL	3	0	3
	CORNWALL	0	0	0
	FERRISBURGH	0	0	0
	GOSHEN	1	0	1
	GRANVILLE	5	3	8
	HANCOCK	2	0	2
	LEICESTER	2	0	2
	LINCOLN	1	1	2
	MIDDLEBURY	2	2	4
	MONKTON	1	1	2
	NEW HAVEN	2	0	2
	ORWELL	0	0	0
	PANTON	0	0	0
	RIPTON	3	1	4
	SALISBURY	0	2	2
	SHOREHAM	0	0	0
	STARKSBORO	5	1	6
	VERGENNES	0	0	0
	WALTHAM	0	0	0
	WEYBRIDGE	0	0	0
	WHITING	0	0	0
	TOTAL	27	11	38
BENNINGTON	ARLINGTON	3	0	3
	BENNINGTON	1	2	3
	DORSET	1	3	4
	GLASTENBURY	2	2	4
	LANDGROVE	1	0	1
	MANCHESTER	3	2	5
	PERU	0	1	1
	POWNAL	6	0	6
	READSBORO	6	1	7
	RUPERT	4	4	8
	SANDGATE	0	5	5
	SEARSBURG	3	0	3
	SHAFTSBURY	1	2	3
	STAMFORD	8	0	8
	SUNDERLAND	1	0	1
	WINHALL	0	1	1
	WOODFORD	1	1	2
	TOTAL	41	24	65
CALEDONIA	BARNET	0	2	2
	BURKE	0	4	4
	DANVILLE	1	2	3
	GROTON	3	1	4
	HARDWICK	11	6	17
	KIRBY	2	1	3

County	Town	Males	Females	Total Harvested
CALEDONIA (cont.)	LYNDON	5	7	12
	NEWARK	0	3	3
	PEACHAM	7	5	12
	RYEGATE	5	5	10
	ST. JOHNSBURY	6	5	11
	SHEFFIELD	2	2	4
	STANNARD	0	1	1
	SUTTON	11	4	15
	WALDEN	2	3	5
	WATERFORD	2	4	6
	WHEELOCK	0	3	3
	TOTAL	57	58	115
CHITTENDEN	BOLTON	2	1	3
	BUELS GORE	0	0	0
	BURLINGTON	0	0	0
	CHARLOTTE	0	0	0
	COLCHESTER	0	0	0
	ESSEX	0	0	0
	HINESBURG	1	1	2
	HUNTINGTON	1	2	3
	JERICHO	1	0	1
	MILTON	1	0	1
	RICHMOND	0	0	0
	SHELBURNE	0	1	1
	SOUTH BURLINGTON	0	0	0
	ST. GEORGE	0	0	0
	UNDERHILL	2	1	3
	WESTFORD	0	1	1
	WILLISTON	0	0	0
	WINOOSKI	0	0	0
	TOTAL	8	7	15
ESSEX	AVERILL	1	0	1
LJJLX	AVERYS GORE	0	0	0
	BLOOMFIELD	2	0	2
	BRIGHTON	5	2	7
	BRUNSWICK	3	2	5
	CANAAN	2	1	3
	CONCORD	3	4	7
	EAST HAVEN	2	1	3
	FERDINAND	0	0	0
	GRANBY	0	3	3
	GUILDHALL		<u>5</u>	10
	LEMINGTON	4	<u>5</u> 1	5
	LEWIS	0	2	2
	LUNENBURG		12	<u>2</u> 19
	MAIDSTONE	1	2	3
	NORTON	0	<u>2</u> 1	<u>3</u> 1
		2	<u> </u>	3
L	VICTORY	2		3

County	Town	Males	Females	Total Harvested
ESSEX (cont.)	WARRENS GORE	0	0	0
, ,	TOTAL	37	37	74
FRANKLIN	BAKERSFIELD	0	1	1
	BERKSHIRE	2	1	3
	ENOSBURG	7	3	10
	FAIRFAX	3	0	3
	FAIRFIELD	2	2	4
	FLETCHER	0	0	0
	FRANKLIN	0	0	0
	GEORGIA	0	0	0
	HIGHGATE	0	0	0
	MONTGOMERY	3	3	6
	RICHFORD	7	4	11
	SHELDON	1	0	1
	ST. ALBANS	0	1	1
	SWANTON	0	0	0
	TOTAL	25	15	40
GRAND ISLE	ALBURGH	0	0	0
	GRAND ISLE	0	0	0
	ISLE LA MOTTE	0	0	0
	NORTH HERO	0	0	0
	SOUTH HERO	0	0	0
	TOTAL	0	0	0
LAMOILLE	BELVIDERE	0	1	1
	CAMBRIDGE	6	4	10
	EDEN	1	0	1
	ELMORE	3	1	4
	HYDE PARK	1	0	1
	JOHNSON	1	5	6
	MORRISTOWN	1	0	1
	STOWE	9	5	14
	WATERVILLE	1	1	2
	WOLCOTT	6	1	7
	TOTAL	29	18	47
ORANGE	BRADFORD	4	2	6
	BRAINTREE	0	0	0
	BROOKFIELD	4	2	6
	CHELSEA	2	1	3
	CORINTH	0	1	1
	FAIRLEE	1	1	2
	NEWBURY	6	3	9
	ORANGE	3	1	4
	RANDOLPH	1	1	2
	STRAFFORD	5	0	5
	THETFORD	2	3	5
	TOPSHAM	1	2	3
	TUNBRIDGE	0	0	0

