

2010 VERMONT WILDLIFE HARVEST REPORT Black Bear



FISH & WILDLIFE DEPARTMENT
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2010 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

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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.

2010 Black Bear Report

Vermont's Black Bear Population

Vermont's black bear population is currently estimated at between 5,400 and 7,700 with a population model "best estimate" of 6300 bears. This number has slowly increased over the past two decades in response to goals to increase the state's bear population as set forth in the past two Vermont bear management plans. During the past two decades, the bear population was allowed to grow in size 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 (e.g., 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.

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 2010, the Department reviewed and evaluated an estimated 782 development projects. Of these, 16 projects involved significant bear habitat comprised of concentrated areas of hard mast trees, forested wetlands used by bears, and black bear travel corridors. Since 1995, there have been 27, 223 acres of significant bear habitat protected in Vermont through the environmental permitting process. Currently, Department biologists are reviewing several large industrial wind projects that could potentially impact additional large acreages of significant bear habitats.

2010 Harvest Summary

Vermont's 2010 78-day bear season commenced on September 1 and ended on November 17. The season terminated on the first Wednesday of the general firearms deer season, overlapping the deer season for 5



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. The bear biologist also attended several Vermont Bear Hound Association meetings and gave presentations to the Ascutney Mountain Audubon as well as The Nature Conservancy located in Manchester. Game wardens also responded to 278 complaints of black bears involved in automobile collisions, causing property damage or potentially threatening public safety in 2010.

days. Licensed hunters took 537 black bears in Vermont during the 2010 season. This represents a decrease of 15 percent below the 2009 harvest of 629 bears, but is still above the previous 10-year average of 505 (Figure 1). Approximately 20 tons (an estimated 40,275 lbs.) of boneless bear meat was harvested. The attached Appendix I, 2010 Bear Harvest by Sex and Town, 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 2010. 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 2010 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 2010 when beech mast is low forcing the bears to travel more widely and to forage more on foods such as apples, acorns and feed corn where they are more susceptible to being taken by hunters.

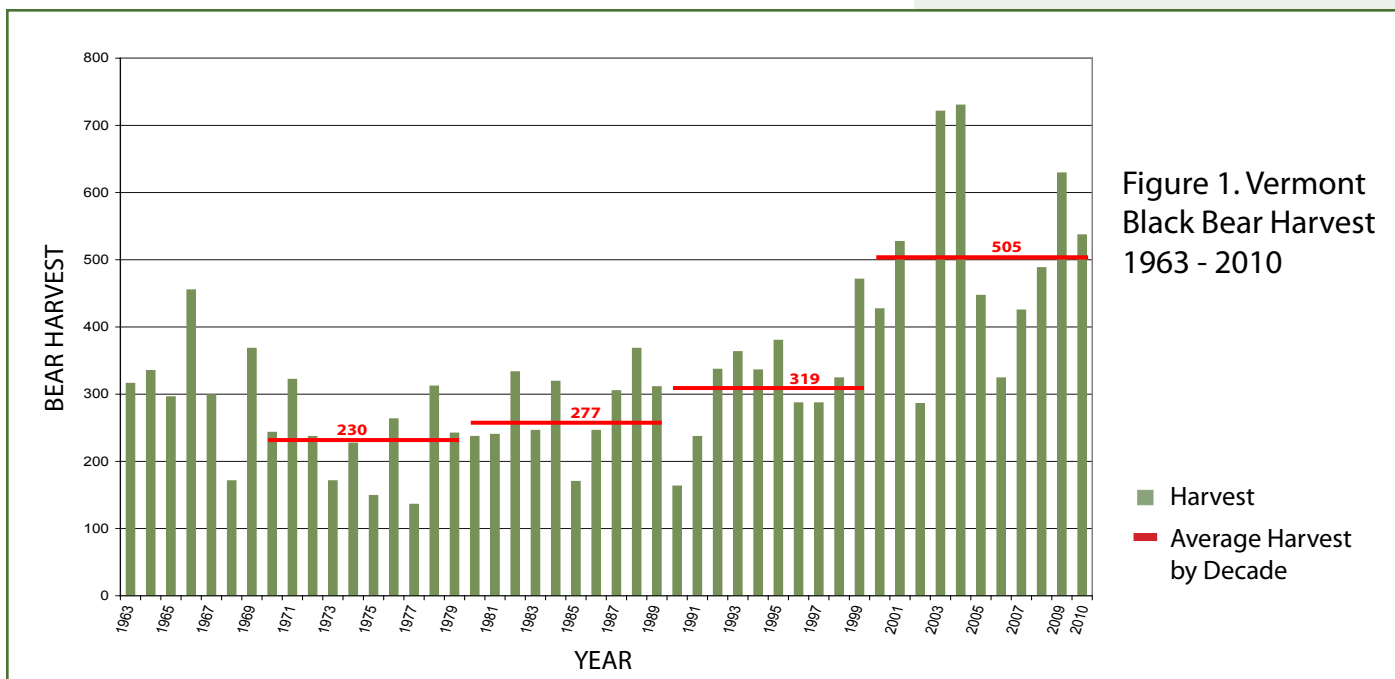
During 2010, bear management activities continued to generate the information required to ensure that the population is managed at a sustainable level consistent with public desires. The current management program is based primarily on biological data collected during the mandatory bear harvest registration, population and habitat indexes, and surveys of public desires derived through a detailed public input process.

