

# Vermont Furbearer Management Newsletter



Vermont Fish & Wildlife Department

## Lynx Alert

Since 2003, six lynx have been documented in Vermont via observation of tracks, high quality sightings or actual confirmation. All six animals were located in northeastern Vermont. Two of the animals were actually confirmed to be lynx through the DNA analysis of scat or the actual retrieval of a carcass. The other four sightings were assigned a high quality rating based on the experience of the observer, the examination of photo documents, and/or the description/behavior of the animal.

Unlike other New England states, historical records of lynx in Vermont are few. We believe that prior to European contact into Vermont, lynx were found at low densities although the actual status is not clear from historical records and documentation. Only four records of lynx exist in Vermont between 1797 and 1968 which leads us to believe that they occurred here only sporadically. One record was discovered in the state archivist's office dating back to February 1797 in Cabot, Vermont (bounty record). Two additional lynx were taken in Windham County, Vermont in 1928 and in Addison County in 1937. Before the most recent sightings in this decade, the most recent record was from St. Albans, Vermont in 1968. Throughout the 20th century, there has been no evidence of a breeding population of lynx in this state. We assume that the most recent

increase in lynx sightings is attributable to animals dispersing from the expanding populations in Maine and Canada. Maine biologists believe their lynx population peaked in 2003 (Jakubus and Ritchie 2008) and has stabilized since then.

Unlike Vermont, the combined habitat in northern Maine, the Gaspé Peninsula, and northern New Brunswick supports a sustainable population of lynx (Hoving 2001). This is in part due to the high snowshoe hare densities in the 15 to 30 year old clearcuts that resulted from the most recent spruce budworm outbreaks in 1972-1986 (Jakubus and Ritchie 2008). The increased prey base combined with the high annual snowfall (>105 inches) has provided good lynx habitat in the northern half of Maine, the Gaspé, and northern New Brunswick (Hoving 2001).

These same conditions are not found consistently in Vermont thus undermining this state's ability to support a viable population of lynx.

However, the Fish & Wildlife Department continues to encourage the reporting of lynx sightings and captures. We maintain a database of historical sightings and would like to add to it to help track distribution and changes in status.

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

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## Paying It Forward

In a popular movie titled *“Pay It Forward”*, a young boy is given a unique assignment by his Social Studies teacher: think of something to change the world and put it into action. The boy fulfills this assignment by pursuing the idea of paying a favor forward rather than back. He repays good deeds by doing good deeds to three new people rather than paying back the person who did a good deed for him. The young boy’s efforts affect change in an ever widening circle of people, both known and unknown to him.

This is the first in what we hope will be a regular series of articles recognizing folks who are “paying it forward”. These are everyday people who are working, in most cases, quietly behind the scenes, to insure the ongoing heritage of hunting, trapping, and fishing, as well as the health of all wildlife species and the ecosystems they inhabit. At some point in their lives, someone bestowed on them a good deed when they encouraged them to pursue these traditions in a thoughtful, ethical manner and they are in turn “putting it into action” to change the world for present and future generations.

When we discussed potential “candidates” for the first article, Jim Calchera came to mind immediately. I first met Jim in his role as a landowner enrolled in the Wildlife Habitat Incentives Program (WHIP). He and his wife Lisa were battling glossy buckthorn and multiflora rose on their land in Westminster. Since then, I have seen Jim wear many hats including that of an active member of the Vermont Trappers

Association. I have come to appreciate his quiet, “be a part of the solution” demeanor. The following explains why he works to be part of the solution rather than take life a little easier.

*How old were you when you first realized your interest in hunting, fishing, and trapping? Did you have any mentors who encouraged your interests?*

I started fishing when I was about 3 years old and hunting when I was 12. I didn’t try my hand at trapping until I was about 35 years old. My Dad was my biggest mentor, not only did he introduce me to fishing and hunting, but he encouraged all my efforts in these areas (fly fishing, fly tying, muzzleloader hunting, bow hunting, etc.). We also had friends of the family who were more than willing to help out interested kids who showed an interest in hunting and fishing. Our friend Ray Marin ran a fishing tackle shop until he was well into his 70s, and he was always willing to trade night crawlers we picked for fly tying gear. Other friends often took me out fishing and hunting. These trips taught me about the camaraderie associated with friends pursuing the wonderful past times of hunting and fishing. They were always willing to bring along someone else to enjoy the outdoors.

My father never trapped so I didn’t have much interest in that until I shot my first coyote and skinned it. Tom White in Vernon, VT took the time to explain proper skinning techniques over the phone. When I

shot my second coyote and brought it to him for professional skinning and tanning, we talked about trapping, and he mentioned a Trapper’s Ed course. I signed up and took the course from Rick Schoonover. Tom White and Dan Olmstead also helped teach portions of the classes. I was impressed with their willingness to share their knowledge. I also was very impressed when I received a free trap from Perley Champney after completing the Trapper’s Education course and the discount he provided on the next purchase of supplies. Each time a trapping friend and I caught a new species, it was back to Tom’s for some species-specific fur handling lessons. He was always willing to help on these lessons or give some suggestions if we ran into problems on the trap line. I also learned a lot through reading and through demonstrations at the trapping shows. The information is all out there for the beginning trapper. They just need to show an interest, do some reading, and be persistent. It is a sport where you never stop learning.

