



Vermont Furbearer Management Newsletter



Volume 4, Issue 1

Fall/Winter 2003

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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NOTICE: The following fisher and bobcat season changes will be implemented December 2003 (this season)

- An open season is declared for the taking of fisher statewide by trapping only, beginning on December 1 and running through December 31, both dates inclusive.
- A person shall take bobcat by trapping only, beginning December 1 and running through December 16, both dates inclusive.
- A person who takes bobcats during the trapping season shall present the pelts and carcasses to a Vermont State Game Warden for tagging within 48 hours of the close of the season.
- From December 17 to December 31, both dates inclusive, in order to minimize incidental bobcat harvest during the remainder of the fisher season, a person shall not set a body-gripping trap with a jaw spread over six (6) inches unless the trap is set five (5) or more feet above the ground, or in the water.

The above changes were based on input from many individual trappers as well as the Board of Directors of the Vermont Trappers Association. The Department of Fish & Wildlife reviewed the fisher and bobcat biological, harvest, and effort data and submitted a proposal last spring to the Fish & Wildlife Board to extend the fisher season.

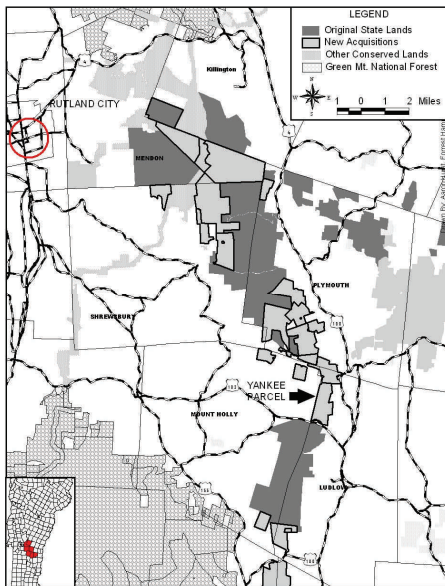
Rule changes such as this fisher season extension can take up to nine months to complete and involve a great many steps including furbearer team review and analysis of the data (all of which is collected from you, the trapper/hunter – thank you very much), in-house review

of the proposed change by law enforcement and biological staff, a presentation to the Fish & Wildlife Board, public review of the proposal, a public input meeting, revisions based on public comments, reviews by both agency and legislative rules committees, and two additional board votes (total cost per rule ~\$1,500-\$2,200). Season changes such as this one are not done frivolously and must be based on good information. Thank you again for providing the data necessary to successfully complete this process.



State & Conservation Groups Conserve Land for Wildlife

Over 15 years ago, state wildlife biologists recognized that the U.S. Forest Service lands north of Route 4 in Mendon and the U.S. Forest Service lands south of Route 155 in Mount Holly and Weston were 'held together' by a thin fragmented band of State-owned land. These state-owned properties, along with many large private ownerships, functioned as a critical link for the north/south movement of black bear and other wildlife species. The potential for destruction of this link was high due to the increasing possibility of fragmentation and development associated with the Okemo and Killington Ski Areas.

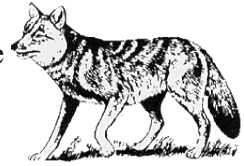


Since the early 1990s, several private conservation organizations stepped in to help the State conserve many of the large private ownerships and secure the future of this important corridor. In January 2003, 15 years and over 20,000 acres later, one of the three remaining

parcels in the corridor was conserved. The 515-acre Yankee property, located in Ludlow, Vermont, was purchased by the State thanks to a grant from U.S. Fish and Wildlife Service federal aid funds (via an excise tax on hunting equipment and firearms) and mitigation money from Okemo Mountain Resort. The Conservation Fund and the Trust For Public Lands assisted the State with the acquisition. The Yankee parcel is located along Route 103 in a very narrow section of the corridor. Its protection was vital to maintaining the integrity of the rest of the corridor and the public's investment in the lands already conserved. This effort has been an incredible achievement of cooperation between many groups including two ski areas, the State Fish & Wildlife and Forests, Parks & Recreation Departments, the federal government, many conservation organizations, and sportsmen and women. It's a project that will link wildlife habitat in northern and southern Vermont forever and is a legacy we can all be proud of.

