2007 Vermont Wildlife Harvest Report

Black Bear

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

2007 Vermont Black Bear Harvest Report

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 equipement 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.

Contents

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
103 South Main Street, 10 South
Waterbury, Vermont 05671-0501
(802) 241-3700 / www.vtfishandwildlife.com

2007 Black Bear Report

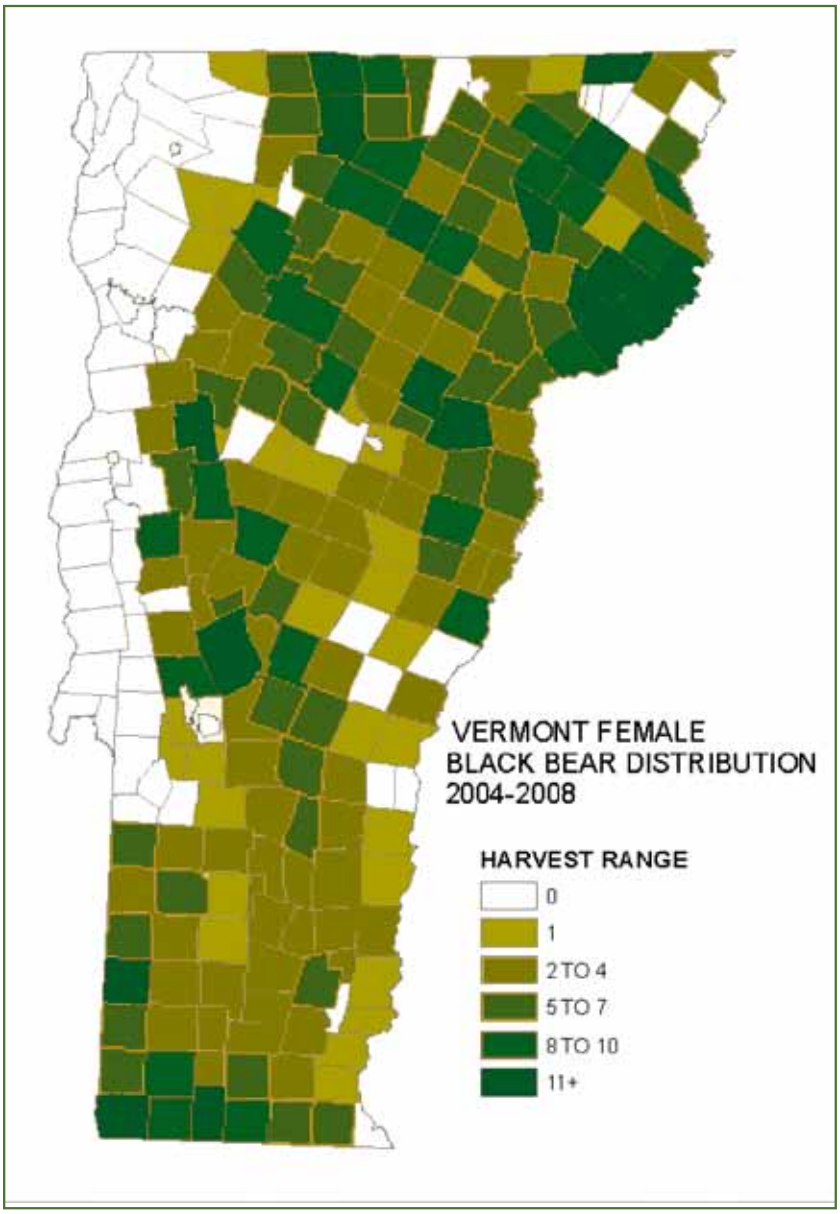
Vermont's Black Bear Population

Vermont's black bear population is currently estimated at between 4,600 and 5,700 bears, an estimated 27% increase since 1997. The Vermont Fish & Wildlife Department has recommended that the population should be stabilized and maintained at the current levels. Hunting season management strategies and season structure will remain unchanged unless bear population monitoring indicates the population is below or above 4,600 to 5,700 bears.