*The definition of a “conservationist” as written in the Trapper Education Manual (someone who places the highest values on preserving habitats, ecosystems, and sustainable wildlife populations) describes you very well. How did your concern for wildlife and habitat develop beyond the thrill of the hunt or catching the big one?*

My father must have instilled the conservation mindset in me as I’ve always been more concerned about

## Habitat is Still the Key to Successful Conservation

Recently, Vermont Public Radio had a story about wildlife officials in Florida attaching magnets to the heads of alligators as a means of altering their homing instinct. The reason for this experiment was to prevent the alligators from returning to their habitat of origin because it was now developed with neighborhoods. People living in the alligator's former habitat were apparently shocked and disturbed that these large reptiles would return to the community after being relocated.

A few years ago, I recall a similar story about a residential community in California that had developed in a wetland. The residents of this community were distraught at the "noise" created in spring by singing frogs.



Now, perhaps these stories speak to our unusual relationship to reptiles and amphibians, but I think there is an important issue that these stories highlight. Rather than spending the precious time and resources to try and alter an evolutionary trait that has developed over hundreds of thousands of years—an effort I suspect is destined to failure—why not plan the development away from alligator habitat. And, the only surprise with the second story is that the frogs persisted in the wetland in spite of the development.

During the 1980s, the Department used the phrase, "Habitat is the Key", to highlight the important connection between habitat consideration and species survival. Some old adages should never be forgotten. This message is more important today than ever before as we face the continuing challenges of habitat loss and degradation.



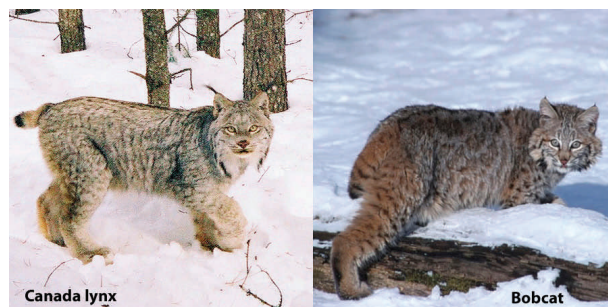
Through our emphasis on this conservation principle, we have restored common loons, peregrine falcons, and osprey. We are reintroducing spruce grouse into suitable habitat in the Victory basin. We are acquiring unique habitat in Vernon that supports the endangered spotted turtle. We have protected the endangered black racer snake by working with the Vermont Agency of Transportation to manage critical



*Continued on page 4*

## Lynx Alert *(continued from page 1)*

If you have any doubt as to how to distinguish a lynx from a bobcat, go to the Vermont Fish & Wildlife website ([www.vtfishandwildlife.com](http://www.vtfishandwildlife.com)), click on Hunting and Trapping, click on Furbearers, and go to the U.S. Fish & Wildlife Service document *How to Avoid the Incidental Take of Lynx*. Please let us know if you locate an animal that appears to be a lynx.



Hoving, C.L. 2001. *Historical occurrence and habitat ecology of Canada lynx (lynx Canadensis) in eastern North America*. M.S. Thesis, University of Maine, Orono, Maine, USA.

Jakubus, W.J. and S. Ritchie. 2008. *Draft Incidental Take Plan for Maine's Trapping program*. Maine Dept. of Inland Fisheries & Wildlife (MDFW), Augusta, Maine. 311 pgs.



## Habitat is Still the Key to Successful Conservation *(continued from page 3)*

habitat for that species. The list of success stories associated with habitat conservation goes on and on.

As the Department and other partner organizations in Vermont move forward with wildlife conservation efforts, we will face new challenges in a new era regarding energy development, increasing use of public lands, new diseases, lack of financial resources, changing population demographics, and a changing climate. As we collectively move into this new era of wildlife conservation, we must not forget this principle—**Habitat is the Key to Conservation Success**. It always has been and always will be. I hope and trust we can make better decisions and use our limited resources or wisely than

was the case with the news stories from other areas around the country.

— John M. Austin, Acting Director of Wildlife



*“Wild beasts and birds are by right not the property merely of the people who are alive today, but the property of unborn generations, whose belongings we have no right to squander.”*

— Theodore Roosevelt

## Recipe

### Teriyaki Kabobs

1 to 2 lbs. muskrat, beaver, venison, chicken or beef  
 1/2 cup soy sauce  
 1/2 cup ketchup  
 1 tsp. garlic powder  
 1/2 cup sugar  
 Any vegetables such as cherry tomatoes, onions, pineapple chunks, green peppers, etc.