Total Bear Harvest For Hunting Seasons 1963-2010

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 the graph below (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-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. The largest numbers of bears were taken in WMUs D2 (58), D1 (51), C (46), and J1 (40) (Table 1). It is interesting to note that a substantial number (156 or 29%) were taken from 10 WMUs (B, F1, F2, K1, K2, M2, N, J1, J2 and O2) that, until the two most recent decades, were considered to be on the fringe of typical bear range and visited only infrequently by bears. The fact that 80% percent of the bears harvested in these 10 WMUs were males suggests that these areas may still have large numbers



of bears dispersing from other WMUs long considered to be “core” habitat for bears in the state, as males tend to travel further than females. Counties reporting the highest harvests were Orleans (79), Caledonia (65), and Windsor (70). Towns with the highest harvests were Bethel (10), Guildhall (9), and Morgan (9) (Table 6). According to anecdotal reports from hunters, bears were not concentrated in areas to forage on feed-corn as they were in 2009.

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 licensed hunters are potential bear hunters as a bear tag is provided with every big game hunting 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.

In 2010, data from harvest reports indicated that bears were primarily taken by hunters specifically hunting for bears (67%), while 25% were taken by hunters who opportunistically took a bear while hunting for deer during the archery or rifle season. Twenty percent of the harvest of hunters hunting specifically for bear was taken with the use of hounds (Table 2), while houndsmen

accounted for 13 percent of the total harvest. Archers took 16% of the total harvest. There were 90 bear hound permits issued (8 fewer than in 2009) with a tenth of them going to non-residents.

Principal Species Hunter was Seeking	Number Harvested	Percent of Harvest
Bear	360	67%
Harvest with dog	72	20%
Harvest with no dog	288	80%
Deer	132	25%
Other/Unknown	45	8%

Table 1. 2010 Bear harvest by sex and WMU.

WMU	Total Harvested	Percent of Harvest	Female	Male	Unknown
A	0	0.0	0	0	0
B	15	2.8	7	8	0
C	46	8.7	20	26	0
D1	51	9.6	33	17	1
D2	58	11.0	27	29	2
E	32	6.0	14	18	0
F1	1	0.2	1	0	0
F2	7	1.3	1	6	0
G	18	3.4	7	11	0
H1	27	5.1	11	15	1
H2	18	3.4	5	13	0
I	38	7.2	18	20	0
J1	40	7.4	13	27	0
J2	19	3.5	5	13	1
K1	1	0.2	1	0	0
K2	7	1.3	2	5	0
L	27	5.0	7	18	2
M1	15	2.8	13	2	0
M2	13	2.5	2	11	0
N	35	6.6	9	26	0
O1	9	1.7	5	3	1
O2	18	3.3	8	9	1
P	28	5.3	14	12	2
Q	14	2.6	2	11	1
Total	537	100	225	300	12

Table 3. 2010 Timing of harvest.

Period When Harvested	Number Harvested	Percent of Harvest
September	224	42%
October	201	37%
November	112	21%
<i>During Deer Season (11/13-11/17)</i>	79	15%

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 15% were taken during that part 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 big game 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 2010 season with two surpassing 400 pounds. The heaviest was 436 pounds and taken in the town of Albany. 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. Six of the 8 heaviest bears, including the largest, were taken with the use of dogs (Table 4). Three of these heaviest bears were taken in WMU D1.

Table 4. Heaviest bears harvested in 2010.

