



# Vermont Furbearer Management Newsletter



Volume 2, Issue 1

Fall/Winter 2001

*The MISSION of the Vermont Fish & Wildlife Department is the conservation of fish, wildlife, and plants and their habitats for the people of Vermont. In order to accomplish this mission, the integrity, diversity, and vitality of all natural systems must be protected.*



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## What's New With BMPs?

In 1996, the International Association of Fish and Wildlife Agencies (IAFWA) began a program to develop Best Management Practices (BMPs) for trapping furbearers in the United States. A BMP is a method to improve an activity by developing recommendations based on sound scientific information while maintaining practicality. Trapping BMP recommendations will provide a valuable menu of options that state wildlife agencies may choose to incorporate into their furbearer management programs. In addition to improving animal welfare in the United States, the research and resulting BMPs may be used by other countries to improve their wildlife programs. Furthermore, BMPs will be used to address international commitments to identify and promote the use of humane traps and trapping methods for capturing wildlife.

Although Vermont trappers have been involved in the BMP trap testing effort since the beginning, due to a shortage of IAFWA funds, we were unable to participate this year. We hope to be back in the game next year.

### Coyote BMP

The final draft of the Coyote BMP (draft 4.2) has been sent out by the IAFWA for review by state Fish and Wildlife Departments and trappers. Comments are due back to the IAFWA by January 15, 2002. Please call if you would like a copy of the document. The trap standards committee will review draft 4.2 and provide comments as we have on previous drafts, but the more people that provide feedback, the better.



### Outreach Efforts

As a result of a three-year pilot project that took place in Connecticut, Indiana, and Wisconsin, four mini pack baskets filled with educational and outreach materials were sent to every state in the country. The idea is for state wildlife biologists and trappers to use the messages and products in the basket to more effectively communicate the benefits of regulated trapping. Tools inside the kit include:

- A brochure — “Trapping in the 21st Century”
- Two videos: (1) “Trapping Matters”: an overview of regulated trapping for use in hunter education; and (2) “Regulated Trapping and Furbearer Management in the United States”: a 15-minute video aimed at educating the general public about the benefits of regulated trapping
- Public relations materials
- Key messages wallet card
- CD-ROM of all the materials in the kit

*(Continued on page 4)*

## Harvest Information for the 2000-01 Season



A total of 45 bobcat, 264 fisher, and 111 otter were reported and pelt-sealed by law enforcement personnel during the 2000-01 season. According to the trapper mail survey, 1,678 beaver were harvested in that same period, 44% of which were taken as a result of human/beaver conflicts. Table 1 compares the harvest of 11 furbearer species since the 1994 seasons. The mandatory Trapper Mail Survey provides information critical to maintaining sustainable furbearer populations in Vermont. Because harvest figures are more often a reflection of trapper effort than actual furbearer

population levels, it is very important that we understand something about the amount of effort going into trapping a specific species. Although the number of licenses sold is an indicator of effort, it may not reflect the year-to-year variation in trap nights (# traps x # nights). Table 2 below shows the average price paid per pelt. Figures 1, 2, and 3 show the number of licenses sold since 1971 and the variability in the effort applied to fisher and otter trapping since 1986, respectively.

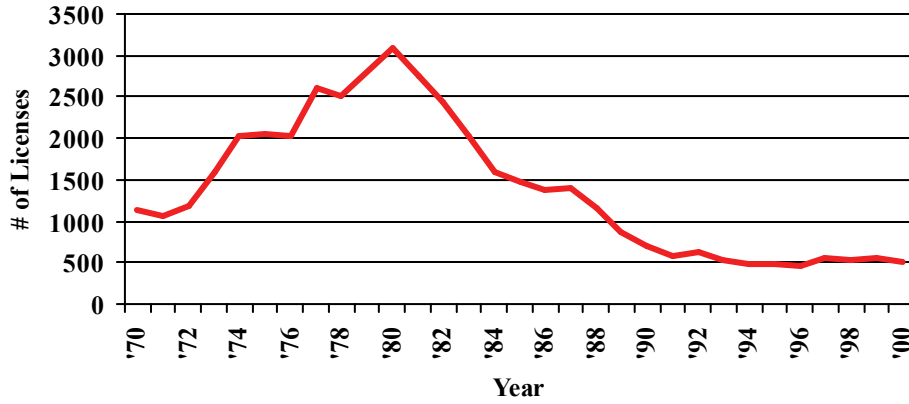
**Table 1.** Summary of Annual Vermont Furbearer Harvest Based on Trapper Mail Survey Data.