### Preparation

To make the marinade, combine the soy sauce, ketchup, garlic powder, and sugar.

Cut the meat in 1" to 1 1/2" cubes.

Cut the vegetables into large chunks.

Put the meat in the marinade, cover and put in the refrigerator overnight. (You can marinate the vegetables also if you prefer).

### Cooking

Alternately skewer the meat and vegetables.

Put the skewers on the grill at medium heat, turning often, and

cook to taste (venison is best when done medium-rare, only 2 to 3 minutes per side).

*(From Wild-About-Trapping.com)*



## Muskrat Sex and Age Data 2008-09

Due to a concern about regional muskrat populations, Fish & Wildlife Department biologists attended the fall and spring fur auctions to collect sex and age data on harvested muskrats. Between the two auctions, we looked at 908 pelts. A special thanks to Charles Mingo and son who brought their 600+ pelts to the spring auction so we could look at them.

### December Fur Auction—Bethel, VT

187 pelts examined

#### Males vs. Females:

Adults: 1.60 males/female ( 48/ 30)  
 Juveniles: 1.76 males/female ( 69/ 39)  
**Total: 1.71 males/female (118/69)**

#### Juveniles vs. Adults:

Males: 1.43 juvs/adults ( 69/ 48)  
 Females: 1.30 juvs/adult ( 39/ 30)

### \*March Fur Auction—Bethel, VT

721 pelts examined

#### Males vs. Females:

Adults: 1.07/ males/female ( 62/ 58)  
 Juveniles: 1.66 males/female (371/223)  
**Total: 1.53 males/female (435/284)**

#### Juveniles vs. Adults:

Males: 5.98 juvs/adults (371/223)  
 Females: 3.84 juvs/adult (223/ 58)  
**Total: 4.92 juvs/adults (595/121)**

Most of these results are consistent with muskrat populations reported in the scientific literature. However, the juvenile to adult ratio in the animals from the December auction is quite low. Although this may be a result of the small sample, biologists will continue to collect information at the 2009 and 2010 auctions.



*\*The bulk of these animals (603) came from the Southern Lake Champlain Zone.*

## Season Results 2007-08

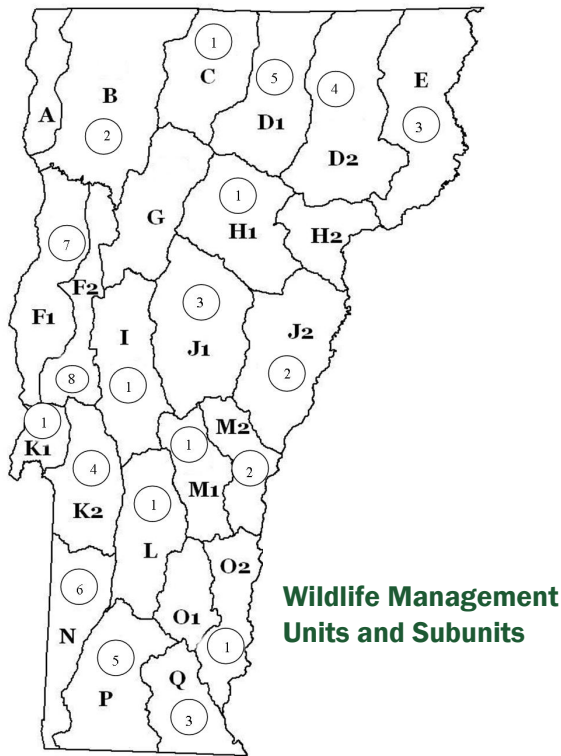
Sixty-one bobcat, 367 fisher, and 86 otter were reported and tagged by Vermont's Wardens during the 2007-08 season. Wildlife biologists and volunteers examined each carcass to determine their sex, age, and physical condition. These data are used to monitor changes in health, status, and population levels.

Bobcat and fisher are well distributed throughout much of the state (Figures 1 and 2). Otter are managed by Watershed

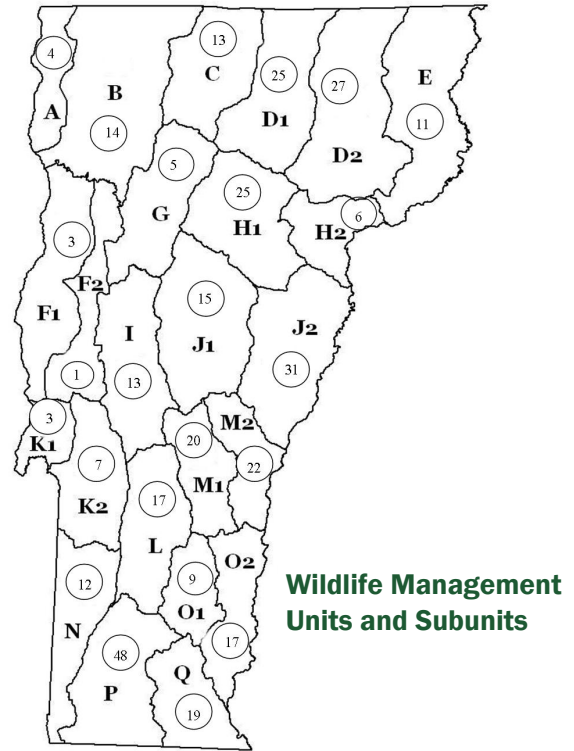
Management Units, as this species is closely tied to waterways and well distributed throughout the state (Figure 3). We also monitor the harvest of furbearer species through the annual trapper mail survey (Figure 4), which allows us to track trapper effort (# traps x # nights) and pelt price. Historically, trapping effort has been closely related to harvest levels. This strong relationship is a reassuring indicator that we are not overharvesting furbearers in Vermont.