Ryan Smith

Black Bear Habitat

Vermont's black bears are dependent on large tracts of unbroken remote forests to survive. These areas are referred to as "core" habitat (see map) and have the highest density of bears. Much of the annual bear production comes from these remote habitats.



Unfortunately, as Vermont's human population has increased over time (since 1960 Vermont experienced at least a 10% growth per decade according to the U.S. Census Bureau) many of Vermont's large tracks of forests have become fragmented.

Much of the increased development is not centered around residential areas but is primarily occurring on Vermont's rural forested landscape. This pattern of development is extremely effective at fragmenting essential bear habitat.

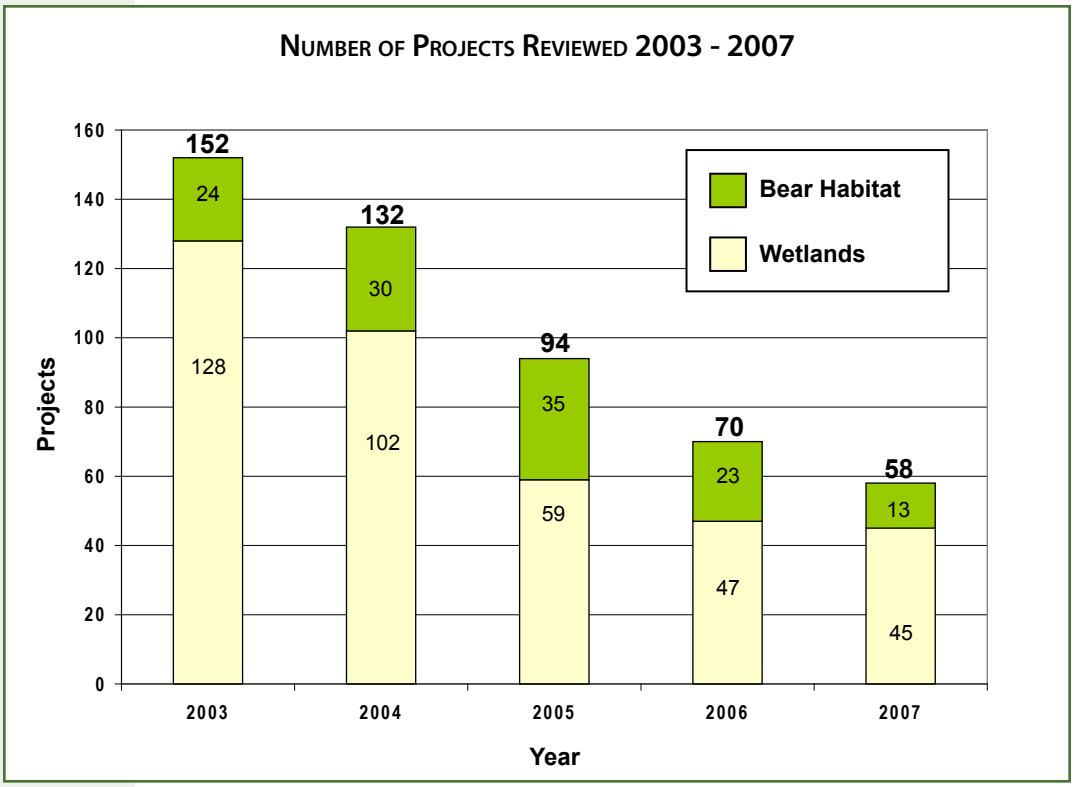
Fragmentation and habitat loss impose many threats to Vermont's black bear population. Some of these threats include increased motor vehicle collisions, damage and nuisance complaints, restriction of vital travel corridors, and destruction of critical habitats such as wetlands and key stands of beech and oak.

