



2009 VERMONT WILDLIFE HARVEST REPORT Black Bear



FISH & WILDLIFE DEPARTMENT
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2009 Vermont Black Bear Harvest Report

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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

Agency of Natural Resources

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Most of the programs described in this report are funded through the *Federal Aid in Wildlife Restoration Program*. This program initiated in 1937 as the Federal Aid In Wildlife Act and created a system where by 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 use these monies for acquiring land, and for restoring and managing wildlife. These excise tax dollars, coupled with state hunting license fees have been the predominate source of money funding the successful restoration and management of Vermont’s wildlife resources.

2009 Black Bear Report

Vermont's Black Bear Population

Vermont's black bear population is currently estimated at between 4,700 and 6,750 bears and has slowly increased over the past two decades. Bear management in the Green Mountain State was structured to meet management goals stated in the 1997-2006 Big Game Management Plan while a new plan was being prepared. Under this plan, and the previous one, the bear population was allowed to grow in size over the past two decades through a reduction in the length of the hunting season first implemented in 1990. Under the recently enacted Big Game Plan (2010-2020), the statewide bear population goal will be to maintain the population between 4,500 and 6,000 animals.

Black Bear Habitat

Vermont's black bear core habitat is made up of large tracts of unbroken remote forests. These areas of core habitat have historically had the highest density of bears, but with the recent increases in the bear population, bears are occurring in higher numbers in more fragmented habitat often causing problems for both the bears and humans. As the state's human population approaches 650,000, land continues to be developed and subdivided into smaller parcels, resulting in less available habitat for bears and fewer opportunities for hunters to access private land while increasing the chance of human-bear conflicts. The Department recognizes these problems and remains committed to public land acquisition programs (for example Forest Legacy) that conserve wildlife habitat. There are currently over 800,000 acres of public land open to hunting under state or federal management. The Vermont Agency of Natural Resources manages more than 333,000 acres of this total as wildlife management areas, state forests, and state parks. The Agency also holds easements on over 123,000 acres of conserved commercial forestlands that guarantee public access. The Green Mountain National Forest and Silvio Conte National Wildlife Refuge comprise most of the federally-owned public lands in the state.

Department biologists worked with the National Wildlife Federation, Vermont Natural Resources Council, Vermont Agency of Transportation, and the US Forest Service on the "Critical Paths" project to identify priority crossing zones along the spine of the Green Mountains that are essential for south-north wildlife movement. The project identified 11 priority zones of the 38 wildlife crossings that were surveyed along the highways bisecting the Green Mountains. Biologists tracked and monitored wildlife movement patterns at each crossing over an extended period of time. Then, in consultation with other resource professionals, transportation experts, and local citizens, they developed key strategies to make the roads safer and improve wildlife habitat connectivity. The Critical Paths report can be found online at: www.nwf.org/northeast or www.vnrc.org/library/publications. This project was designed to serve as a first in a series of wildlife crossing projects with the goal to eventually identify and develop management strategies for all major wildlife crossing areas in Vermont.



Jacob Zorn

Public Education and Outreach

Much of the public outreach for Vermont's bear program was done in conjunction with the development of the new Big Game Management Plan (2010-2020). A survey of 1,000 randomly-selected Vermont residents was conducted to gather public opinion related to bear and other big game species management. Respondents were asked their views on many topics such as habitat protection, game species population size preferences, and property damage from wildlife. Results of the survey are posted on the Department's website: www.vtfishandwildlife.com/library/.

Additionally, a series of open house style public meetings were held in five locations around the state and a web page was developed to allow people to discuss issues and offer opinions to Department staff. This was followed by two public meetings and a month-long public comment period to allow Vermonters to submit opinions regarding draft management plans. Approximately 200 people attended the meetings, wrote letters and e-mails, used the on-line comment option, or made phone calls to express their views.

Biologists and game wardens gave bear presentations to communities and schools as requested. Game wardens also responded to 275 complaints of black bears causing property damage or potentially threatening public safety in 2009.

The Vermont Fish & Wildlife Department also protects wildlife habitat through reviewing and making habitat development recommendations on projects that require federal, state, or local permits for potential impacts to fish, wildlife, and related habitats. During 2009, the Department reviewed and evaluated an estimated 1,135 development projects. Of these, 20 projects involved significant bear habitat comprised of concentrated areas of hard mast trees and forested wetlands used by bears as well as travel corridors. Since 1995, 1,741 acres of significant bear habitat have been protected in Vermont. Currently, Department biologists are reviewing several large industrial wind projects that could potentially impact large acreages of significant bear habitats.