Coyote BMPs Complete

As part of the largest national research effort ever undertaken, the International Association of Fish and Wildlife Agencies has produced the booklet, "*Best Management Practices for*



Trapping Coyotes" (a copy is enclosed). The booklet is the culmination of several years of research to scientifically identify those traps/trap designs that meet animal welfare standards as well as efficiency, selectivity, safety, and practicability criteria.

Four trappers from Vermont participated over a period of three years to contribute valuable information to this project. Other BMPs for red fox, raccoon, and beaver should be available within the next year. We can now begin to incorporate this information into our trapper education and management programs.

Season Results 2002/2003

Sixty-four bobcat, 437 fisher, and 152 otter were reported and pelt-sealed by law enforcement personnel during the 2002-03 season. The carcasses that were turned into the wardens were processed by us at our lab in Roxbury to determine the sex, age, and condition of each of the animals. These data allow us to monitor changes in population levels from one year to the next. Our ability to accurately predict whether the populations are increasing, decreasing, or staying relatively stable allows us to more confidently defend trapping and hunting seasons and ensure that these animals exist for future generations of Vermonters.

Figures 1-3 show the geographic distribution of the bobcat, fisher, and otter harvest by Wildlife/Watershed Management Unit. Figure 4 graphs the harvest of raccoon, beaver, coyote, muskrat, red fox, mink, fisher, otter, and bobcat against the trapper effort (# traps x # nights) for each species. These data are derived from the annual trapper mail survey. It is easy to see from these graphs how much trapper effort influences the harvest. It follows, therefore, that these data are critical to the accurate interpretation of harvest information and to the true forecasting of trends in furbearer populations. Thanks to all of you who collect and/or contribute this essential information to the furbearer program.

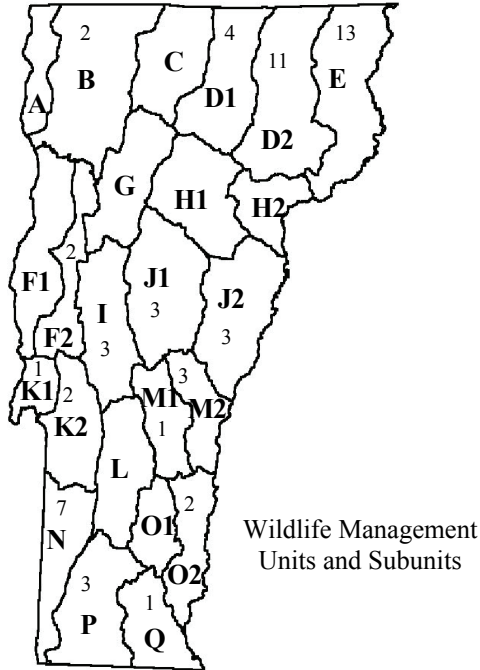


Figure 1. Distribution of 60 bobcat taken during the 2002-03 season.