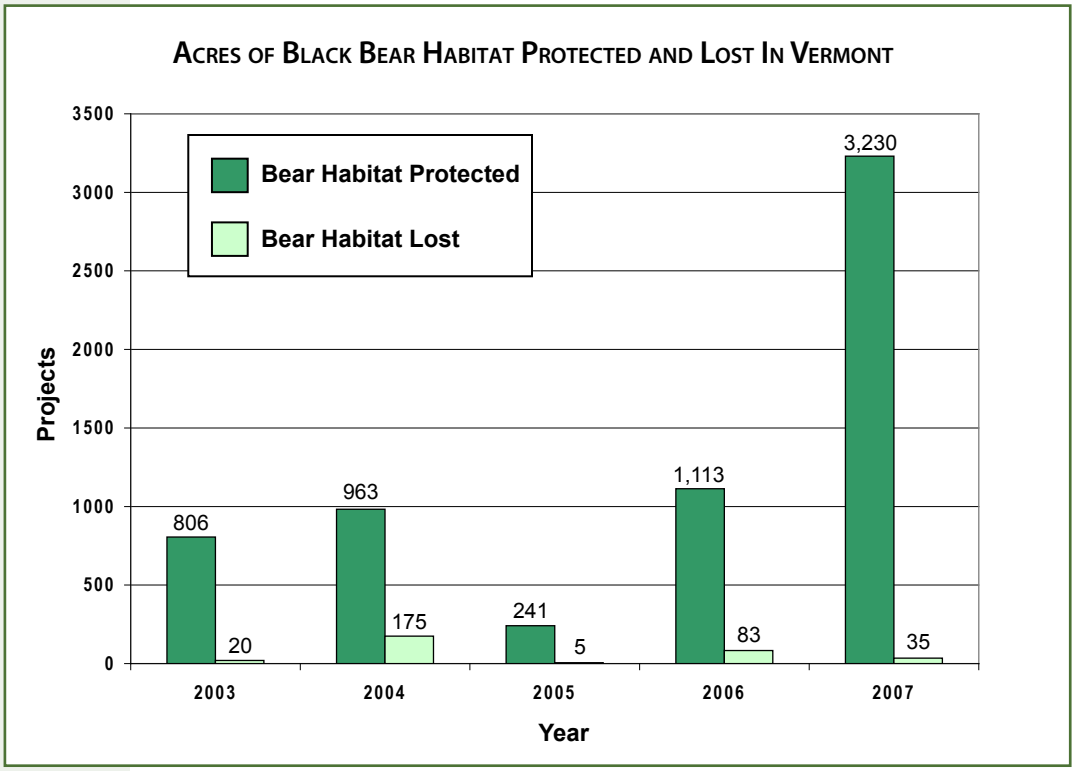
Black Bear Habitat Protection

To help maintain critical black bear habitat, under Vermont's act 250 law, three types of bear habitat are considered "necessary" and deserving protection. These include travel corridors, wetlands, and hard mast stands of beech or oak that show signs of bear feeding activity.

Through Vermont's Act 250 land use permit review process, department biologists provide input to help conserve these important habitats. In 2007, department biologists reviewed 58 projects related to bear habitat. Biologists also work with landowners to help manage American beech stands. This is conducted through forestry workshops and comments through easements the department holds on lands.

Despite these efforts, Vermont continues to lose bear habitat each year. The acres of bear habitat protection and loss in the past five years are summarized in this graph.