**Thanks to all of you who collect and/or contribute this essential information to the furbearer program.** As pelt prices increase, monitoring harvest and effort data will become even more critical to understanding furbearer population dynamics and management.

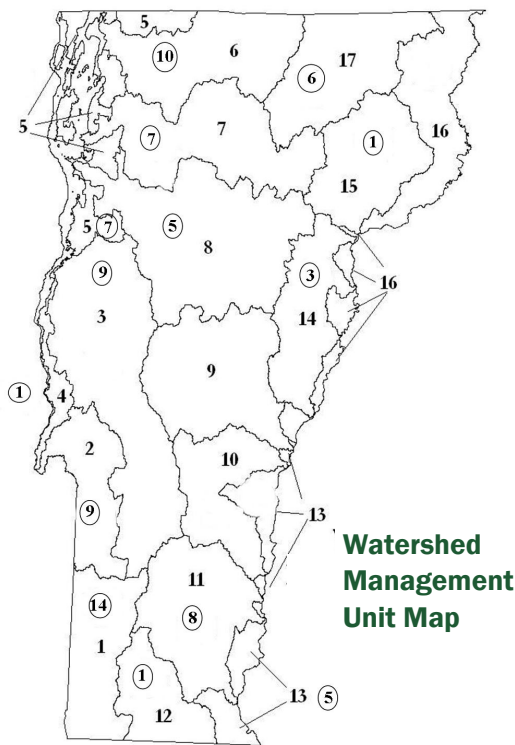
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**Figure 1.** Distribution of 61 bobcat taken during the 2007-2008 season.

