

## Table of Contents

### Section A

Solving Human-Beaver Conflicts  
Practical Solutions for Local Health Officials and Conservation  
Commissioners/ MSPCA

Beavers in Massachusetts/ MassWildlife

Beavers in Massachusetts/ University of Massachusetts and  
Massachusetts Division of Fisheries and Wildlife

### Section B

Guidance for Boards of Health Implementing MGL c.131, s.80A  
Threats from Beaver and Muskrat-Related Activities/ Massachusetts  
Department of Public Health

Massachusetts Department of Public Health Appeals process for MGL  
c.131, s.80A

### Section C

Guidance for Conservation Commissions Implementing MGL c.131, s.80A  
Threats from Beaver and Muskrat-Related Activities/ Massachusetts  
Department of Environmental Protection

Excerpt from Department of Environmental Protection 310 CMR, section  
10.06 Emergencies. Department of Environmental Protection review of  
permit, denial, or failure to act within 24 hours of emergency certification.

### Section D

Managing Nuisance Beavers Along Roadsides  
A Guide for Highway Departments/ Dept of Natural Resources, Cornell  
University

### Section E

Forms:           Application for 10 Day Emergency Beaver or Muskrat Permit  
                      10 Day Emergency Beaver or Muskrat Permit  
                      10 Day Additional Emergency Beaver or Muskrat Permit  
                      Notice of Denial of Emergency Permit under MGL c131,s80A  
                      Application for 30 Day Extension Permit  
                      30 Day Beaver or Muskrat Extension Permit

## Section F

Case Study: Town of North Andover's adopted Article 16 Reducing the Beaver Population 2001.  
Includes Beaver Solutions townwide assessment of beaver problems and specialized forms.

## Section G

Beaver Problems Contacts  
Listing of Massachusetts Agency contacts involved in beaver problems, and private contractor Mike Callahan of Beaver Solutions.

## Section H

Examples: Beaver Solutions Sept 27, 2004 assessment of Shea dam and Rt 62 culvert device proposal.

Beaver Solutions October 13, 2003 assessment of Fieldcrest dam and flow device proposal. Installed May 2004 and very effective.

John A. Benedetto January 1, 2004 beaver trapping proposal for Fieldcrest dam.

## Section I

Beaver Solutions North Reading Town-Wide Assessment  
Chart of problem locations spreadsheet summary, suggested prioritization by Martins Pond Reclamation Study Committee and Mike Soraghan, Town Engineer

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October 27, 2004  
Revised December 2005*

# Solving Human-Beaver Conflicts

Practical Solutions for  
Local Health Officials and  
Conservation Commissioners

Provided by  
Living With Wildlife

A Program of the  
Massachusetts Society for the Prevention of Cruelty to Animals  
350 South Huntington Avenue  
Boston, MA 02130  
617-522-7400

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# TABLE OF CONTENTS

Introduction

The MSPCA's Commitment

Beavers and Public Health Officials/Conservation Commissioners  
*brief description of recent changes to the law that impact you*

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- I. Methods for Solving Beaver Conflicts  
*the facts about what can be done to solve human-beaver conflicts*
- II. Resources  
*who to contact for help with beaver problems*
  - MSPCA
  - Beaver Solutions
  - Integrated Wildlife Control
  - Critter Control of Central Massachusetts
  - The Fund for Animals
  - Beaver Busters
  - Mass. Division of Fisheries and Wildlife
  - Mass. Dept. of Public Health
  - Mass. Dept. of Environmental Protection
- III. Beaver Solutions Information  
*including company overview, guide to beaver management methods, and case studies*
- IV. Text of the trapping law, M.G.L. Ch. 131 §80A
- V. Regulations, 321 CMR 2.08
- VI. Flow chart  
*procedure of the trapping law*
- VII. Massachusetts Department of Public Health  
*guidelines regarding the trapping law*
- VIII. Massachusetts Department of Environmental Protection  
*guidelines regarding the trapping law*
- IX. Dam Breaching and Wetland Ecology
- X. Giardia  
*basic facts about this water-borne disease*

## Introduction

As you are probably well aware, when beavers and humans come into contact, problems can and do occur, most notably with flooding caused by beaver damming activity and tree destruction and damage from gnawing. In July 2000, changes to the law in Massachusetts about human-beaver conflicts impact you, and we want to assist you with understanding what these changes mean and what is available to you to help you do your job. The Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA) has been involved in this issue for many years and this guide includes current information on the legal and practical aspects of resolving human-beaver conflicts in a long-term, cost-effective manner.