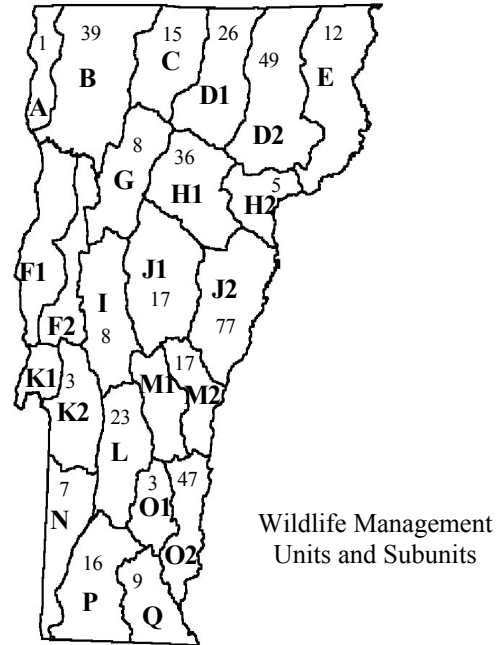
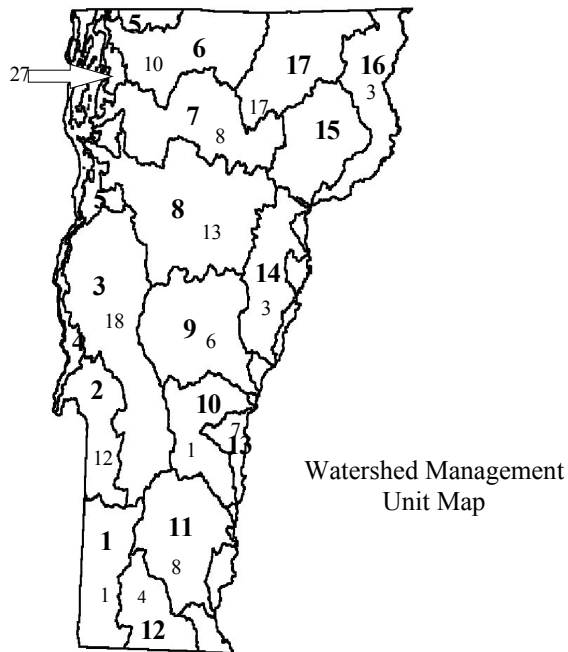


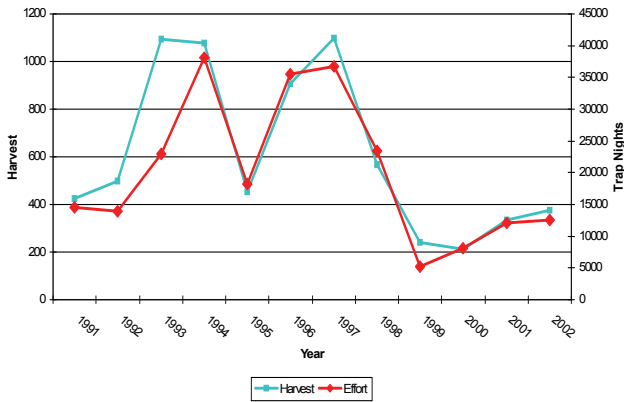
Figure 3. Distribution of 418 fisher taken during the 2002-03 season. The remaining 19 are unknown.



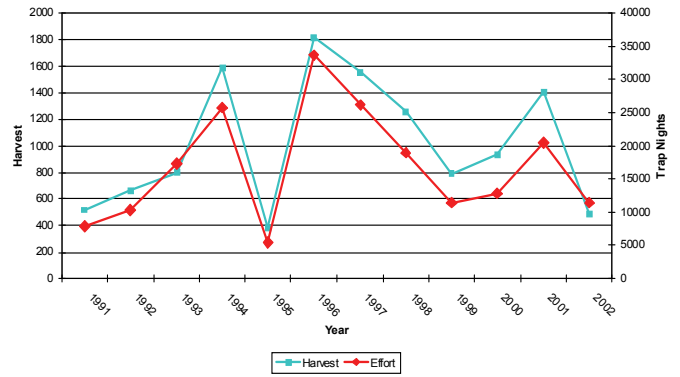
1. Batten Kill, Walloomsuc, Hoosic
2. Poultney, Mettawee
3. Otter Creek, Little Otter Creek, Lewis Creek
4. Lower Lake Champlain
5. Upper Lake Champlain, LaPlatte, Malletts Bay, St. Albans Bay, Rock, Pike
6. Missisquoi
7. Lamoille
8. Winooski
9. White
10. Ottauquechee, Black
11. West, Williams, Saxtons
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 2. Distribution of 138 otter taken during the 2002-03 season. The remaining 14 are unknown.