Species	1994	1995	1996	1997	1998	1999	2000
Coyote	220	125	265	294	221	186	129
Gray Fox	35	16	31	38	38	18	8
Mink	551	363	749	823	563	302	453
Muskrat	4,364	4,684	2,022	9,492	11,297	7,399	4,071
Otter*	207	136	232	196	161	110	111
Bobcat*	15	24	20	31	17	29	45
Fisher*	288	103	250	630	387	344	264
Raccoon	227	1,108	459	922	1,126	575	261
Red Fox	87	190	105	138	123	156	155
Skunk	37	180	66	240	111	121	57
Beaver	938	1,588	333	1,814	1,562	1,256	793
Nuisance Beaver	740	812	360	1,299	1,278	976	785

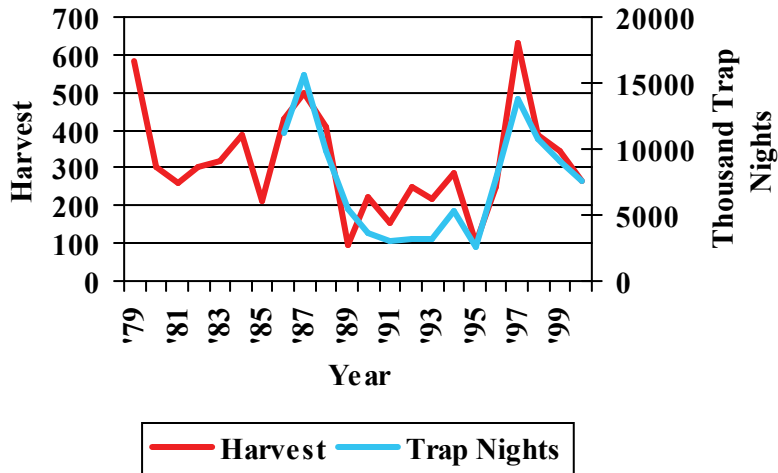
\* bobcat, fisher, and otter harvest totals from blue card data.

**Table 2.** Average price per pelt paid to Vermont trappers by species. *Source: Trapper Mail Survey.*

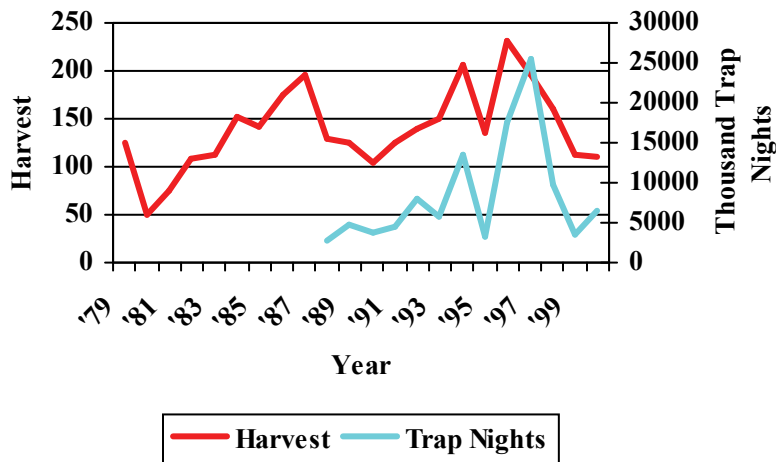
Year	Mink	Raccoon	Red Fox	Gray Fox	Skunk	Muskrat	Coyote	Beaver	Nui- sance Beaver	Fisher	Otter	Bobcat
1996-97	19.40	15.40	19.11	12.50	4.12	4.13	19.43	26.66	19.92	34.42	45.51	32.50
1997-98	13.35	14.31	18.75	14.38	2.18	3.11	17.35	22.61	21.04	36.17	42.85	28.83
1998-99	8.89	9.76	13.24	8.95	2.15	1.34	12.64	14.45	14.29	22.50	34.29	67.50
1999-00	10.07	5.84	12.07	10.75	3.00	2.07	12.00	17.92	16.45	19.16	39.12	—
2000-01	10.63	8.98	19.88	22.00	2.83	2.27	13.93	21.44	17.51	24.00	48.68	22.00