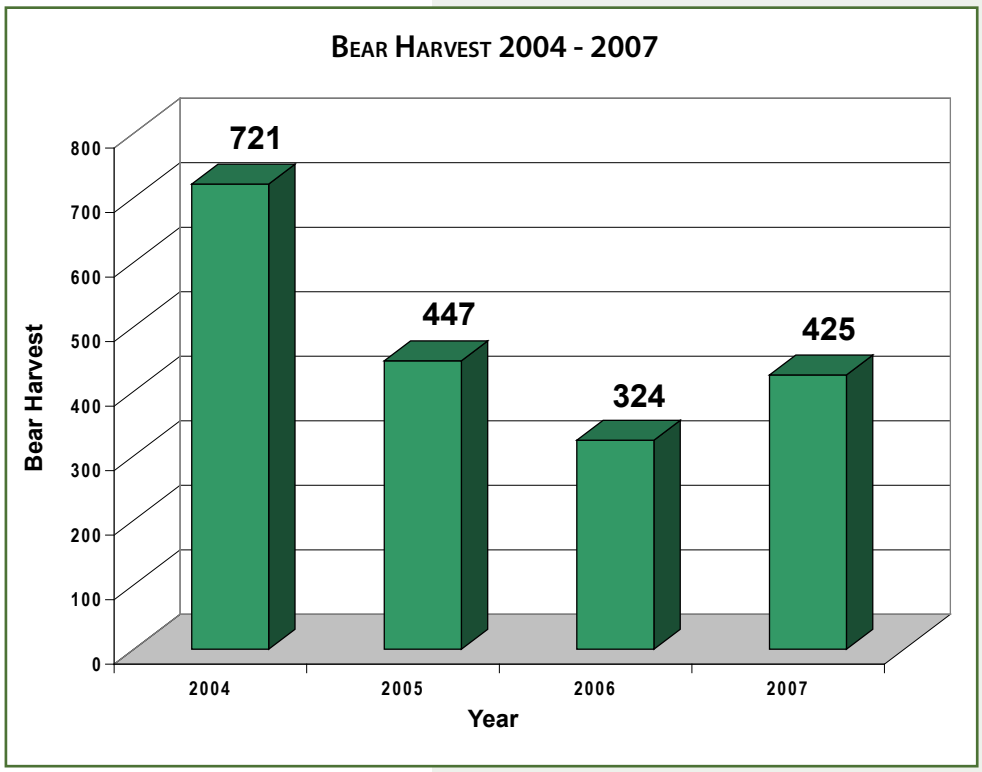
Public Education and Outreach

Department biologists participate in a variety of forums in an effort to promote understanding of black bears and bear management. Game wardens responded to 138 complaints of black bears causing property damage or potentially threatening public safety in 2007. Wardens also spent hundreds of hours monitoring bears in suburban areas, hazing bears away from developments and educating citizens in methods to make their property less attractive to bears looking for food.

We have increased efforts to provide the public with information on living among bears, particularly in dealing with bears attracted to alternative foods such as garbageand birdseed. We have distributed hundreds of black bear posters and are in the process of printing pamphlets to help people deal with nuisance bears.

2007 Regulated Bear Harvest

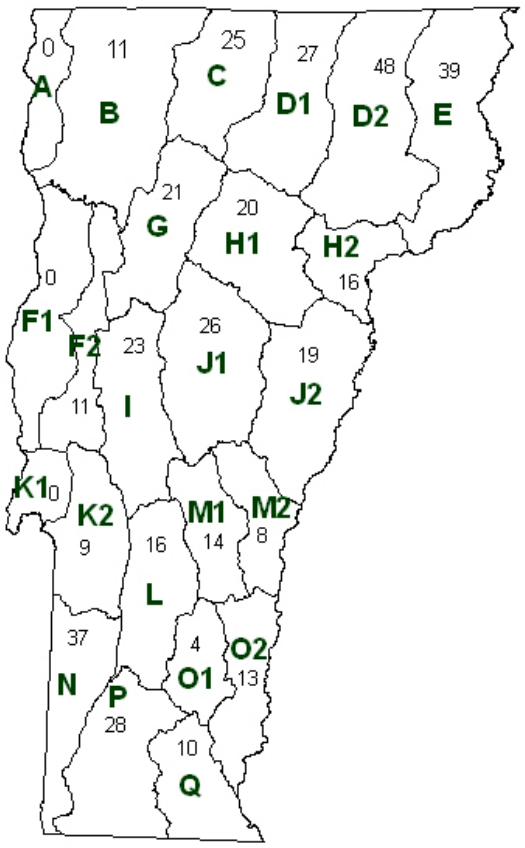
Vermont began regulating the harvest and utilization of black bears by the public in 1941. Today, this oversight continues with 25 laws governing the harvest, utilization and sale of bears in Vermont. The regulated hunting of black bears is an important wildlife management tool as well as a means by which the public utilizes bears as food source and for other reasons.