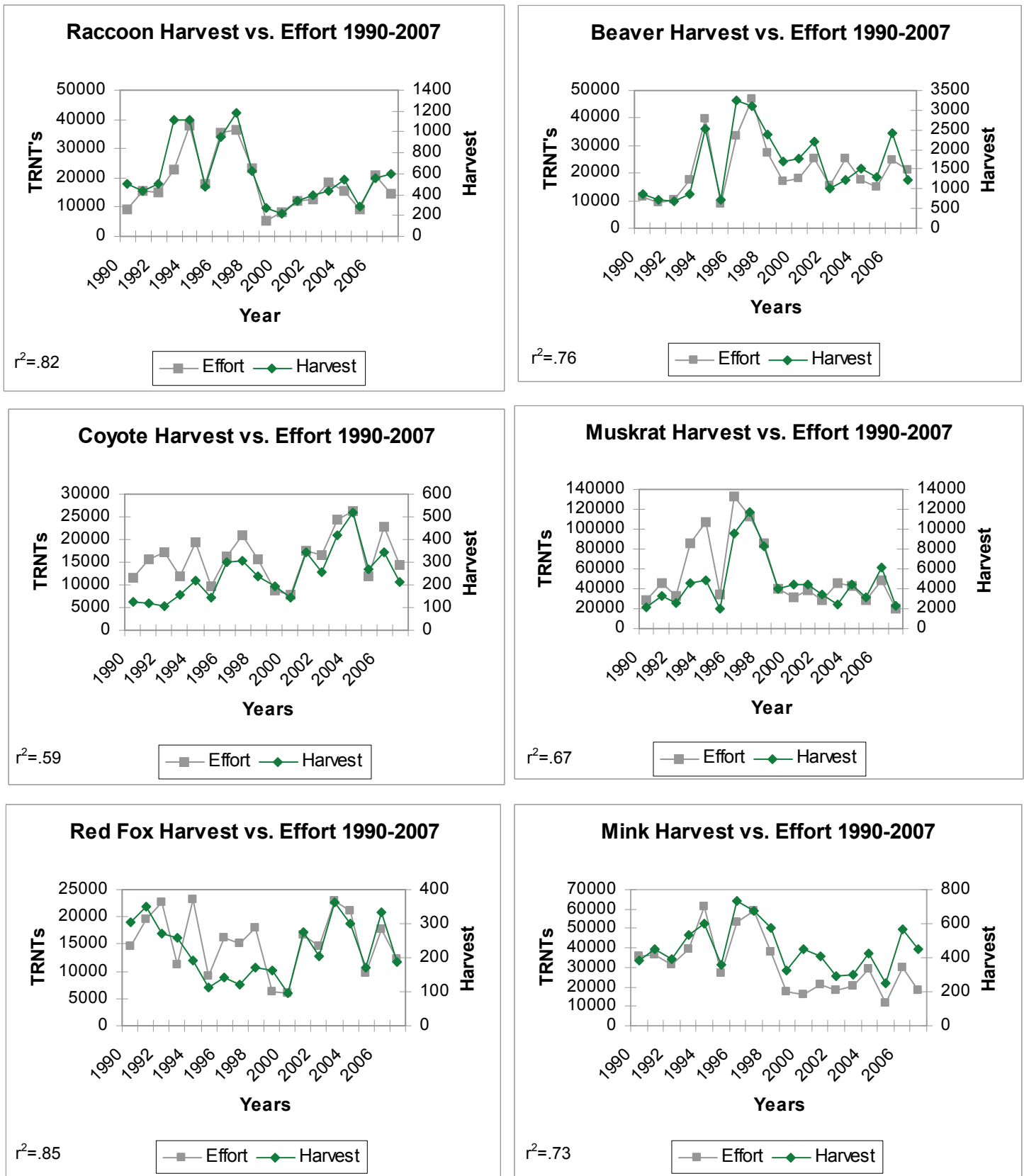


**Figure 2.** Distribution of 367 fisher taken during the 2007-2008 season. (The remaining 22 fisher are unknown).



Watershed Management Units	
1.	Batten Kill, Walloomsuc, Hoosic
2.	Poultney, Mettawee
3.	Otter Creek, Little Otter Creek, Lewis Creek
4.	Lower Lake Champlain
5.	Upper Lake Champlain, LaPlatte, Malletts Bay, St. Albans Bay, Rock, Pike
6.	Missisquoi
7.	Lamoille
8.	Winooski
9.	White
10.	Ottauquechee, Black
11.	West, Williams, Saxtons
12.	Deerfield
13.	Lower Connecticut, Mill Brook
14.	Stevens, Wells, Waits, Ompompanoosuc
15.	Passumpsic
16.	Upper Connecticut, Nulhegan, Willard Stream, Paul Stream
17.	Lake Memphremagog, Black, Barton, Clyde

**Figure 3.** Distribution of 86 otter taken during the 2007-2008 season. (The remaining 20 otter are unknown).



**Figure 4.** Harvest vs. Trapper Effort in Vermont (data from annual Trapper Mail Survey returned by trappers — thank you!). TRNTs = Number of trapping nights or effort.

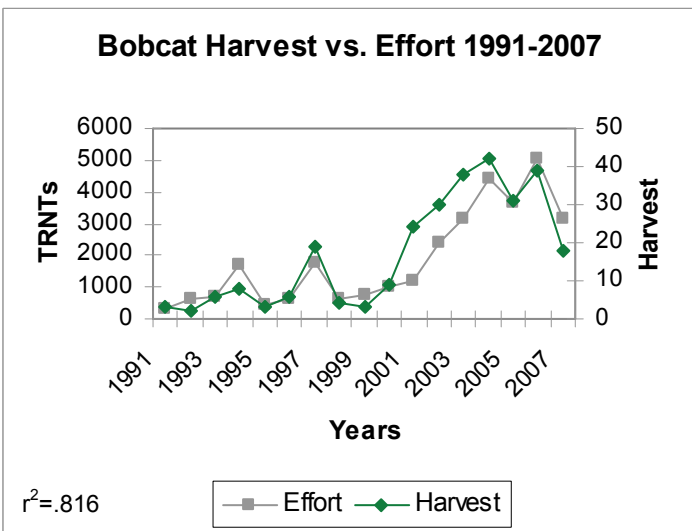
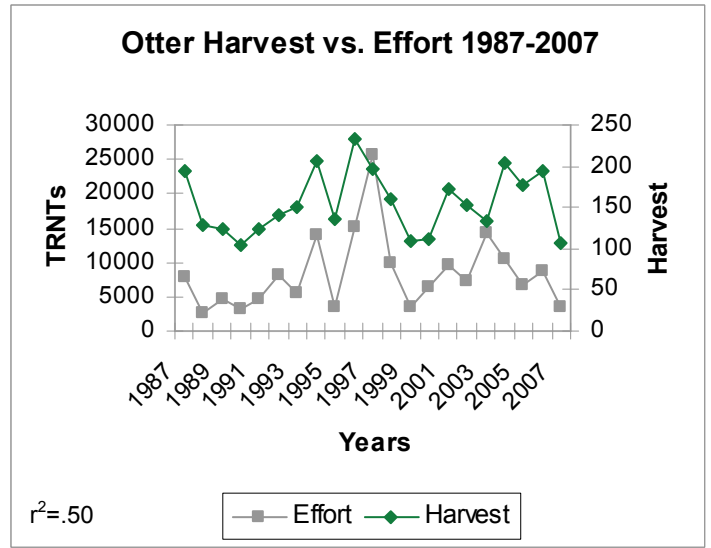
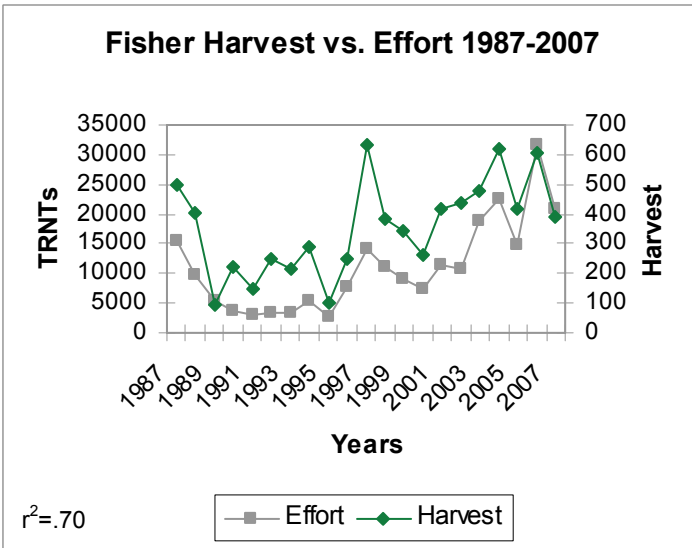