**Figure 1.** Total Number of Resident Trapping License Sales in Vermont by Calendar Year.



**Figure 2.** Comparison of Fisher Harvest and Trapper Effort.



**Figure 3.** Comparison of Otter Harvest and Trapper Effort.

## New Trapper Education Manual

In cooperation with the Vermont Fish & Wildlife Department's hunter/trapper education program, the Trap Standards Committee took on the task of modernizing the trapper education booklet. The Committee started a couple of years ago with the recently-updated New York Trapper Education booklet and modified it (quite significantly) to fit the needs of Vermont trappers. The new booklet has been field tested this past summer and fall and will be revised slightly this winter based on things learned in the classroom. We hope that the new Trapper Education booklet will provide new, as well as experienced, trappers information that will help to improve animal welfare, landowner relations, trap selectivity, ethics, and safety, thereby contributing to maintaining the future of trapping.



## Warden Dave Gregory Develops Weekend Trapper Training Course

Warden Dave Gregory, with help from department personnel Bob Lutz, Doug Lawrence, John Kapusta, Paul Ainsworth, and Tom Decker and trappers Bruce Baroffio and Rick Schoonover, organized a weekend trapper training course last August. The emphasis was on providing new and better information to advanced trappers in a relaxed, friendly atmosphere. The presentations included a slide show on the history and biology of trapping; discussions involving scouting, location, landowner permission, and ethics; hands-on experiences such as trap set-up demonstrations for beaver/otter, mink/muskrat, and coyote/fox; and skinning, fleshing, and stretching activities. Drawings were held at the end of the weekend, and lots of trapping supplies were given away to all participants. A great time was had by all. Watch for next year's advanced trapper weekend coming up in September 2002. Thank you Dave for the great idea and the tremendous effort. Thanks also to the VTA for financial support and to all the planners and contributors.

## What's New With BMPs?

*(continued from page 1)*

- Copies of two reports: (1) Furbearer Management Outreach Project: Pilot States Report; and (2) Survey Results: Attitudes toward and Awareness of Trapping Issues in Connecticut, Indiana, and Wisconsin

As part of this effort, the state of Wisconsin developed the following key messages—tips for communicating effectively about regulated trapping:

1. Show that you care about wildlife and the habitats they depend on to survive.
2. Use the key messages below. (They work!)
3. Be professional and speak in a conversational tone, even if you disagree on certain topics.
4. Be respectful and acknowledge that there are people who have other points of view.

The following messages are effective in communicating the role of trapping in modern society. Use these messages whenever you have an opportunity to talk about trapping.

1. Regulated trapping does not cause wildlife to become threatened or endangered.
2. Trapping is managed through scientifically-based regulations that are strictly enforced by Vermont wardens.
3. The Vermont Fish and Wildlife Department continually reviews and develops rules, regulations, education programs, and capture methods that consider animal welfare.
4. Regulated trapping provides many benefits, including (in certain situations): reducing wildlife damage to crops and property, and reducing threats to human health and safety.
5. Most of the animal can be used — the fur to make clothes and the rest of the animal for food and other useful products such as soap, paint, lubricants, etc.