2009 Harvest Summary

Vermont's 79-day bear season commenced on September 1 and ended on November 18. The season terminated on the first Wednesday of the general firearms deer season, overlapping the deer season for 5 days. Licensed hunters took 629 black bears in Vermont during the 2009 season. This represented an increase of 29 percent over the 2008 harvest as well as an increase over the previous 10-year average; although still well below the two highest harvests recorded in 2003 and 2004. Approximately 23 tons (an estimated 46,000 lbs.) of boneless bear meat was harvested. Table 6 provides the listing of harvest by town and county.

Annual surveys of both soft and hard mast conducted by Department biologists indicated that food availability may have played a role in the high bear harvest in 2009. Soft mast includes soft, juicy berries, wild cherries, and apples while hard mast includes beechnuts, acorns, and hazelnuts. Vermont biologists go afield every year to assess mast availability as they recognize that it affects bear reproduction success and their seasonal movements and timing of hibernation. Mast availability also influences the distribution of the bear harvest, road kills, and property damage. Survey results in 2009 indicated that apple and acorn production were higher than normal while beechnuts were rather sparse. Both apples and acorns tend to occur at lower elevations while during years of good beechnut production, bears tend to feed at higher elevations more distant from roads. Bear harvests tend to be higher in years such as 2009 when beech mast is low forcing the bears to travel more widely and to forage more on foods such as apples and feed corn where they are more susceptible to being taken by hunters.

During 2009, bear management activities continued to generate the information required to ensure that the population is managed at a sustainable level consistent with public desires. The current management program is based primarily on biological data collected during the mandatory bear harvest registration, population and habitat indexes, and surveys of public desires derived through a detailed public input process.

Total Bear Harvest For Hunting Seasons 1955-2009

Total bear harvest is the combined harvest of still- and hound- hunters and the number of bears taken fluctuates widely between some years as illustrated in Figure 1. Annual bear harvest has increased notably during the past two decades. Periodic fluctuations in harvest generally occur due to differences in food availability (especially beechnuts) and weather conditions which also reflect changing vulnerability to hunters. A long-

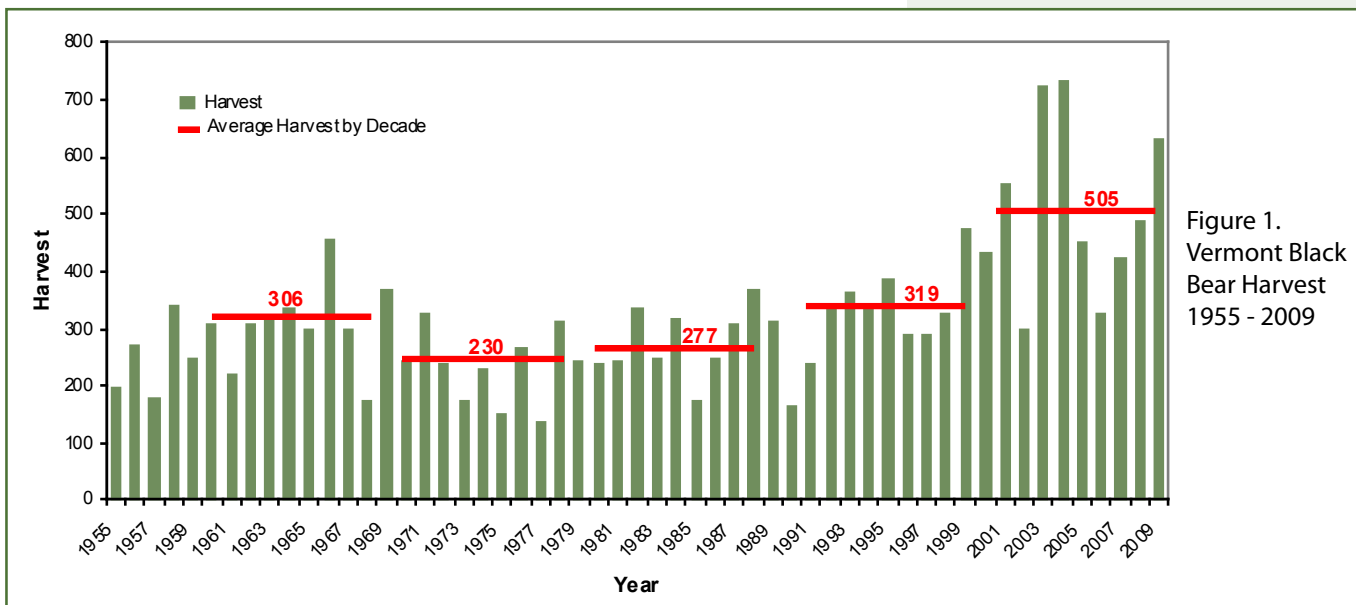


Figure 1. Vermont Black Bear Harvest 1955 - 2009

term trend in higher harvests is usually the result of an increasing population. The highest bear harvests in the past 55 years have been achieved in the past decade, with the third highest occurring in 2009. These historic high harvests are believed to reflect a strong bear population that is larger than previous decades and could indicate an increase in the number of hunters hunting specifically for bears.