County	Town	Males	Females	Total Harvested
ORANGE (cont.)	WASHINGTON	4	1	5
	WEST FAIRLEE	0	0	0
	WILLIAMSTOWN	3	0	3
	TOTAL	37	20	57
ORLEANS	ALBANY	2	4	6
	BARTON	7	2	9
	BROWNINGTON	5	4	9
	CHARLESTON	6	4	10
	COVENTRY	8	3	11
	CRAFTSBURY	5	6	<u>11</u>
	DERBY	3	2	<u>5</u>
	GLOVER	2	5	7
	GREENSBORO	4	5	9 7
	HOLLAND	3	4	
	IRASBURG	11	9 3	20
	JAY LOWELL	6	<u> </u>	<u>9</u> 4
	MORGAN	<u> </u>	<u>3</u> 	4 8
	NEWPORT	<u>_</u>	4	9
	TROY	1	3	4
	WESTFIELD	2	<u>3</u> 1	3
	WESTMORE	0	2	2
	TOTAL	72	71	143
RUTLAND	BENSON	0	1	1
ROTEARD	BRANDON	2	1	3
	CASTLETON	2	0	2
	CHITTENDEN	2	2	4
	CLARENDON	0	0	0
	DANBY	4	2	6
	FAIR HAVEN	0	0	0
	HUBBARDTON	1	2	3
	IRA	1	1	2
	KILLINGTON	2	0	2
	MENDON	2	1	3
	MIDDLETOWN SPRINGS	1	0	1
	MOUNT HOLLY	0	3	3
	MOUNT TABOR	2	0	2
	PAWLET	3	2	5
	PITTSFIELD	1	1	2
	PITTSFORD	1	1	2
	POULTNEY	2	1	3
	PROCTOR	0	0	0
	RUTLAND	2	1	3
	SHREWSBURY	1	0	1
	SUDBURY	0	0	0
	TINMOUTH	1	1	2
	WALLINGFORD	0	1	1
	WELLS	2	1	3

County	Town	Males	Females	Total Harvested
RUTLAND (cont.)	WEST HAVEN	0	0	0
, ,	WEST RUTLAND	0	0	0
	TOTAL	32	22	54
WASHINGTON	BARRE	2	1	3
	BERLIN	0	1	1
	CABOT	3	1	4
	CALAIS	4	1	5
	DUXBURY	1	0	1
	EAST MONTPELIER	4	0	4
	FAYSTON	1	2	3
	MARSHFIELD	1	0	1
	MIDDLESEX	7	0	7
	MONTPELIER	1	0	1
	MORETOWN	0	1	1
	NORTHFIELD	0	0	0
	PLAINFIELD	1	3	4
	ROXBURY	0	0	0
	WAITSFIELD	1	0	1
	WARREN	3	0	3
	WATERBURY	0	1	1
	WOODBURY	6	1	7
	WORCESTER	2	1	3
	TOTAL	37	13	50
WINDHAM	ATHENS	0	2	2
	BRATTLEBORO	2	0	2
	BROOKLINE	1	0	1
	DOVER	1	4	5
	DUMMERSTON	0	0	0
	GRAFTON	3	1	4
	GUILFORD	0	0	0
	HALIFAX	2	6	8
	JAMAICA	2	3	5
	LONDONDERRY	3	0	3
	MARLBORO	1	0	1
	NEWFANE	3	0	3
	PUTNEY	0	0	0
	ROCKINGHAM	1	0	1
	SOMERSET	1	0	1
	STRATTON	2	0	2
	TOWNSHEND	1	3	4
	VERNON	0	0	0
	WARDSBORO	1	1	2
	WESTMINSTER	0	0	0
	WHITINGHAM	2	1	3
	WILMINGTON	2	2	4
	WINDHAM	3	1	4
	TOTAL	31	24	55

County	Town	Males	Females	Total Harvested
WINDSOR	ANDOVER	2	1	3
	BALTIMORE	2	0	2
	BARNARD	1	3	4
	BETHEL	1	1	2
	BRIDGEWATER	1	4	7.
	CAVENDISH	2	1	3
	CHESTER	3	5	8
	HARTFORD	0	0	0
	HARTLAND	0	1	1
	LUDLOW	2	2	4
	NORWICH	3	1	4
	PLYMOUTH	3	2	5
	POMFRET	0	1	1
	READING	3	8	11
	ROCHESTER	7	1	8
	ROYALTON	0	1	1
	SHARON	3	1	4
	SPRINGFIELD	0	0	0
	STOCKBRIDGE	6	2	8
	WEATHERSFIELD	0	2	2
	WEST WINDSOR	0	0	0
	WESTON	1	1	2
	WINDSOR	1	3	4
	WOODSTOCK	0	2	2
	TOTAL	41	43	84
STATE	TOTAL	474	363	837