## A Biologist Out of the Office?



Tracks



Contrary to what many believe, biologists do in fact regularly “put on parkas and boots” and leave the office behind. Although meetings, data analysis, and report writing require significant amounts of office time, we do routinely work and recreate in the fields and forests around us thereby maintaining a vital link between us and the resources we strive to manage. The vast majority of our field work is conducted locally in the districts we serve and, to a lesser degree, statewide. Occasionally though, we even have the opportunity to broaden our experiences far from home. One such opportunity presented itself to Kim Royar and me (Chris Bernier) this past February.

After loading the snowmobiles and packing our cold weather gear, Kim and I departed Vermont. Ten hours and many miles of snow-covered logging roads later, we arrived in the tiny logging community of Clayton Lake, Maine located 110 miles northwest of Millinocket and just 30 miles east of the Canadian border. Once there, we met Jennifer and Adam Vashon, the chief researchers of the Canada lynx research project. Kim and I volunteered to help on this project primarily to experience firsthand the methodologies being used as well as to glean from the project any information which could prove useful to furbearer management in Vermont.

The project is an intensive radio-telemetry study of Canada lynx aimed at documenting the movements, survival, habitat use, and reproduction of lynx in Maine. The researchers are also hoping to gain an understanding of the interspecific competition of lynx with other predators as well as to develop various survey methods used to determine the status of lynx populations. Since the winter of 1999, when the project began, a total of 21 lynx have been radio collared. These 21 lynx have already provided researchers with much useful information and data collection is ongoing. The implications of the project are far reaching with practical usefulness here in Vermont.

With the temperature hovering around -24°F and with 5 feet of powdery snow, our day began at 6:30 a.m. with a brief introduction to the project and an assignment description. Each crew member was assigned to a specific, radio-collared lynx. Our task was to first locate where our lynx had spent the night.

To do this, we were given the coordinates of the animal’s location which were taken earlier that morning using a telemetry-equipped plane. By means of truck, snowmobile, and snowshoes, we honed in on the coordinates until finding the lynx’s bedsite. With this accomplished, we were then to back track the lynx as far as possible within the remaining daylight. Ideally, each lynx would be tracked all the way back to the last snow event which occurred 36 hours previous.

As each of us tracked our respective animal, we carried a Garmin, hand-held GPS unit which recorded everywhere we went. We were also instructed to record every bedsite, chase event, kill site, and road crossing as interpreted from the various sign the lynx had left behind. In essence, we were creating a 36-hour activity “diary” for each of the study animals. Later, with the GPS information downloaded into various computer programs, we would be able to determine trends in habitat use and selection, behavior, and choice of road crossing sites.

Needless to say, our one day of volunteering played only a small part in this multi-year project but our involvement proved challenging and educational nonetheless. The experience not only gave us a better understanding of this elusive animal’s behavior and habitat requirements but also gave us the opportunity to get out of the office and refine our tracking and sign interpretation skills. For more information on the lynx research project, please feel free to contact us at the Springfield office and remember, you’ll likely have to leave a message because we’ll be “in the field.”





## Featured Species: Marten (*martes americana*)

Historically, the marten was found throughout Vermont. The marten population declined in the early 1900s due to widespread deforestation within the state and to unregulated trapping. In 1853 martens were still plentiful; however by the early 1900s, martens were extinct in Vermont.

From 1989-1991 a total of 115 individual martens, taken from Maine and New York, were released at several different sites in the Green Mountain National Forest. During the winter of 1994-95, camera boxes were set up at 12 sites. Martens were detected at two sites, and fisher were detected at 11. Three years later a study involving 47 camera boxes detected no marten, though fisher visited 37 of the boxes confirming the belief that a viable population of martens had not established itself in Vermont.