Town Harvested	WMU	Weight	Date of Kill	Sex	Target Species	Using Dogs
Albany	D1	436	9/10/2010	Male	Bear	Yes
Holland	D2	420	9/2/2010	Unknown	Bear	Yes
Guildhall	E	385	9/1/2010	Male	Bear	Yes
Canaan	E	364	10/15/2010	Male	Unknown	No
Groton	H1	342	10/12/2010	Male	Bear	Yes
Newfane	Q	336	11/14/2010	Male	Deer	No
Strafford	J2	329	10/22/2010	Male	Bear	Yes
Johnson	G	325	9/6/2010	Male	Bear	Yes
Hardwick	D1	321	11/13/2010	Male	Deer	No
Richford	C	319	9/1/2010	Male	Bear	No
Cabot	H2	314	11/14/2010	Male	Deer	No
Pawlet	K2	305	9/4/2010	Male	Bear	No
Derby Line	D1	300	10/2/2010	Male	Deer	No

Table 5. 2010 Non-hunting mortalities and damage complaints.

Mortality Type	Number
Vehicle Collision	80
Management/Damage	11
Illegal	2
Other or Unknown Cause	5
Total	98
Bear Property Damage Complaints	180

Non-hunting Mortalities and Damage Complaints

In addition to the 537 bears taken legally during the regulated hunting season there were 98 that were reported as non-hunting (or incidental) mortalities during 2010. Of these bears that were not taken by hunters, 80 were killed in motor vehicle collisions and 11 were dispatched as nuisance animals (Table 5). In addition, Department law enforcement personnel received a total of 180 property damage complaints. In all, wardens responded to a total of 278 call-outs regarding non-hunting mortality and bear damage complaints.

Table 6. 2010 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALES	UNKNOWN
ADDISON	Bristol	3	0	3	0
	Goshen	1	1	0	0
	Granville	4	3	1	0
	Leicester	2	1	1	0
	Lincoln	4	3	1	0
	Middlebury	2	2	0	0
	New Haven	2	0	2	0
	Ripton	5	3	2	0
	Salisbury	5	2	3	0
	Starksboro	4	0	4	0
	Total		32	15	17
BENNINGTON	Arlington	7	2	5	0
	Bennington	3	1	2	0
	Dorset	3	1	2	0
	Landgrove	1	0	1	0
	Peru	2	1	1	0
	Pownal	7	3	4	0
	Readsboro	4	2	2	0
	Rupert	4	0	4	0
	Sandgate	8	1	7	0
	Shaftsbury	3	3	0	0
	Stamford	2	2	0	0
	Sunderland	1	0	1	0
	Winhall	2	1	1	0
	Woodford	6	5	1	0
	Total		53	22	31
CALEDONIA	Barnet	5	1	4	0
	Burke	7	5	2	0
	Danville	6	3	3	0
	Groton	3	1	2	0
	Hardwick	6	3	3	0
	Kirby	3	2	1	0
	Lyndon	1	0	1	0
	Newark	5	1	4	0
	Peacham	6	2	4	0
	Ryegate	2	0	2	0
	Sheffield	3	2	1	0
	St Johnsbury	2	1	1	0
	Sutton	3	1	2	0
	Walden	4	3	1	0
Waterford	1	0	1	0	

Looking To The Future

The bear population in Vermont is currently estimated to be above the Big Game Management Plan population objective of 4,500 to 6,000 bears. To address this, and other management issues identified in the Plan, in 2011 the Department will evaluate black bear management strategies and hunting season structures in order to increase the annual harvest of bears in the state. Changes that will be considered include increasing the season length, management by regions, and an increase of the season bag limit. The issue of creating a separate bear license may be explored further as well.

Table 6. 2010 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALES	UNKNOWN	
CALEDONIA (cont.)	Bolton	1	0	1	0	
	Hinesburg	1	1	0	0	
	Huntington	1	1	0	0	
	Jericho	1	1	0	0	
	Richmond	2	1	1	0	
	Underhill	2	2	0	0	
	Total		65	31	34	0
ESSEX	Averill	1	0	1	0	
	Bloomfield	2	1	1	0	
	Brighton	3	2	1	0	
	Canaan	2	0	2	0	
	Concord	1	1	0	0	
	East Haven	3	3	0	0	
	Guildhall	9	5	4	0	
	Lemington	1	0	1	0	
	Lunenburg	7	3	4	0	
	Maidstone	3	0	3	0	
	Norton	1	0	1	0	
	Total		33	15	18	0
	FRANKLIN	Bakersfield	5	0	5	0
Berkshire		2	1	1	0	
Enosburg		4	2	2	0	
Fairfax		2	0	2	0	
Fairfield		1	0	1	0	
Fletcher		1	0	1	0	
Franklin		1	1	0	0	
Montgomery		8	5	3	0	
Richford		8	2	6	0	
Swanton		1	0	1	0	
Total			33	11	22	0
LAMOILLE	Belvidere	3	1	2	0	
	Cambridge	8	2	6	0	
	Eden	2	2	0	0	
	Elmore	2	1	1	0	
	Hyde Park	4	4	0	0	
	Johnson	3	2	1	0	
	Morristown	4	2	2	0	
	Stowe	2	0	2	0	
	Waterville	1	0	1	0	
	Wolcott	2	2	0	0	
Total		31	16	15	0	