Utilization of bear resources is important as people look to Vermont's forests as an important place to harvest natural resources. This is a key component of bear conservation, as hunting of bears requires a forested land base, and the activity does not demand conversion of the landscape into some other human use. Thus, food from Vermont's forest provides a powerful incentive to keep Vermont's landscape in a condition that promotes valuable habitat for many species of wildlife, including a sustainable bear population.

In 2007, an estimated total of 18,000 lbs of boneless bear meat was harvested from the 425 black bears taken during the 77-day open hunting season. This harvest was considered slightly above average and reflects several conditions, including a robust bear population, good habitat overall, and reduced fall food sources, which greatly influenced where bears traveled during the fall months. The 2007 harvest of 425 bears is considered slightly above the long-term average, even though the 3-year average is 497 bears. The current 3 year average includes the record setting bear harvest of 2004 when 721 bears were harvested. An average annual harvest would normally be between 350-400 bears.

2007 Vermont Black Bear Harvest by Wildlife Management Unit



Harvest by Hunting Opportunity

Bears were primarily taken by hunters specifically hunting for bears (66%), and (34%) were taken by hunters who opportunistically took a bear while hunting other species.

Principle Species Hunter Was Seeking	# Harvested	% of Harvest
Bear	280	66%
Deer	118	28%
Other Wildlife	12	3%
Unknown	9	2%
Birds	6	1%
Total	**425**	**100%**

Harvest Distribution

The map to the left showing the distribution of harvest by Wildlife Management Unit (WMU) reveals that, as in past years the principle areas of harvest occur in WMU'S (D2, D1 and E) followed by the units within the Green Mountains (I, L and P). Significant harvests also occurred in areas outside the "core" habitat, indicated by significant harvests in WMUsJ1, H1 and N. This is typical during years with poor beech production. Bears will move out of the "core" mountain habitats to exploit alternate food sources in the foothill and agricultural regions of Vermont.

Hunting Bears with Dogs

In Vermont, hunters are permitted to use trained dogs to hunt bears. This season, 15% of the bears in Vermont were harvested with the aid of dogs. Typically the percentage ranges from 10-15%. The Fish and Wildlife Department recognizes that using hounds is a controversial issue in Vermont, but supports this activity for several reasons. Running bears with hounds plays a key role in maintaining the wildness in Vermont's bear population. Bears learn from houndsmen's activities to stay away from humans and roads, thus helping minimize nuisance complaints and road kills.

When nuisance complaints do occur, game wardens frequently call upon the services of houndsmen to chase bears away from corn fields, apple orchards, bee hives or people's backyards. Many times this practice is successful. The bear escapes almost certain lethal removal because it hesitates to return to the site after being chased by dogs.

Permits are required to train and hunt bears with dogs. See table below for the number of bear dog permits issued from 1995-2007. The number of non-resident bear dog permits allowed in Vermont is restricted to 10% of the resident permit numbers.

Bear Dog Permit Issued		
Year	Resident	Non-Resident
1995	168	15
1996	173	17
1997	157	15
1998	154	16
1999	120	14
2000	na	na
2001	110	11
2002	94	11
2003	99	10
2004	106	10
2005	97	10
2006	102	10
2007	97	10

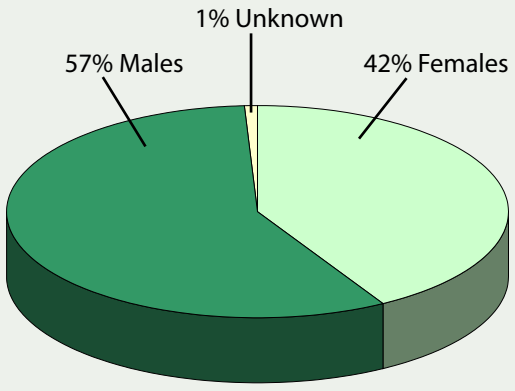
2007 Legal Black Bear Harvest by Wildlife Management Unit, Town and Sex