Reports in recent years have identified originally-released martens. A road-killed marten in Candia, New Hampshire was a confirmed released marten (the body had the appropriate ear tags). This animal was 70 miles away from its release site. In December 1990, a released marten was trapped in Shrewsbury, Vermont, 10 miles from its release site. A road-killed marten was reported in Hartford, Connecticut in June 1992, 100 miles away from its release site. A released marten was trapped in Rangeley, Maine in November 1997, 150 miles from its release site.

The unsuccessful reintroduction may have occurred due to the high fisher densities, as indicated by the camera box visitations. It is possible that the warmer winters of the 1990s allowed fisher to populate areas that they historically would have been excluded from due to deep snow.

### Description

Martens are small, long, slender-bodied cousins of the fisher. The body is about the size of a mink or small cat and usually weighs under two pounds. They have round, relatively long ears, short limbs, and a long, bushy tail. The fur is medium-brown to red color on the torso, and becomes darker on the legs and tail. Martens have a light-colored head with a vertical



mark on the inner corner of each eye. The throat and chest area are buff colored.

### Reproduction

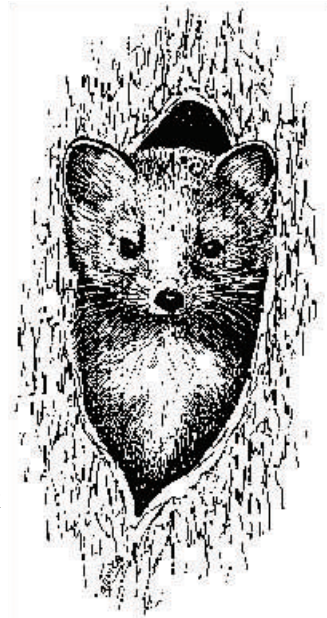
Female martens mature at one and a half years. They prepare a lined nest in the cavity of a tree or in a rock den. Although martens breed any time between late June and early September, development of the embryo doesn't begin until February or March. This phenomenon, known as "delayed implantation", is believed to be a mechanism by which the pregnant female can abort the fertilized egg should her physical condition deteriorate through the harsh winter conditions. Post-implantation gestation is 27 days. The litter, of one to five young, is born blind and virtually hairless with each kit weighing only one ounce. The young reach their full length at 3 months but do not gain their full weight for several months. Female martens are known to breed at least to the age of 14½. Adult male martens do not aid in raising the young.

### Food Habits

The marten is also known by its Native American name, *wabachis* or *rabbit-chaser*. Martens may take animals as large as hare, and also hunt smaller prey, such as voles, mice, squirrels, and chipmunks. They are opportunists and will feed on amphibians, reptiles, insects, birds, eggs, and berries.

### Habitat Requirements

Martens prefer woodlands composed predominantly of softwoods or mixed woods. However, they will use a variety of habitat types if food and cover are available. Martens are better able to cope with deep snow giving them a competitive edge over their more aggressive cousin, the fisher. The most likely place to find martens, therefore, would be in the higher elevation spruce/fir forests where snow depths may inhibit fisher colonization.



## New Website on Furbearer Management and the Role of Trapping



Wildlife professionals in 13 northeastern states and 5 Canadian provinces have completed a project to help people better understand trapping and furbearer management by creating a high quality Internet website providing the latest scientific information on this controversial subject.

The website was created by the Northeast Furbearer Resources Technical Committee (NEFRTC), an organization made up of state and provincial furbearer biologists from the northeastern United States and Canada, committed to the study and responsible management of furbearer species.

The site's Overview section reads, "This site represents the current professional outlook on trapping and furbearer management. It is the combined work of numerous wildlife scientists responsible for the conservation of furbearer populations in the states and provinces of the Northeast."

It is hoped that the website will play a vital role in educating and informing the general public about the many issues regarding trapping and fur management. It is believed that when people are made aware of existing regulations and conditions under which trapping must be conducted, even those who were initially uncertain about the activity often become supportive.