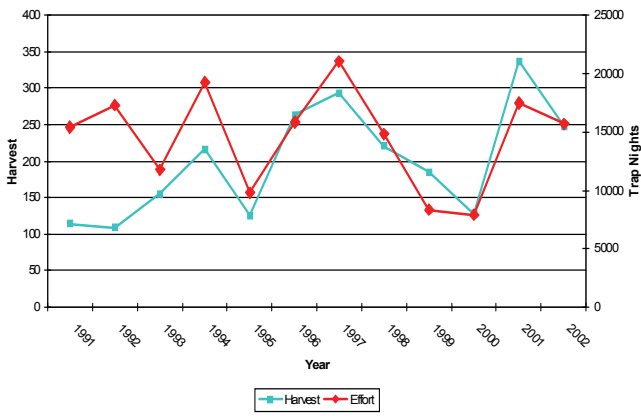
Raccoon



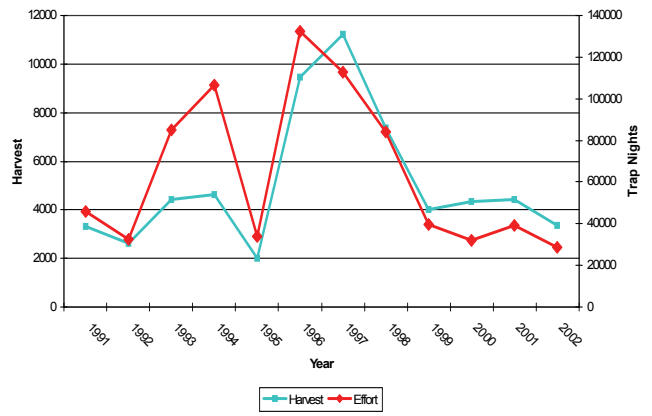
Beaver



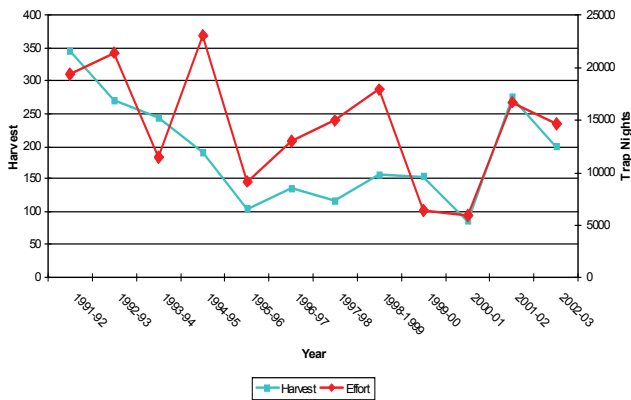
Coyote



Muskrat



Red Fox

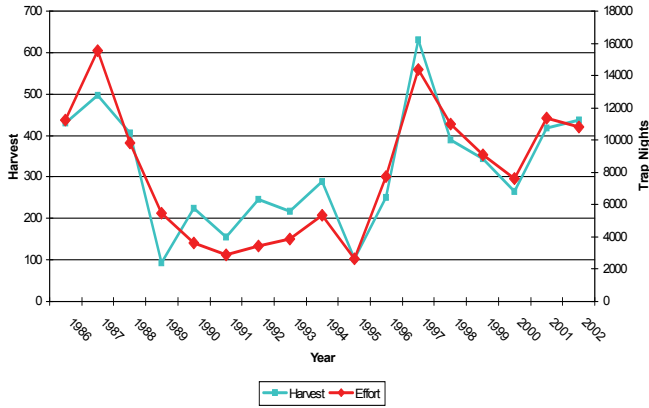


Mink

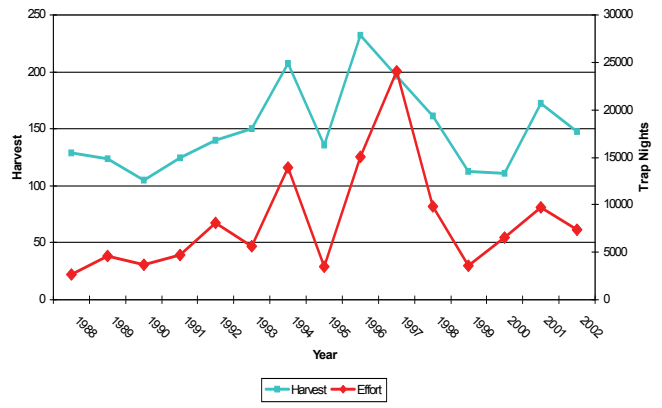


Figure 4. Harvest vs. Trapper Effort in Vermont.