Harvest Distribution

Bears were harvested legally in all WMUs with the exception of WMU A and K1. The largest numbers of bears were taken in WMUs D2 (67), E (55), and J1 (47) (Table 1). It is interesting to note that a substantial number (92 or 15%) were taken from 6 WMUs (B, F1, F2, K2, M2 and O2) that, until the two most recent decades, were considered to be outside normal bear range and visited only infrequently by bears. The fact that nearly half of those harvested bears were females (40) suggests that these were probably not random dispersal events, but that bears have expanded their occupied ranges into these WMUs. Counties reporting the highest harvests were Windsor (73), and Orleans (71). Towns with the highest harvests were Bethel (15), Lunenburg (13), Sutton (11), and Guildhall (10). According to anecdotal reports from hunters, areas of the state with the highest bear harvests were areas where bears had concentrated to forage on feed- corn where they were more vulnerable to hunters than bears in forested areas.

Harvest by Hunting Opportunity

Bears in Vermont can be taken with the use of hounds, with firearms and by archers. Snaring and hunting with the use of bait is prohibited. All deer hunters are potential bear hunters as a bear tag is provided with every deer license sold. The actual number of deer hunters that would take a bear if given the opportunity is unknown as is the total number of bear hunters in the state.

WMU	Total Harvested	Percent of Harvest	Female	Male	Unknown
A	0	0.0	0	0	0
B	29	4.6	14	15	0
C	44	7.0	19	24	1
D1	48	7.6	25	23	0
D2	67	10.7	23	42	2
E	55	8.7	20	35	0
F1	3	0.5	3	0	0
F2	19	3.0	9	10	0
G	37	5.9	19	17	1
H1	37	5.9	15	19	3
H2	13	2.1	4	9	0
I	39	6.2	18	20	1
J1	47	7.5	15	30	2
J2	31	4.9	8	23	0
K1	0	0.0	0	0	0
K2	14	2.2	2	12	0
L	21	3.3	6	15	0
M1	19	3.0	6	12	1
M2	13	2.1	8	5	0
N	18	2.9	6	11	1
O1	10	1.6	7	3	0
O2	14	2.2	4	9	1
P	34	5.4	20	14	0
Q	17	2.7	8	9	0
Total	629	—	259	357	13

Table 2. 2009 Bear harvest by hunting opportunity.

Principal Species Hunter was Seeking	Number Harvested	Percent of Harvest
Bear	438	70%
Harvest with dog	85	14%
Harvest with no dog	544	86%
Deer	152	25%
Other/Unknown	31	5%

In 2009, bears were primarily taken by hunters specifically hunting for bears (70%), while 30% were taken by hunters who opportunistically took a bear while hunting other species. Fourteen percent of the harvest was taken with the use of hounds (Table 2) while archers also took 14%. There were 98 bear hound permits issued in 2009 with a tenth of them going to non-residents.

Timing of Harvest

The majority of harvested bears were taken by hunters during September and October (79%) with the highest harvest occurring in September (Table 3), while only 13% were taken during that part

Table 3. Timing of harvest.

Period When Harvested	Number Harvested	Percent of Harvest
September	276	45%
October	215	34%
November	129	20%
During Deer Season (11/14-11/18)	85	13%
Unknown	9	1%

of the bear season that overlaps the November deer season. Historically, a much larger proportion of the harvest occurred during the deer season leading many managers to believe that holding the bear season during the deer season, as well as not charging specifically for a bear permit, was essential to being able to harvest enough bears to control the population. In recent years, the high number of bears taken by hunters hunting specifically for bears, as well as the large proportion of the harvest being taken prior to the deer season, indicate that interest in hunting for bears may be increasing and that issuing a bear tag with every deer license may not be necessary for the purpose of achieving a desired level of harvest.

Heaviest Bears

A total of 13 bears weighing more than 300 pounds (scaled/dressed weight) were taken during the 2009 season. Several additional large bears were reported that were not fully field dressed when brought into the check station for weighing and so are not reflected in this report. Although no bears were recorded over 400 pounds during the season,

Table 4. Heaviest bears harvested in 2009.