The most important piece of information for you to know is that *there are places for you to turn for help with beaver problems* and that *the problems you are facing do have long-term, effective solutions!*

## The MSPCA's Commitment: Living With Wildlife

The Living With Wildlife program of the MSPCA has been working in communities across the Commonwealth for several years, providing information to cities and towns about effective beaver problem management. We understand that local authorities have not always found it easy to secure the assistance they've needed for addressing these serious problems; we are here as a resource. The MSPCA has worked with countless cities and towns to solve beaver problems and we have experienced staff who can assist you with practical and procedural questions, not only about how to effectively resolve problems, but also about working within the law. We can steer you in the right direction and tell you where to find the right resources for solving your problem. (See "Resources"). We hope that you find this information useful and encourage you to use us as a partner for bringing real solutions to human-beaver conflicts in your city or town.

## Beavers and Public Health Officials

Recent changes to state law have an impact on local public health officials. Under these changes, local health officials must respond to requests from the public to determine whether or not specific beaver activity poses a threat to public health and safety. **The law makes suggestions about what may constitute such a threat, but it is up to each health official to decide whether the threat is real or not.** The Massachusetts Department of Public Health (DPH) has written guidelines to assist local boards of health with determining whether or not beaver activity poses a real threat to human health and safety; these guidelines are included in this guide under "DPH." This guide also provides some general information on Giardia (see "Giardia"), and can help steer health officials to the appropriate resources for solving beaver problems should they find a real threat to the public's health.

If local health officials determine that there *isn't* a threat to public health or safety, this doesn't mean that the person seeking assistance is without options. They can still install water flow devices, breach dams, or trap beavers, under different conditions, which are outlined within the

last three paragraphs of the law (see "The Law"). What local health officials can do is provide people with the resources, so that they have someone to turn to for assistance.

*Please note that the Department of Environmental Protection (DEP) shall make any determination of a threat to a public water supply. This is not the responsibility of local health officials. The DEP's recommendations to water authorities are included in this manual under "DEP."*

## **Beavers and Conservation Commissioners**

As Massachusetts' conservation commissioners well know, beavers are important creators of wetlands. When these wetlands are in urban and suburban areas, flooding and tree damage caused by beavers can have a negative impact on people, and managing these problems with a specific concern for wetland preservation is imperative. Under old and new laws, breaching beaver dams is subject to the approval of local conservation commissioners (see "The Law"). Under the old law, both conservation commissioners and the state Division of Fisheries and Wildlife (DFW) had to approve any dam breaching before it could take place and, in practice, this often meant that conservation commissioners were able to rely on the determination by DFW and approve DFW's recommendation. Now, in cases of threats to public health or safety as determined by local health officials, conservation commissioners alone have that authority. All other situations that do not involve a health threat still need the approval of both DFW and local conservation commissioners.

## **I. Methods for Solving Beaver Conflicts**

As public officials assigned to assist people with finding solutions to beaver problems, it is important for you to understand not only what resources are available to you and what is legally allowed, but also what people coming to you for help are experiencing and expecting. By the time someone approaches a local official for help with a problem, the flooding has often already occurred, and people are anxious for quick solutions. They are often angry about the damage, afraid that the flooding could endanger their health, and, in our experience, frustrated because they've not been able to find good assistance and advice. The MSPCA has worked with countless cities and towns and private property owners who are under the mistaken impression that statutory changes have left them without any options for dealing with beaver damage. **This is simply not true.**

*Here's what can legally be done: construct water flow devices, breach beaver dams, and trap and remove beaver.*

### **1. Construct Water Flow Devices**

Called beaver deceivers, flexible pond levelers, and beaver bafflers, these pipe and fencing devices are designed to regulate water levels and prohibit damming that could result in flooding. The MSPCA believes that installing water flow devices to regulate water levels in wetlands is the most cost-effective, long-term, and successful solution to beaver flooding problems. When installed properly, these devices can solve beaver problems for many years with only minimal maintenance. Unlike trapping and dam breaching, water flow devices are designed to be effective for the long-term, eliminating the need for continuous and repeated trapping or dam breaching efforts. Our experience, and the experience of those with whom we've worked both inside and outside of the state, demonstrates that water flow devices are undoubtedly the preferred option. The MSPCA likes this solution not only because it's incredibly effective, but also because it protects the wetland, provides an opportunity to share the benefits of beavers and wetlands with everyone involved in solving the problem, and allows beavers and humans to co-exist without resorting to killing the animal. There are good options available to you for using water flow devices; the most important thing is to talk with someone who is experienced with these devices (see "Resources").