WMU	Town of Kill	Total Harvest	Females	Males	Unknown
B	Bakersfield	1		1	
	Berkshire	1	1		
	Cambridge	1	1		
	Enosburg	1	1		
	Fairfax	1		1	
	Jeffersonville	2		2	
	Jericho	1	1		
	Lowell	1	1		
	Richmond	1	1		
	Underhill	1	1		
Total B Harvest		11	7	4	
C	Bershire	3	2	1	
	Cambridge	1	1		
	Enosburg	4	1	3	
	Jay	3	2	1	
	Jeffersonville	1		1	
	Johnson	1	1		
	Lowell	1		1	
	Montgomery	3		3	
	Ricford	7	5	2	
	Westfield	1	1		
Total C Harvest		25	13	12	
D1	Albany	1		1	
	Craftsbury	5	3	2	
	Conventry	4	2	2	
	Greensboro	2	1	1	
	Glover	4	1	3	
	Hardwick	1		1	
	Hyde Park	2	1	1	
	Irasburg	4	1	3	
	Newport	1		1	
	Troy	1		1	
	Wolcott	2		2	
Total D1 Harvest		27	9	18	
D2	Barton	3		3	
	Brownington	2	1	1	
	Burke	1	1		
	Charlestown	6	1	5	
	Danville	3	3		
	Derby	2	2		
	Hardwick	1		1	
	Holland	1		1	
	Kirby	3	3		
	Lyndon	5	1	4	
	Morgan	1		1	
	Newark	3	3		
	Norton	2		2	
	Sheffield	1	1		
	St. Johnsbury	1	1		
	Sutton	9	6	3	
	Walden	1	1		

Sex Ratio of 2007 Black Bear Harvest

The 2007 harvest included 245 males, 177 females and 3 bears of unknown sex. The harvest of female bears has the greatest impact on maintaining a sustainable bear population. The distribution of black bears throughout the state is best determined by the distribution of female bears. Males have much larger home ranges, and young male bears often disperse into less suitable habitat. It is essential that we not only monitor the number of females harvested but also monitor the distribution of the female harvest.

2007 Black Bear Harves
Sex Ration



2007 Legal Black Bear Harvest by Wildlife Management Unit, Town and Sex

WMU	Town of Kill	Total Harvest	Females	Males	Unknown
D2	Westmore	1	1		
	Wheelock	2	1	1	
Total D2 Harvest		48	26	22	
E	Brighton	1	1		
	Bloomfield	3	1	2	
	Brunswick	1	1		
	Canaan	2		2	
	Concord	1		1	
	Ferdinand	1		1	
	Granby	3	3		
	Guildhall	9	4	5	
	Island Pond	1	1		
	Lemington	1		1	
	Lunenburg	7	3	4	
	Maidstone	4	2	2	
	Victory	5	3	2	
Total E Harvest		39	19	20	
F2	Brandon	1	1		
	Bristol	2		2	
	Middlebury	1		1	
	Monkton	1		1	
	New Haven	1		1	
	Ricmond	1		1	
	Salisbury	1		1	
	Starksboro	3	1	2	
Total F2 Harvest		11	2	9	
G	Bolton	1		1	
	Cambridge	1		1	
	Duxbury	2		2	
	Huntington	2		2	
	Jericho	2	1	1	
	Jeffersonville	2		2	
	Morristown	2	1	1	
	Ricmond	2		2	
	Starksboro	2		2	
	Stowe	1		1	
	Underhill	2	2		
	Waterbury Center	1	1		
	Waterbury	1	1		
Total G Harvest		21	6	15	
H1	Barre	1	1		
	Barre Town	1	1		
	East Montpelier	2		2	
	Elomore	2	2		
	Groton	2	2		
	Marshfield	4	2	2	
	Middlesex	1	1		
	Morrisville	1	1		
	Plainfield	2	1	1	
	Wolcott	1		1	
	Worchester	3	1	2	
Total Harvest H1		20	12	8	