Fisher



Otter



Bobcat

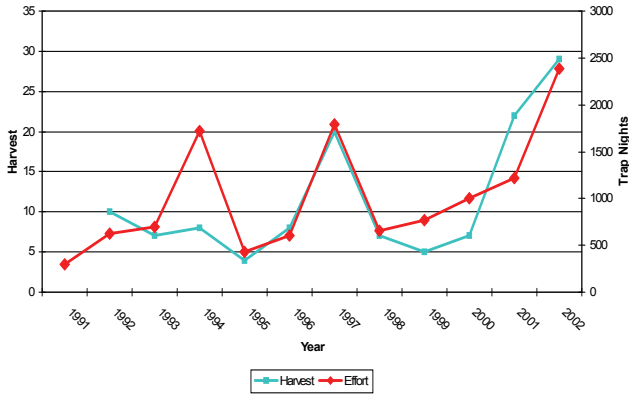


Figure 4. Harvest vs. Trapper Effort in Vermont (cont.).

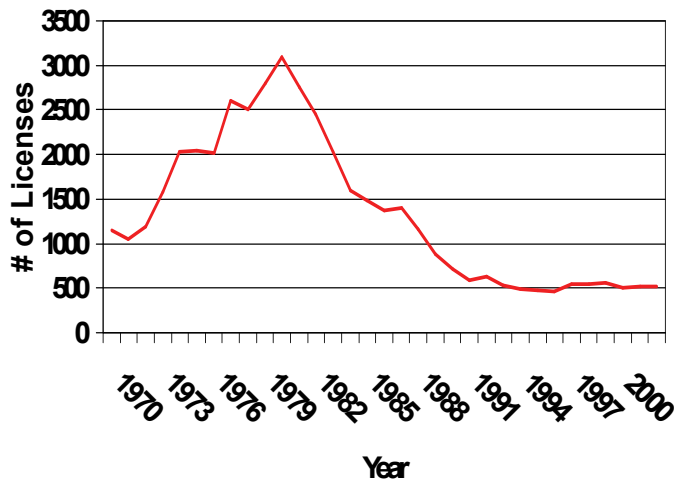


Figure 5. Total Number of Resident Trapping License Sales in Vermont by Calendar Year.

Featured Species: River Otter (*Lutra canadensis*)

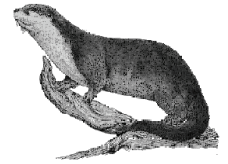
“The otter is a voracious animal, of great activity and fierceness. When it is fully grown, it is five or six feet long; with sharp and strong teeth; short legs, and membranes in all his feet; and fitted either for running or swimming. The otters explore the rivers and ponds in search of fish, frogs, water rats, and other small animals. And when these are not to be had, he lives on the boughs and bark of young or aquatic trees...The fierceness and strength of the old otters is such that the dog can seldom overcome them. And when they cannot escape, they will attack the hunter with great rage.”

So wrote Samuel Williams in 1794 in The Natural and Civil History of Vermont. At that time, *Lutra canadensis*, the North American river otter, could be found throughout nearly all of Canada and the United States. Vermont's Otter Creek derives its name from the abundance of otters that inhabited its banks. By the late 1800s, however, the river otter was already disappearing. Its thick, lustrous fur is the most durable of native American furs, making it the favorite of Chinese mandarins and Russian nobility in the 1700s. Unregulated trapping and loss of habitat contributed to its decline, as did the contamination of rivers, lakes, and streams during the industrial revolution.

In 1853, Zaddock Thompson wrote in Natural History of Vermont, “Formerly very common in Vermont...they are now become scarce, but are occasionally taken at several places in the state.” The Report of the State Geologist in 1910 listed the otter as “very near extinction.” Since that time, however, improved water quality, additional habitat created by an increased beaver population, and regulated trapping have allowed the otter to make a comeback. Today, data collected in the last decade indicates that Vermont's otter population is well distributed and has grown significantly in recent years.