### **Water Flow Devices and the Law**

Permits for building water flow devices are needed from local conservation commissioners because they are built in water, just as permits are necessary for constructing a dock or building a structure on the edge of the water. Should the installation of a water flow device require building in a beaver dam (many devices do require this), this would constitute a breaching of the dam and permission is necessary as stated below under "Breach Beaver Dam."

### **2. Breach Beaver Dam**

Breaching a dam is the only way to effectively relieve flooding in a timely manner because it is the only thing that will lower the water level. Breaching a dam, however, is serious business because of the risk of further flooding if a dam is too severely breached and because it could endanger all the wild species depending on the impounded water for survival if the water is

drained too low. Conservation commissioners know the importance of maintaining a dam for the purpose of protecting the wetland and its inhabitants; if a dam is breached, it should be done carefully, with a small notch in the dam to allow for the slow release of water – too large a cut in the dam can cause the entire dam to give way as the water pressure builds, causing an even more serious flooding problem and subsequent draining of the wetland. If beaver currently inhabit the site, the breach should be made in the morning and should be monitored while the water recedes during the day. Beavers are nocturnal and will quickly and easily repair the breach come nightfall, so additional breaches may be necessary.

If the flooding can be tolerated until a water control device has been installed, this is the best option because the risks of further flooding or wetland damage are then eliminated. If the flooding is really causing a serious health threat, careful breaching to lower the water level is the only immediate relief available. If you are charged with breaching a dam and are not familiar with doing it, you should seek the advice of someone with more experience, as there are very strong wetland protection laws in Massachusetts with severe penalties for unauthorized breaches (see “Resources”).

*It is important to understand that breaching dams is a temporary fix to flooding problems that will not solve those problems in the long run.* Beavers can easily repair damage to a dam, even if the dam has been removed with a backhoe! Even if beaver are removed from the site through trapping, the wetland habitat is prime for occupation by other beavers and they will move in, rebuild the dam, and the problems will reoccur. Time and time again we have encountered the frustration of local city and town officials who have been dealing with the same problem site for many, many years. They spend countless dollars and hours repeatedly breaching dams and hiring trappers, only to find that the problems return. We recommend using water flow devices.

### **Breaching Dams and the Law**

Under current law, if there is an established threat to public health or safety as declared by the local health official, and that local health official has issued an emergency permit, the person receiving the permit can choose to breach a dam *and must get permission and work with the local conservation commissioners to do so.* In cases where a health or safety threat is *not* present, permission to breach must be secured from the state Division of Fisheries and Wildlife and local conservation commissioners.

*Please note that because dams are so important to maintaining wetlands, unauthorized breaches can be punishable under the state Wetlands Protection Act by a fine of up to \$25,000 per day plus damages.*

### **3. Trap Beavers**

The MSPCA believes that trapping does not provide long-term solutions for human-beaver conflicts. The simple reason for this is that when beaver are removed from a wetland habitat, this habitat becomes available to other beaver that will move into the vacant territory, and the problems will begin again. It has been our experience that cities and towns who have been dealing with repeated beaver problems over many years are looking for solutions that will last, not a temporary fix such as is provided through trapping. If trapping is chosen, however, it is legal and can be done by a licensed trapper.

Many living things rely on the rich wetlands beaver create for their survival, and trapping beaver out of a wetland may cause the drainage of the wetland and the destruction of a variety of plants and animals, many of which are threatened or endangered. Removal of beaver will have a large impact on the other living things there and will radically compromise the integrity of the wetland. It is also important to consider the time of year when issuing permits to trap beaver. Beaver kits are born in mid-May and are not very active at birth; removal of adult beaver at this time may orphan the kits at an age when their survival may be tenuous because of their dependence upon the adults. For this reason, conditions may warrant that permits for particular sites need to be delayed. For more information on beaver trapping, contact the Division of Fisheries and Wildlife (see "Resources").

### **Beaver Trapping and the Law\***

Beaver can be trapped by a licensed trapper during the regular beaver-trapping season using box or cage traps (current trapping season runs from Nov. 1 – April 15). In cases of declared threats to public health or safety, beaver can be trapped using box, cage, or Conibear traps with an authorized emergency permit from public health officials. In cases of beaver-caused property damage where there isn't a threat to health or safety, beaver can be trapped by a licensed trapper during trapping season using box or cage traps, or with special permission from DFW outside of trapping season. If box or cage traps and alternative measures like water flow devices fail to solve a flooding problem after 15 days, beaver can be trapped by a licensed trapper using a Conibear trap.