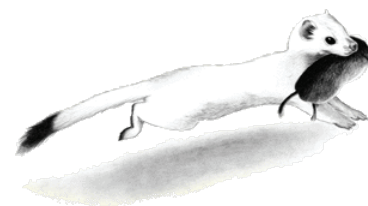
Six sections on the site's front page break down a vast amount of information:

- Regulated Trapping
- Conservation & Management
- Animal Welfare
- Trapping as a Way of Life
- Furbearer Guide
- Guide to Trap Types

Go to [www.ConserveWildlife.org](http://www.ConserveWildlife.org) and check it out.

## Survey of Vermont Trappers Activities and Motives

In 1994, researchers from the University of Massachusetts and Lyndon State College conducted a six-state study on the sociocultural aspects of trapping. The survey was repeated in Vermont in 2000 by Rod Zwick and Ron Glass of Lyndon State College and was partially funded by the Vermont Trappers Association and the Vermont Fish & Wildlife Department. The purpose of the most recent survey was to assess the changes in participation and motives of Vermont trappers. It appears that the three most significant motivations for trapping are similar to what they were in 1994: self reliance (income and independence), outdoor lifestyle activity (rural tradition, heritage), lifestyle, and affiliation (social values, to be with friends). Trappers responding in 2000 expended almost twice the number of days trapping than those that responded in 1994 even though the income earned in 2000 (adjusted for inflation) was less than what trappers in 1994 earned. Perhaps one of the most interesting shifts in attitude was in response to the question: *What would make you get out of trapping?* In 1994 most people cited personal health and time constraints while in 2000 the most common responses included concerns about development pressure, posting, habitat loss, and fragmentation. According to researchers Zwick and Glass, "Trapping remains a central life interest by which people organize themselves, interact with each other and the natural environment, derive utilitarian satisfaction from the environment, and maintain a sense of autonomy from year to year."



## Guiding Principles for a Land Ethic

In last year’s newsletter it was reported that the Vermont Fish & Wildlife Department had hosted a Wildlife Congress that brought together 80 Vermonters of various backgrounds (hunters, trappers, farmers, foresters, members of conservation organizations, etc.) to explore the concept of a land ethic for Vermont and develop concepts that might provide a yard stick for Vermonters to measure their actions against. The Department hoped that one of the results of the day-long Congress would be that participants might arrive at a shared understanding of what a land stewardship ethic would be. Interestingly, seven themes repeatedly surfaced in the breakout groups. We believe the following guiding principles could form the framework for a land stewardship ethic in Vermont:

1. Preserve Vermont’s capacity for both healthy lands and communities.
2. Foster cooperation, collaboration, and communication among all interested groups to find common ground.
3. Recognize the value of education in inspiring a land ethic that enables informed decisions on wildlife resources of the state.

4. Recognize each individual’s shared responsibility for minimizing impacts on natural resources.
5. Recognize the role and importance of the private landowner and promote programs and policies that provide fair incentives and rewards for preserving and promoting open space.
6. Think long term.
7. Promote ecologically sound, sustainable use of Vermont’s natural resources.

The Vermont Fish & Wildlife Department’s newly-organized land ethic team will be working on ways to incorporate the guiding principles into statewide programs. The proceedings for the Wildlife Congress are available on the Department’s website ([www.vtfishandwildlife.com](http://www.vtfishandwildlife.com)). If you would like a hard copy, please call Kim Royar at 885-8831.

“The concept of land stewardship must embrace the cultural environment, so that we ask ourselves whether the settlement patterns and driving patterns, and shopping patterns, we are putting on the land today are going to work well for our own species and for those animals and plants that live adjacent to us?”

*Jan Alberts, Wildlife Congress 2000*

## The Department Continues its Efforts to Protect Critical Wildlife Habitat



Through Act 250 and Act 248 Vermont’s land use and development laws, Vermont Fish & Wildlife Department personnel spend a significant amount of time working to minimize the impacts of development on critical wildlife habitats such as deer wintering areas, bear-scarred beech stands, wetlands, riparian

buffers, and threatened and endangered species habitats. The following table tracks the acres impacted vs. acres saved as a result of Department participation in Act 250 and Act 248. [This represents only a fraction of the habitat lost in the state. These numbers reflect only those projects that the Department has the opportunity to review.]