Town Harvested	WMU	Weight	Date of Kill	Sex	Target Species	Using Dogs
Coventry	D1	399	10/3/2009	Male	Bear	Yes
Barton	D2	348	9/1/2009	Male	Bear	Yes
Brunswick	E	342	9/3/2009	Male	Bear	Yes
Rockingham	O2	327	11/14/2009	Male	Deer	No
Brownington	D1	327	9/26/2009	Male	Bear	Yes
Sutton	D2	325	9/26/2009	Male	Bear	Yes
Bethel	J1	322	9/30/2009	Male	Bear	Yes
Pownal	N	322	10/11/2009	Male	Deer	No
East Haven	E	316	10/31/2009	Male	Other	No
Bakersfield	B	315	10/20/2009	Male	Other	No
Rupert	N	312	10/19/2009	Male	Unknown	No
Derby	D2	310	10/1/2009	Male	Bear	Yes
Rochester	1	310	10/17/2009	Male	Bear	No

the heaviest was 399 pounds and taken in the town of Coventry. Seven of the 13 heaviest bears, including the largest, were taken with the use of dogs (Table 4). Three of these heaviest bears were taken in WMU D2 while more than half were harvested in the Northeast Kingdom. The average weight of all bears in the 2009 harvest was 138 pounds.

Non-hunting Mortalities and Damage Complaints

In addition to the 629 bears taken legally during the regulated hunting season there were 107 that were reported as non-hunting mortalities during 2009. Of these bears that were not taken by hunters, 75 were killed in motor vehicle collisions and 12 were destroyed as nuisance animals (Table 5). Department law enforcement personnel responded to 275 black bear complaints, of which 143 involved property damage.

Table 5. Non-hunting mortalities and damage complaints.

Mortality Type	Number
Vehicle Collision	75
Management/Damage	12
Illegal	7
Other or Unknown Cause	13
Total	107
Bear Property Damage Complaints	143

Table 6. 2009 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALE	UNKNOWN
ADDISON	BRISTOL	4		4	
	GOSHEN	7	1	6	
	GRANVILLE	7	2	5	
	LEICESTER	1	1		
	LINCOLN	1	1		
	MIDDLEBURY	4	4		
	NEW HAVEN	2	2		
	RIPTON	4	3	1	
	SALISBURY	9	5	4	
	STARKSBORO	9	5	4	
BENNINGTON	ARLINGTON	2	2		
	BENNINGTON	5	4	1	
	DORSET	1	1		
	GLASTENBURY	2	2		
	POWNAL	8	3	5	
	READSBORO	4	3	1	
	RUPERT	2	1	1	
	SANDGATE	2		2	
	SEARSBURG	1	1		
	SHAFTSBURY	3	1	2	
	STAMFORD	3	2	1	
	SUNDERLAND	2	1	1	
	WINHALL	1		1	
WOODFORD	7	4	3		
CALEDONIA	BARNET	1		1	
	BURKE	7	2	4	1
	DANVILLE	5	2	3	
	GROTON	3	1	2	
	HARDWICK	6	1	5	
	KIRBY	4	2	2	
	LYNDON	3	2	1	
	NEWARK	5	3	2	

Table 6. 2009 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALE	UNKNOWN
CALEDONIA (cont.)	PEACHAM	1	1		
	RYEGATE	3	1	2	
	SHEFFIELD	3	1	2	
	ST JOHNSBURY	1		1	
	SUTTON	11	3	7	1
	WALDEN	1			1
	WATERFORD	7	2	5	
	WHEELOCK	2	1	1	
	CHITTENDEN	BOLTON	4	1	3
ESSEX		2	1	1	
HINESBURG		2	1	1	
HUNTINGTON		4	1	3	
JERICO		3	2	1	
MILTON		1	1		
RICHMOND		3		3	
ST GEORGE		1		1	
UNDERHILL		7	6	1	
WESTFORD		1		1	
WILLISTON		1	1		
ESSEX		BLOOMFIELD	4	2	2
	BRIGHTON	6	3	3	
	BRUNSWICK	5	1	4	
	CANAAN	3		3	
	CONCORD	3	3		
	E HAVEN	2		2	
	FERDINAND	1	1		
	GRANBY	1	1		
	GUILDHALL	10	4	6	
	LEMINGTON	1		1	
	LUNENBURG	13	3	10	
	MAIDSTONE	2	1	1	
	VICTORY	4	1	3	
	FRANKLIN	BAKERSFIELD	6	3	3
BERKSHIRE		3	2	1	
ENOSBURG		10	3	7	
FAIRFAX		1		1	
FAIRFIELD		6	3	3	
FLETCHER		4		4	
MONTGOMERY		8	3	5	
RICHFORD		7	3	4	
SWANTON		1		1	
LAMOILLE	CAMBRIDGE	8	5	3	
	EDEN	3	2		1