Figure 4. Harvest vs. Trapper Effort in Vermont (cont. from page 4).

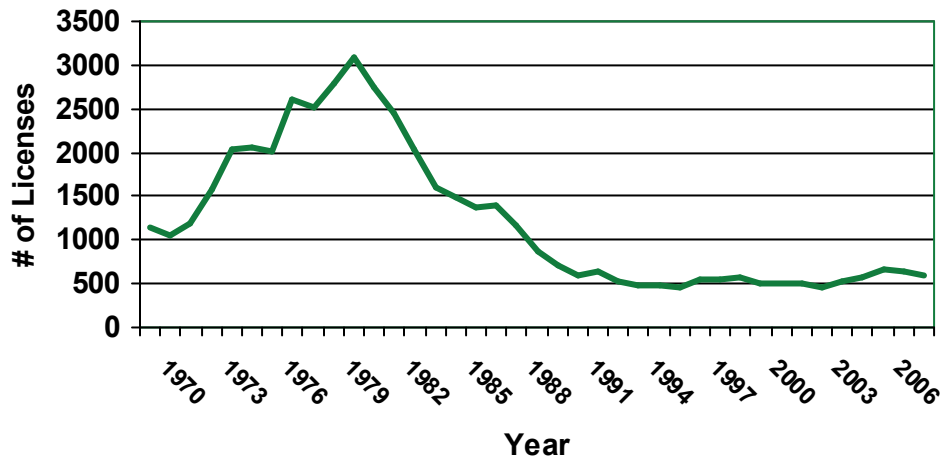


Figure 5. Total number of resident trapping license sales in Vermont by calendar year.



## Paying It Forward *(continued from page 2)*

conservation versus killing. We would keep occasional fish, and we would always eat what we shot during hunting season, but there were plenty of times when we let all the trout go or didn't shoot an animal because it didn't seem right. I did a lot of reading as well and some of the stories from the outdoors magazines also had an impact on me. The development of a number of favorite hunting grounds in Connecticut and seeing the devastation of a large forest fire in the Cape Breton National Park in Nova Scotia reinforced the concept of the impact that man has on the environment.

When my Dad and I went fishing or hunting, we would always pick up trash at the parking areas and along the shorelines. (A somewhat fermented mouse found in a beer bottle made an interesting odor in the back seat of the station wagon and definitely had an impact as that occurred about 40 years ago). My sister has been fishing quite a bit with my father the last couple of years, and she's been telling me that he seems to spend more time trash picking than he does fishing.

When my wife Lisa and I began looking for our first home in 1990, one of the primary requirements was a reasonable sized piece of land. Her father had been a hunter for years and had similar experience where many of the hunting grounds either became posted or developed. We became involved with the Use Value Appraisal program, joined the Vermont Woodland Owners Association, and subscribed to Northern Woodlands and other

publications. I like the idea of being able to make a living off of the land while improving the land for the future. I don't think we will ever be able to make a living, but hope to have many years of gathering firewood, logging, hunting, and trapping on the land. Growing up hunting on state forest land in Connecticut, I definitely appreciate the ability to hunt on other's private property, appreciate those who do not post their land, and always thank all landowners who give me permission to hunt and trap their property.