Habitat	1996		1997		1998		1999		2000		2001	
	Habitat Impacted	Habitat Protected	Habitat Impacted	Habitat Protected	Habitat Impacted	Habitat Protected	Habitat Impacted	Habitat Protected	Habitat Impacted	Habitat Protected	Habitat Impacted	Habitat Protected
Deer Winter	679	2,476	266	2,821	349	2,785	281	3,000	198	1,956	205	1,620
Black Bear	635	6,780	208	2,010	110	1,391	115	1,525	100	1,524	360	1,205
Wetland	42	557	19	241	38	250	20	150	122	177	35	481
Threatened & Endangered Species	0	300	45	14	4	5	15	10	141	177	32	15



## Recipes

### Roasted Stuffed Opossum

1 opossum, skinned and cleaned	1 teaspoon salt
salt and pepper	dash pepper
1/4 cup fat	1-1/4 teaspoons poultry seasoning
1/2 cup chopped onion	1/3 cup water
1/2 cup chopped celery	1 sweet potato per person
6 cups bread cubes	

Rub opossum with salt and pepper. Melt fat in skillet; add onion and celery and cook until tender. Combine bread cubes, salt, pepper, and poultry seasoning with onions and celery. Add water and mix thoroughly. Fill the body cavity. Close by sewing the skin together with a heavy string or by skewering the skin together and lacing with a heavy string. Place, underside down, on rack in shallow roasting pan. Roast at 300-350 degrees F 2 to 2-1/2 hours or until well done, basting occasionally with drippings and sprinkling lightly with flour after each basting for a crisp, crackly crust.

*Wild Game from Field to Table, University of Georgia College of Agricultural & Environmental Sciences*



### Fried Beaver



First and foremost you need a fresh beaver — one caught within 24 hours. After skinning and taking care not to cut open the casters or oil sacks, cut off the hind legs and back straps. Wash meat well in cold water and cut all fat off. Cut the meat into 1" thick strips making sure to cut across the grain. Next, get your frying pan hot and put in olive oil. Olive oil is the key to a good fried beaver. Margarine, butter, vegetable oil, and lard are ok, but not nearly as good as olive oil. Fry quickly on both sides taking care not to burn or overcook the meat. Serve immediately on a bed of fried onions with garlic or alone. Either way if you like a rich red meat that will leave you satisfied and ready to trap all the harder, this is for you.

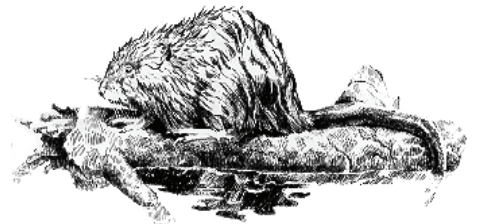
*Franklin Gorham*

### Muskrat Meat Loaf

1-1/2 pounds ground muskrat	1/4 teaspoon thyme
2 eggs, beaten	1 teaspoon salt
1/3 cup dry crumbs	1/4 teaspoon pepper
1 cup evaporated milk	1 teaspoon Worcestershire sauce
1/4 onion, minced or grated	

Soak muskrat overnight in salted water (1 tablespoon salt to 1 quart water). Remove meat from bones and grind. Mix ground meat thoroughly with other ingredients. Place in meat loaf dish. Place dish in pan containing hot water. Bake in a moderate oven (350 degrees F) for 1-1/4 hours to 2 hours. Serves 6-8.

*Wild Game from Field to Table, University of Georgia College of Agricultural & Environmental Sciences*



## Check Out These Web Sites



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

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

**Vermont Trappers Association**  
<http://homepages.together.net/~lrk/VTA.html>

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

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

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

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

## THANK YOU, THANK YOU

Trappers, hunters, game wardens,  
 furbearer team members, and trap  
 standards committee members 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

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