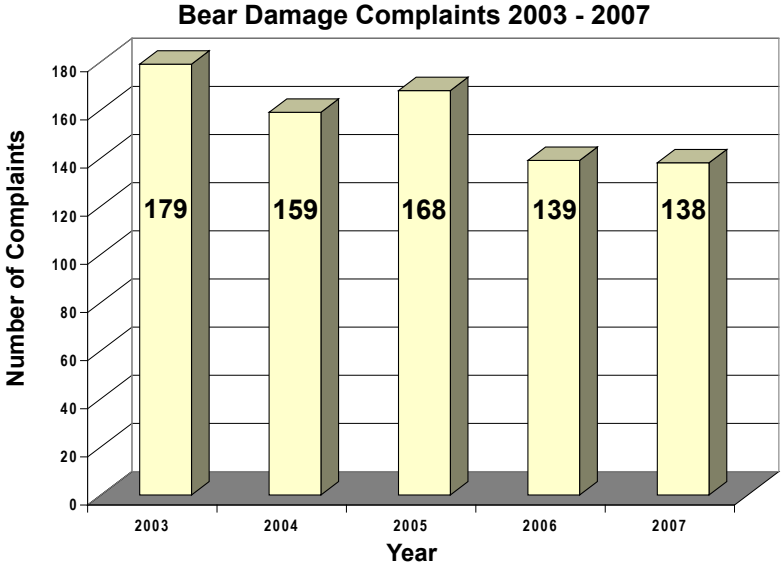
Mast Survey

Hard mast (beechnuts and acorns) is an essential high calorie food source that Vermont's black bears depend on in the fall. During years with abundant hard mast crops, bears will gorge themselves, putting on large amounts of fat. This helps them survive winter hibernation. Years when mast crops are poor, bears may roam great distances in search of other foods, such as apples, berries and corn.

The fall of 2007 had a very poor mast crop. Beechnuts were very scarce and acorn productivity was poor. Bears not only travel much further to find food during years with poor mast crops, but they also will enter winter dens early. With this said, 80 % of the harvest occurred in September and October and only 20 % in November. However, 2006 was an excellent hard mast year and almost half (48 %) of the bear kill occurred in November. During years of abundant mast, bears will remain active longer, delaying denning, thus making them more susceptible to opportunistic deer hunters.

2007 Legal Black Bear Harvest by Wildlife Management Unit, Town and Sex

WMU	Town of Kill	Total Harvest	Females	Males	Unknown
H2	Barnet	3	1	2	
	Danville	2		2	
	Groton	1		1	
	Marshfield	1		1	
	Peacham	4	1	3	
	Ryegate	2		2	
	Waterford	3		3	
Total H2 Harvest		16	2	14	
I	Brandon	1		1	
	Chittenden	4	3	1	
	Granville	3		3	
	Hancock	1		1	
	Middlebury	3	1	2	
	Lincoln	3	2	1	
	Pittsford	2	1	1	
	Ripton	1	1		
	Rochester	2		2	
	Salisbury	2	1	1	
	Stockbridge	1	1		
Total I Harvest		23	10	13	
J1	Bethel	2		2	
	Brantree	2	1	1	
	Brookfield	5	1	4	
	Chelsea	2	1	1	
	Granville	4		4	
	Hancock	1	1		
	Moretown	2		2	
	Northfield	1	1		
	Rochester	2	2		
	Stockbridge	1	1		
	Waitsfield	1	1		
	Warren	1		1	
	West Topsham	1	1		
	Williamstown	1		1	
Total J1 Harvest		26	10	16	



Human/Bear Conflicts

In recent years department personnel have observed an increase in the number of people reporting problem bears. However, as this graph shows, complaints peaked in the early 2000s and have remained stable or decreased slightly in the last 5 years. The department responded to 138 damage complaints in 2007.