Table 6. 2010 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALES	UNKNOWN	
ORANGE	Bradford	1	0	1	0	
	Braintree	5	0	5	0	
	Brookfield	2	0	2	0	
	Chelsea	1	0	1	0	
	Corinth	4	2	2	0	
	Fairlee	1	0	1	0	
	Newbury	2	1	1	0	
	Orange	1	0	1	0	
	Strafford	3	0	3	0	
	Tunbridge	1	0	1	0	
	Washington	1	1	0	0	
	Williamstown	1	0	1	0	
	Total		23	4	19	0
	ORLEANS	Albany	7	6	1	0
Barton		2	1	1	0	
Brownington		6	2	4	0	
Charleston		1	1	0	0	
Coventry		3	2	1	0	
Craftsbury		6	4	2	0	
Derby		3	2	1	0	
Glover		5	3	1	1	
Greensboro		2	1	1	0	
Holland		5	0	4	1	
Irasburg		6	4	2	0	
Jay		3	2	1	0	
Lowell		4	3	1	0	
Morgan		9	4	4	1	
Newport		5	3	2	0	
Troy		5	2	3	0	
Westfield		5	2	3	0	
Westmore		2	0	2	0	
Total			79	42	34	3
RUTLAND		Brandon	2	0	2	0
	Chittenden	6	2	4	0	
	Danby	1	0	1	0	
	Ira	1	0	1	0	
	Killington	3	2	1	0	
	Mendon	2	1	0	1	
	Mt. Holly	4	1	3	0	
	Mt. Tabor	1	0	1	0	
	Pawlet	5	1	4	0	

Table 6. 2010 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALES	UNKNOWN
RUTLAND (cont.)	Pittsfield	6	2	4	0
	Pittsford	2	1	1	0
	Shrewsbury	8	1	7	0
	Sudbury	1	0	1	0
	Tinmouth	1	1	0	0
	Wallingford	2	1	1	0
	Total		45	13	31
WASHINGTON	Barre	1	0	1	0
	Berlin	2	1	1	0
	Cabot	2	1	1	0
	Calais	2	2	0	0
	Duxbury	3	1	2	0
	East Montpelier	2	2	0	0
	Fayston	1	0	1	0
	Marshfield	1	0	1	0
	Middlesex	3	1	2	0
	Montpelier	4	1	2	1
	Moretown	3	1	2	0
	Plainfield	3	2	1	0
	Roxbury	3	0	3	0
	Warren	3	3	0	0
	Waterbury	2	1	1	0
	Woodbury	2	2	0	0
	Total		37	18	18
WINDHAM	Athens	1	1	0	0
	Brookline	1	0	1	0
	Dover	2	1	1	0
	Dummerston	4	2	2	0
	Grafton	1	1	0	0
	Halifax	3	0	3	0
	Jamaica	3	1	1	1
	Londonderry	3	1	2	0
	Newfane	3	1	2	0
	Putney	2	1	1	0
	Rockingham	6	2	3	1
	Stratton	1	0	0	1
	Townshend	4	0	3	1
	Wardsboro	1	0	1	0
	Westminster	3	1	2	0
Whitingham	2	0	2	0	
Wilmington	4	0	4	0	

Table 6. 2010 Vermont Black Bear Harvest by Town of Kill.

COUNTY	TOWN	TOTAL HARVESTED	FEMALE	MALES	UNKNOWN
WINDHAM (cont.)	Windham	2	1	1	0
	Total	46	13	29	4
WINDSOR	Andover	2	1	0	1
	Baltimore	1	1	0	0
	Barnard	1	1	0	0
	Bethel	10	1	9	0
	Bridgewater	5	4	1	0
	Cavendish	3	2	1	0
	Chester	1	1	0	0
	Hartford	3	0	2	1
	Hartland	2	0	2	0
	Ludlow	1	0	1	0
	Norwich	5	1	4	0
	Plymouth	2	1	1	0
	Pomfret	3	1	2	0
	Rochester	6	5	1	0
	Royalton	1	0	1	0
	Springfield	1	1	0	0
	Stockbridge	2	1	1	0
	Weathersfield	4	1	3	0
	West Windsor	2	0	2	0
	Weston	3	1	1	1
	Woodstock	2	2	0	0
	Total	60	25	32	3
GRAND TOTAL		537	225	300	12