The river otter is a fascinating creature. In sharp contrast to Williams' description, it is recognized for being one of the more intelligent species. Its grace and endurance in the water holds irresistible charm for those lucky enough to watch. The otter is one of the largest members of the weasel family and adapts to a variety of aquatic habitats — streams, lakes, ponds — as long as there is plenty of water and dense, impenetrable vegetation along the edge. It uses abandoned burrows or beaver lodges for dens, and seeks out partially-submerged trees and tall grasses for resting sites and foraging.

The physical characteristics of the otter are unique as well. *Lutra canadensis* is distinguished from other otter family members by the large, hairless patch on its nose. Its long, streamlined body averages 35 to 54 inches and weighs 14 to 33 pounds. Males are generally larger than females. The otter's tail, tapered and flattened underneath, comprises 40% of its total length and is used as a rudder and propeller while swimming. It can travel through the water at speeds of up to seven mph. Short, strong legs, webbed toes, and sharp claws are just as Williams described. Small brown eyes are located high on its broad head to allow it to swim almost completely submerged, and its tiny ears have valves that close while it swims underwater. Its sharp teeth are capable of grinding and crushing its food.



An otter's vision is poor except when it is under water, but it has a good sense of hearing and a good sense of smell. It has long, highly sensitive whiskers called ‘vibrissae’ at its snout and elbows to help it locate and capture prey in muddy, dark water. A river otter will communicate with other otters by scent marking and by shrill chirps and growls or hissing barks.

Rich, chocolate brown, the otter's dense fur makes it a prize catch. Short, soft underfur is protected by longer, stiff guard hairs. Its underside tends to be lighter in color, and its lips, cheeks, chin, and throat are usually a pale brown. Natural oils in the fur helps to insulate and waterproof. A river otter will molt twice annually, in the spring and then again in the fall. The pelts are prime after the autumn molt.

River otters are piscivorous — fish eaters. They feed mostly on slow-moving species such as chubs, dace, suckers, and catfish. Contrary to some beliefs, the otter does not pose a serious threat to trout populations. Though they will at times consume a trout, they prefer an easier catch. Otters supplement their diet with crayfish, other shellfish, frogs, toads, and insects and occasionally will prey on small mammals or birds and forage for blueberries or rose hips.

Otters breed in the spring. Embryo implantation is delayed until the following winter, and a litter of one to four silky black, blind, toothless pups are born some time between March and May. The pups weigh approximately four to six ounces. They are ready to leave the dens at about two months, and to travel by three months. They are self-sufficient at about six

(Continued on page 9)

New Publication Available

Hot off the presses is the new publication, "How to Avoid Incidental Take of Lynx While Trapping or Hunting Bobcats and Other Furbearers". Although lynx are rare in Vermont (the last confirmed sighting was in St. Albans in 1968), many of you may hunt or trap in states where lynx are more common. This booklet, produced by the U.S. Fish and Wildlife Service and the International Association of Fish and Wildlife Agencies, and written by wildlife biologists and trappers, is intended to help achieve the goal of reducing injury and mortality to the threatened Canada lynx population in the United States.



On March 24, 2000, Canada lynx were listed as Threatened in the contiguous United States under the Endangered Species Act. "Trappers and hunters must use every reasonable effort to avoid taking lynx where they may occur in the contiguous 48 states." The booklet describes identifying characteristics of lynx and bobcats, differences in sign, trapping and hunting methods to help avoid catching lynx, and safe release of incidentally-captured lynx.

Below is an excerpt from the booklet which can be found on-line at <http://international.fws.gov/animals/lynx.htm>:

Distinguishing Characteristics of Lynx and Bobcat:

	Lynx	Bobcat
Pelt color	more gray than red belly fur grayish-white or buff-white with mottled, indistinct black spots	light gray, yellowish brown buff, brown, or reddish brown and streaked or spotted belly fur white with distinct black spots
Tail color	generally matches body except the tip (about the last 1") has a black band all around	usually has dark bars and a black tip (about the last 1") only on upper side and is usually whitish on underside
Feet	feet large and snowshoe-like and hind legs are longer than the front, giving the lynx a "stooped" appearance	feet small and hind legs are about the same length as the front legs
Track size	in dirt: up to 4½ wide in snow: up to 5" wide	in dirt: up to 2½ wide in snow: up to 2¾" wide

We plan to include the booklet in our Trapper Education materials. Anyone interested in a copy should call Kim Royar at (802) 885-8831 or e-mail kim.royar@anr.state.vt.us.