*You have devoted a lot of time to the Vermont Trapper's Association as a member and a director and you assist the instructors of Vermont's Trapper Education course. What drives you to spend time and energy on these activities rather than others?*

I was thrilled when I first starting having success trapping and wished I had started when I was a kid. I would feel like some of the old-time trappers I read about like Jim Bridger, even if some of the beavers I was catching were only about 30 yards from I-91. Rick Schoonover asked me to give a hand at a few of the VTA events which eventually turned into me becoming a director. After a short stint of writing the monthly VTA reports for the *Trapper and Predator Caller* magazine, I was offered the position of treasurer. I had seen that VTA was a well-run organization with a dedicated core group of individuals. I always enjoyed being a contributing member of a team and prefer to

take action instead of just complaining about things like so many people do. I strongly support the VTA mission especially in regards to getting kids to appreciate the outdoors. I like the old traditional activities versus the new high tech world we live with all the time. Trapping and the sustainable use of natural resources are activities I strongly believe in, and I want to help preserve them and pass them along to the next generation.

*Since 2005 you have been working to improve your land as part of your involvement with the USDA Wildlife Habitat Incentive Program (WHIP). Some of that work has included hours of pulling, cutting, and treating acres of invasive plants like Japanese barberry and common buckthorn. What's the point? Why invest the time and energy on something that seems like a losing battle?*

Lisa and I got involved in WHIP as an extension of the Use Value Appraisal program. We bought a piece of land that adjoined ours and learned that all the small trees we had thought were a type of chokecherry were actually glossy buckthorn. Although sometimes the never ending battle with the buckthorn and other invasives seems to be a losing cause, we have been seeing some improvement. The smaller apple trees are much stronger now that the sun-blocking, nutrient-robbing invasives have been removed and where there used to be a carpet of glossy buckthorn seedlings, there

*Continued on page 11*

## The Elusive Beaver Beetle – *Have you seen them?*

A few years ago an observant trapper (aren't they all?), brought a little beetle into the office that he said fell off the body of a recently-killed beaver. Not knowing what it was, I sent the tiny carcass up to Trish Hanson at the FPR Forest Biology Lab for identification. To my surprise, Trish got quite excited about the beetle (as only an entomologist can) and identified it as a *Platypsyllus castoris*, the so-called "beaver beetle." Last year, another trapper contacted me about finding beetles on several beaver that he had trapped out of a pond in Shelburne. He collected several specimens and sent them to Trish, and she confirmed that they too, were *P. castoris*.

It turns out that these rather unique beetles are specialists adapted to living almost their entire lives under the fur of their beaver host. They only leave their host for a couple of days to lay eggs on nest substrate. The eggs develop in around 30 days; after hatching, the larvae return to the host. When mature, the larvae will leave the host to form prepupae in the roof of the beaver

lodge. Otherwise the beetles live the entire active stages of their lives on their host and leave only in response to heat or drying. The beetles are wingless and eyeless and are therefore well adapted to the predominantly dark, warm, cozy environment in the dry underfur of the beaver. They are light brown in color, and it is presumed that they feed on the dead skin cells and/or fatty secretions from the beaver. In rare cases, they have been found on river otter. Because of this specialization, they have been of particular interest to bug folks around the country.

In addition to *Platypsyllus castoris*, another beaver ectoparasite (*Leptinillus validus*) has never been seen in Vermont. *L. validus* is more often found in the beaver lodge itself rather than on the beaver. Needless to say, Trish and other entomologists are interested in samples of both beetles for further study and DNA analysis. According to the entomologists, it is fairly "easy" to tell the two beetles apart. *L. validus* is quite a

bit larger than *P. castoris* (4mm long vs. 2mm long). In addition, *L. validus* has eyes and a convex body with long legs. Neither beetle is harmful to humans as the little animals soon die if they can't find a beaver to depend on.

So, here is an opportunity for trappers to contribute to the science of entomology. If you are so inclined, comb through the fur of recently-dead beaver and collect any beetles that resemble the pictures below. Specimens can be placed in a freezer to kill and preserve them, or placed in alcohol (isopropyl or ethanol). Record the location of capture, date of capture, host species (likely beaver, possibly otter), habitat in which they were collected, and your name. If you contact Trish Hanson directly, she will mail you a pre-addressed, postage paid envelope so you can mail the specimen back or if you live close to one of the district offices (see your guide to Hunting and Fishing), you can drop it off there for later transport to the Waterbury Lab. If you mail directly to Trish, place the animals in a non-crushable container but don't scotch tape them to paper. Trish's contact information is:



*Platypsyllus castoris*

2mm long

Copyright, 1998 Joyce Gross.



*Leptinillus validus*

4mm long

Photo: Trish Hanson.

Trish Hanson  
Forest Biologist Lab  
Environmental Lab Building  
VT Dept. of Forests, Parks & Rec.  
103 South Main Street  
Waterbury, VT 05671-0409

Telephone: 802-241-3606  
Email: [trish.hanson@state.vt.us](mailto:trish.hanson@state.vt.us)

Thanks as usual for any help you can provide.