2007 Legal Black Bear Harvest by Wildlife Management Unit, Town and Sex

WMU	Town of Kill	Total Harvest	Females	Males	Unknown
J2	Bradford	2		2	
	Corinth	5	3	2	
	Fairlee	2	1	1	
	Newbury	1		1	
	Orange	1		1	
	Thetford	1		1	
	Topsham	1		1	
	Tunbridge	1		1	
	Vershire	2		2	
	Washington	1	1		
	Wells River	1		1	
	Williamstown	1		1	
Total J2 Harvest		19	5	14	
K2	Clarendon	2		2	
	Danby	1		1	
	Ira	1		1	
	Hubbardton	1		1	
	Pawlet	2	1	1	
	Tinmouth	1		1	
	Wells	1		1	
Total K2 Harvest		9	1	8	
L	Danby	1	1		
	Mendon	2		2	
	Mt. Holly	6	1	5	
	Landgrove	1		1	
	Shrewsbury	2		2	
	Wallingford	2		2	
	Weston	2		2	
Total L Harvest		16	2	13	1
M1	Barnard	2	1	1	
	Bridgewater	2	1	1	
	Killington	1	1		
	Ludlow	3	1	2	
	Plymouth	4	2	2	
	Reading	1	1		
	Springfield	1		1	
Total M1 Harvest		14	7	7	
M2	Barnard	1		1	
	Hartland	2	1	1	
	Pomfret	1		1	
	Quechee	1	1		
	South Royalton	1		1	

Incidental Mortality

Incidental bear mortality often reflects conditions in the availability of natural foods, with the greater numbers of deaths occurring when foods are scarce. Hard mast (beechnut and acorn) production was very poor throughout Vermont in 2007. Consequently, the number of incidental deaths due to motor vehicle and bears killed while doing damage exceeded 2006 (an excellent mast crop year). Although it exceeded 2006 numbers, the incidental kill is much lower than during 2003-2005 when numbers reached all time highs.

Reported Incidental Deaths to Black Bears in VT by Cause and Year, 2003-2007

Year	Damage	Illegal	Vehicle	Nuisance	Other/unknown	Total
2003	27	7	81			115
2004	17	7	84			108
2005	7	19	68			94
2006	4	2	18		1	24
2007	11	6	40*		12	57

* Total number of collisions responded to does not mean bear was killed

2007 Legal Black Bear Harvest by Wildlife Management Unit, Town and Sex

WMU	Town of Kill	Total Harvest	Females	Males	Unknown
M2	Weathersfield	1		1	
	Windsor	1		1	
Total M2 Harvest		8	2	6	
N	Arlington	8	5	3	
	Danby	1	1		
	Dorset	1	1		
	Pawlet	4		4	
	Pownal	8	4	4	
	Rupert	1		1	
	Sandgate	5	3	2	
	Shaftsbury	5	3	2	
	West Arlington	3	2	1	
	Woodford	1		1	
Total N Harvest		37	18	19	
O1	Chester	1	1		
	Townshed	1	1		
	Weathersfield	1		1	
	Windham	1	1		
Total O1 Harvest		4	3	1	
O2	Ascutney	1		1	
	Athens	1		1	
	Canvendish	1		1	
	Chester	1	1		
	Putney	2		2	
	Rockingham	3	1	2	
	Springfield	2	1	1	
	Weathersfield	2		2	
Total O2 Harvest		13	3	10	
P	Dover	1	1		
	Jacksonville	1	1		
	Jamacia	2	1	1	
	Newfane	1		1	
	Pownal	3	2	1	
	Readsboro	2	1	1	
	Shaftsbury	1		1	
	Somerset	2	1	1	
	Stamford	2	1	1	
	Stratton	1		1	
	Wardsboro	1	1		
	Whitingham	4	3	1	
	Wilmington	4	2	2	
	Woodford	3	2	1	
Total P Harvest		28	16	12	
Q	Brattleboro	1	1		
	Dummerston	1		1	
	Guilford	2		2	
	Halifax	1		1	
	Marlboro	2	1	1	
	Newfane	2	1		1
	Tounsend	1		1	
Total Q Harvest		10	3	6	1

David Hall