BMP Research Continues in VT — Fisher Traps to be Tested this December

Vermont will continue its involvement in the development of BMPs for trapping in the United States. This year the effort in New England will be focused on fisher. Four Vermont trappers paired with four field observers will test three different trap types (1½ coilspring, 220 conibear, box trap) for animal welfare, efficiency, selectivity, safety, and practicability.

Best Management Practices are a set of recommendations based on sound scientific information. As Dave Hamilton, a biologist from Missouri and one of the National leaders in the BMP effort says, "Trapping BMPs is an organized way to combine the collective wisdom of thousand of trappers with some intensive scientific testing, and to produce a list of the very best of the methods for the capture of each furbearer species." Vermont's participation allows Vermont trappers to offer their 'collective wisdom' to this very important effort.

Recipe

Raccoon Roast with Barbecue Sauce

- 1 small to medium raccoon cut into serving size pieces
- 1/2 tsp. salt
- 1 tsp. instant minced onion
- 3 tbsp. brown sugar
- 1/2 cup chili sauce
- 1 1/2 tsp. Worcestershire sauce
- 1 (7 oz.) bottle of beer or pickle juice

Place pieces of raccoon in a foil-lined roasting pan. Preheat oven to 350 degrees F. and roast, covered for a half hour. Meanwhile, mix other ingredients in a small bowl for barbecue sauce. After meat has roasted a half hour, uncover and pour barbecue sauce over the pieces. Then roast, uncovered, for another half hour to an hour until tender. Baste several times during cooking, using your barbecue sauce.



Wild Game Recipes List

Vermont's Wildlife Management Areas

Vermont's Wildlife Management Areas (WMAs) are some of the best places in the state to experience quality, wildlife-based outdoor recreation. Regulated hunting, fishing, and trapping, as well as birdwatching, wildlife viewing, photography, hiking, skiing, and snowshoeing are all allowed activities within the WMAs. These areas have been purchased by or donated to the Fish & Wildlife Department in order to protect and improve wildlife habitat for present and future generations and to guarantee public access to these lands for wildlife-based activities.



Each WMA is managed for its own unique resources. A team of foresters, biologists, and ecologists will develop and implement a management plan for each individual area. This team, the District Stewardship Team, is responsible for meeting with the public to get their input, conducting resource inventory and assessment, writing the management plan, and overseeing its fulfillment. In addition, the team looks at the quality and quantity of the various habitats within the area as well as the level of public use on the WMA.

Management plans for WMAs include short and long term goals for habitat conservation and enhancement, as well as timing and methods for carrying them out. They are reviewed over time as needed. Prior to determining the goals for the area, an extensive inventory is done. Natural community types such as Northern Hardwood Forest, Spruce-Fir Forest, sedge meadow, or vernal pools, are identified. Quality and quantity of tree species are calculated. The team evaluates the habitat potential for species such as deer, bear, turkey, ruffed grouse, and songbirds and for rare, threatened, and endangered species. Soils, landscape characteristics, past land use practices, plant species, and of course wildlife sign, are all documented to help decide management priorities.

With 85 WMAs totaling more than 133,000 acres, management and maintenance is a never-ending task.

In addition to the writing and implementation of habitat management plans, the Departments of Fish & Wildlife and Forests, Parks & Recreation are continuously laboring in the routine maintenance of these lands. There are hundreds of miles of boundary lines to be preserved; numerous roads, parking areas and gates to be maintained; a variety of trails to be mapped, built, and monitored annually, and outreach materials to be developed. Additionally, district staff frequently deal with an assortment of legal disputes regarding boundaries, illegal dumping issues, and other misuse of these lands in an effort to sustain the integrity of these parcels and protect the interests of the public. The stewardship of state lands is a sometimes daunting, but more often rewarding, task. Stewardship teams around the state are making significant progress toward responsible and effective WMA management.