Table 6. 2009 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALE	UNKNOWN
LAMOILLE (cont.)	ELMORE	3	2	1	
	HYDE PARK	7	4	3	
	JOHNSON	3		3	
	MORRISTOWN	3	1	1	1
	STOWE	5	5		
	WATERVILLE	2		2	
	WOLCOTT	3	2	1	
ORANGE	BRADFORD	1		1	
	BRAINTREE	6	3	3	
	BROOKFIELD	1		1	
	CHELSEA	1	1		
	CORINTH	4		4	
	NEWBURY	9	2	7	
	ORANGE	1		1	
	RANDOLPH	3	1	2	
	TOPSHAM	5	3	2	
	TUNBRIDGE	3	1	2	
	VERSHIRE	3	2	1	
	WASHINGTON	3	1	2	
	WILLIAMSTOWN	1		1	
ORLEANS	ALBANY	7	5	2	
	BARTON	1		1	
	BROWNINGTON	2		2	
	CHARLESTON	7	1	6	
	COVENTRY	2	1	1	
	CRAFTSBURY	3	1	2	
	DERBY	5	1	4	
	GLOVER	6	4	2	
	GREENSBORO	3	2	1	
	HOLLAND	4	2	2	
	IRASBURG	7	2	5	
	JAY	2		2	
	LOWELL	8	5	3	
	MORGAN	2	2		
	NEWPORT	3	2	1	
	TROY	4	3	1	
	WESTFIELD	3	2	1	
	WESTMORE	2		2	
RUTLAND	BRANDON	4	1	3	
	CHITTENDEN	6	3	3	
	CLARENDON	4		4	
	DANBY	3	1	2	
	KILLINGTON	3	1	2	
	MENDON	4	3	1	

Table 6. 2009 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALE	UNKNOWN	
RUTLAND (cont.)	MIDDLETOWN SPRINGS	1		1		
	MT HOLLY	4	2	2		
	MT TABOR	1	1			
	PAWLET	5		4	1	
	PITTSFIELD	2	1	1		
	PITTSFORD	3	1	2		
	RUTLAND	1			1	
	SHREWSBURY	4	1	3		
	TINMOUTH	1		1		
	WALLINGFORD	2		2		
	WELLS	2	1	1		
	WASHINGTON	BERLIN	2		2	
CABOT		2	1	1		
CALAIS		2	1	1		
DUXBURY		1	1			
E MONTPELIER		3		2	1	
FAYSTON		1	1			
MARSHFIELD		3	2		1	
MIDDLESEX		3	2	1		
MONTPELIER		2		2		
MORETOWN		3	1	2		
NORTHFIELD		2	2			
PLAINFIELD		2	1	1		
ROXBURY		1		1		
WAITSFIELD		1		1		
WARREN		1		1		
WATERBURY		8	3	5		
WOODBURY		2	1	1		
WORCESTER		1		1		
WINDHAM		BRATTLEBORO	1		1	
		DOVER	2	2		
	DUMMERSTON	1	1			
	GRAFTON	1		1		
	GUILFORD	4	1	3		
	HALIFAX	2		2		
	JAMAICA	3	2	1		
	NEWFANE	5	3	2		
	PUTNEY	1		1		
	ROCKINGHAM	2		2		
	SOMERSET	2	1	1		
	STRATTON	1		1		
	VERNON	1		1		
	WESTMINSTER	2		2		

Table 6. 2009 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALE	UNKNOWN
WINDHAM (cont.)	WHITINGHAM	2	1	1	
	WILMINGTON	1		1	
	WINDHAM	2	1	1	
WINDSOR	ANDOVER	1		1	
	BALTIMORE	2		2	
	BARNARD	1		1	
	BETHEL	15	3	11	1
	BRIDGEWATER	8	3	4	1
	CAVENDISH	2	2		
	CHESTER	7	3	3	1
	HARTFORD	1		1	
	HARTLAND	1	1		
	LUDLOW	2		2	
	NORWICH	1		1	
	PLYMOUTH	5		5	
	POMFRET	3	1	2	
	READING	2	1	1	
	ROCHESTER	8	3	4	1
	ROYALTON	1	1		
	SHARON	1		1	
	SPRINGFIELD	2	1	1	
	STOCKBRIDGE	2		2	
	WEATHERSFIELD	2	1	1	
	WESTON	1		1	
	WINDSOR	2	1	1	
	WOODSTOCK	3	3		
TOTAL		629	258	358	13