## Paying It Forward *(continued from page 9)*

is now only a sporadic mix of them in some of the areas. We still have a lot of work to do and with the mature buckthorn on neighboring property; we'll always be doing battle. The improvements we've seen and the abundance of deer sign in that little grown up apple orchard gives us (or at least me) the incentive to keep going.

There are a lot of similar reasons to why I continue to help volunteer to stock salmon with the state. I have been fortunate enough to fish for and catch adult Atlantic salmon fresh from the ocean and would love to see the same type of opportunity closer to home. It seems like there is a very small chance of success, but it makes me feel good to at least attempt to bring back what we lost.

*What are some of the difficulties and issues facing trappers, hunters, and anglers these days? How have they changed the way you pursue these activities?*

I think the biggest issues facing trappers, hunters, and anglers these days are all related to the general public's lack of knowledge of what really goes on in the natural world. What they have learned about the animals usually leads them to one of two extremes — do not kill any animal or kill every one of those beavers, fishers, coyotes, etc. that are causing me problems. I trap for a lot of people who would like to see nothing better than to eliminate fishers from all of southern Vermont. Likewise, there are landowners who would like to see deer eliminated from the area so that

desirable tree species can grow. This is similar to what is going on in Massachusetts where the trapping ban has lead people to reconsider their thoughts on wildlife. They want the problem taken care of, and the problem is typically a summer beaver that results in a waste of the natural resource. The homeowner now sees all beavers as problems and would just as soon see them all taken care of, not recognizing that a regulated trapping season allowing trappers to use established tools would eliminate most of the problems at no cost to the public while making use of the animal in a respectful manner.

I'm concerned that we will be heading down a path like in Europe where most people see animals only on television, the computer, or at the zoo and any attempt to harvest some is not acceptable. Hopefully, we will have enlightened people and organizations here like the VTA to prevent that type of scenario for a long time to come.

*When you think of the concept of "Paying it Forward", who are you thanking by caring for wildlife and the land and by encouraging young trappers? In what ways could this and the next generation pay it forward on your behalf?*

I guess I am thanking all those outdoorsmen who got involved to ensure I have all the opportunities afforded to me. I can't imagine not being able to hunt, fish, and trap. All the people who encouraged me in my early hunting, fishing, and trapping endeavors will never know how much I appreciate it so I guess I am thanking them through

attempting to care for wildlife and the land. Lisa and I don't have any children so we are trying to make this a better place for all those in the future. We were very active in the Westminster Recycling Program for years and this care of the land is just a continuation of the concept of "Thinking Globally, Acting Locally".

The next generation needs to get very knowledgeable about the environment and wildlife so that they can be the educators of the general public and dispel the misinformation put out by the "Anti" groups. They need to be able to make clear to the public why we go out and kill animals during the hunting and trapping season and yet we also do all we can to help wildlife. They will need to become active in organizations like the VTA in order to ensure we don't lose our trapping, hunting, and fishing rights.

I have a friend who thought it strange that in early May I was successful turkey hunting yet two weeks later I stopped gathering firewood in an area due to a grouse nesting there. Those of us who truly appreciate nature have no problem with this concept, but it is contrary to much of what the mass media puts out.

**If you know of someone who is paying it forward and would like to see them recognized, we'd love to hear about it.**

— Mary Beth Adler, WHIP Technician

## Check Out These Websites

**Vermont Fish & Wildlife Department**  
<http://www.vtfishandwildlife.com/>

**Conserve Wildlife**  
<http://www.conservewildlife.org/>

**Vermont Trappers Association**  
<http://www.vermonttrappers.com/>

**National Trappers Association**  
<http://www.nationaltrappers.com/>

**IAFWA Furbearer Resources Technical Work Group**  
<http://www.furbearermgmt.org/>

**Furbearers Unlimited**  
<http://www.furbearers.org/>

**Fur Takers of America**  
<http://www.furtakersofamerica.com/>

**The Wildlife Society**  
<http://www.wildlife.org/>

**Keeping Track**  
<http://www.keepingtrack.org/>

## THANK YOU, THANK YOU

Trappers, hunters, game wardens, biologists, seasonal staff, education specialists, support staff, and volunteers for your help in the management and conservation of Vermont's furbearers



The Vermont Agency of Natural Resources is an equal opportunity agency and offers all persons the benefits of participation in each of its programs and competing in all areas of employment, regardless of race, color, religion, sex, national origin, age, disability, sexual preference, or other non-merit factors.

This publication is available upon request in large print, Braille, or audio cassette.



### Vermont Furbearer Management Newsletter

100 Mineral Street, Suite 302  
Springfield, Vermont 05156-3168  
Phone: 802-885-8855  
Email: [kim.royar@state.vt.us](mailto:kim.royar@state.vt.us)  
Website: [www.vtfishandwildlife.com](http://www.vtfishandwildlife.com)

**Editors:** *Kimberly Royar*  
*Mary Beth Adler*  
*Christopher Bernier*

**Designer:** *Melissa Currier*