So, the next time you visit your local WMA, look around. Is the parking lot convenient and clean? Are the boundaries well defined? Is the kiosk helpful? Did you need to ask permission to access the property? Most importantly though, did you find the wildlife you came looking for?



For more information or maps of the WMAs, visit the ANR website at <http://www.anr.state.vt.us/>. Click on "ANR Maps and Publications."

Who We Are and What We Do

The Vermont Fish & Wildlife Department has a history that extends back to 1866 when the Legislature appointed a Board of Fish Commissioners. A decade later this Board was given authority over game birds and mammals, and in 1892 the Board of Fish Commissioners was renamed the Fish and Game Commission.

These actions were the culmination of increasing public concern about fish, wildlife, and their habitats. Since the state's settlement, many species had declined in abundance because of unrestricted harvests, poorly enforced laws, and habitat loss. By the 1850s, only 25% of Vermont was covered by forest due to extensive land clearing for farming. Today, almost 80% of the state is covered by forest, and many wildlife species have been restored.

Even though the initial focus was on game fish and animals and associated recreation, Department personnel have always had a commitment to all fish and wildlife species. This was formally recognized in 1983 when the Department's name was changed from Fish and Game to Fish and 'Wildlife.' The Department is responsible for the conservation of wildlife in its broadest sense; 41 species of reptiles and amphibians, 89 species of fish, 93 species of breeding birds, 58 species of mammals, more than 15,000 insect species, and 2,000 higher plant species, plus fungi, algae, and 75 different types of natural communities.

The Department is currently staffed by 130 individuals who work as a team to achieve the Department's written mission. Each employee is an integral part of the team offering his/her own specific technical and professional expertise. Game wardens, for example, are the Department's frontline employees who enforce laws, collect data, and educate the public whereas wildlife

biologists are...are what? What exactly *do* wildlife biologists occupy their time with?

Working out of six district offices, wildlife biologists find themselves scrambling from one task to another. On any given day you may bump into your district biologist at the local big game check station where he/she is collecting biological data or you may pass them on the highway while they are traveling in the trademark green truck to meet with a private landowner to provide guidance in their land management decisions. You may happen upon them in the remote peaks of the Green Mountains while they are mapping black bear habitat or may hear them testifying on behalf of wildlife at an Act 250 hearing. You'll know your district biologist has been busy meeting with Fish and Wildlife Board members or legislators when a new season length or bag limit is set or when your right to trap and hunt is under attack at the statehouse. Perhaps a wildlife biologist will be visiting your child's classroom today and meeting with your local planning commission tonight. It is even possible you might meet them on a beaver dam installing a water control structure or out on a call with a warden dealing with a beaver in your neighbor's backyard. With 85 Wildlife Management Areas (WMAs) totaling more than 133,000 acres, it is a good bet you'll cross their path in the forests as they work to inventory and maintain these lands. Back at the office, you may find them examining the State land's inventory data while they update WMA management plans or find them in a meeting to coordinate the implementation of these plans.

In a state which measures 9,609 square miles and has a population of 593,740 people, that roughly equates to 1,602 square miles and 98,957 people per district office. As you can imagine, there is no shortage of work to be done!!

River Otter (*Lutra canadensis*) *(Continued from Page 6)*

months but stay with the family until just before the next litter of young is born. Adult male otters do not help raise their offspring.

Though curious and playful, river otters are seldom seen due to their shy, secretive nature. They are generally nocturnal and active all year long. An otter's presence can be detected by slides in the snow or mud along the edge of a river or pond, trails of scat and crayfish parts leading from water's edge, and the flattened vegetation in its rolling site.

Because they are high on the food chain, otter health and numbers are an indicator of the health of the surrounding environment. The greatest threats to the river otter's existence are the results of human activity — loss of habitat due to development and loss of food supply due to polluted rivers, lakes, and streams. Efforts to maintain high water quality standards and conservation of wildlife habitat in general have provided the necessary components for otters to flourish in Vermont.

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/INDEX.html>

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>

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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