*\*Please note that all trappers must be licensed by the state Division of Fisheries and Wildlife and that trapping rules and regulations change periodically, so the information shown above may have been amended. For the most complete and up-to-date information on beaver trapping, contact the DFW (see "Resources").*

## II. Resources

### Massachusetts Society for the Prevention of Cruelty to Animals Living With Wildlife Program

Comprehensive information on resolving human-beaver conflicts

350 South Huntington Avenue  
Boston, MA 02130  
617-522-7400  
[www.livingwithwildlife.org](http://www.livingwithwildlife.org)

Stephanie Hagopian,  
Director  
Living With Wildlife Program  
Phone: 617-541-5104  
Fax: 617-989-1630  
E-mail: [hagopian@mspca.org](mailto:hagopian@mspca.org)

Andrea Martens,  
Project Coordinator  
Living With Wildlife Program  
Phone: 617-989-1541  
Fax: 617-983-5449  
E-mail: [amartens@mspca.org](mailto:amartens@mspca.org)

### Beaver Solutions

Water flow device installation – beaver removal

Mike and Ruth Callahan, Owners  
98 Bay Road  
Hadley, MA 01035  
Phone: 413-585-9145  
Fax: 413-587-9788  
E-mail: [info@beaversolutions.com](mailto:info@beaversolutions.com)

### Integrated Wildlife Control

Water flow device installation – beaver removal

Don LaFountain  
P.O. Box 690169  
Florence, MA 01062-0169  
Phone: 413-586-0890  
Fax: 413-584-3898  
E-mail: [lafon@javanet.com](mailto:lafon@javanet.com)

### Critter Control® of Central Massachusetts: "Urban Wildlife Management Specialists"

Water flow device installation – beaver removal

Charlie Boulmetis  
20 Envelope Terrace  
Worcester, MA 01604-3652  
Phone: 508-757-4751  
1-800-564-9600  
Fax: 508-756-3309

**The Fund for Animals**

Water flow device installation – serving Southwestern Massachusetts

Skip Hilliker, Beaver Consultant  
Contact: Laura Simon  
Phone: 203-393-1050  
Fax: 203-393-2770  
E-mail: [lsimon@fund.org](mailto:lsimon@fund.org)

**Beaver Busters**

Expert in the use of water flow devices – inventor of the “Beaver Deceiver”  
Water flow device installation

Skip Lisle, Wildlife Biologist  
1187 Cabell Road  
Grafton, VT 05146  
Phone: 802-843-1017

**Massachusetts Division of Fisheries and Wildlife Regional Offices**

Beaver removal, dam breaching, permits for trapping and dam breaching

Field Headquarters  
One Rabbit Hill Road  
Westborough, MA 01581  
Phone: 508-792-7270

Central Wildlife District  
211 Temple Street  
West Boylston, MA 01583  
Phone: 508-835-3607

Western Wildlife District  
400 Hubbard Avenue  
Pittsfield, MA 01201  
Phone: 413-447-9789

Northeast Wildlife District  
Harris Street, Box 2086  
Acton, MA 01720  
Phone: 978-263-4347

Connecticut Valley Wildlife District  
341 East Street  
Belchertown, MA 01007  
Phone: 413-323-7632

Southeast Wildlife District  
195 Bournedale Road  
Buzzards Bay, MA 02532  
Phone: 508-759-3406

**Massachusetts Department of Public Health  
Bureau of Environmental Health Assessment**

Information on beaver or muskrat related threats to human health and safety

250 Washington Street  
Boston, MA 02108  
Phone: 617-624-5757

**Massachusetts Department of Environmental Protection**

Guidance for conservation commissions and about public water supplies

1 Winter Street  
Boston, MA 02108  
Phone: 617-292-5602

### **III. Beaver Solutions Information**

# **Beaver Solutions**

## ***Comprehensive Beaver Management in Massachusetts***

### **Who We Are**

At Beaver Solutions we specialize in resolving human / beaver conflicts. Our guaranteed flow devices are cost-effective, long-term solutions to beaver problems. We also provide year round trapping services.

### **Experience**

Since 1998 we have solved over 350 beaver problems in Massachusetts, as well as surrounding states. We are proud of the excellent reputation we have earned working for highway departments, conservation groups, towns, federal and state agencies, major railroads, public utilities, businesses, and private landowners.

### **What We Do**

Combining an understanding of beaver behavior and abilities, with the latest advances in design, enables "Beaver Solutions" to create effective, low maintenance flow devices that prevent damaging flooding. Flow devices are either culvert protective fences, or pipe systems installed through beaver dams to limit the size of ponds.

### **How Do Flow-Devices Work?**

Highway and railroad culverts are often damming sites because to a beaver a culvert in a roadbed looks like a hole in a dam. Properly designed culvert fencing will decrease the stimulus for beaver damming and make it more difficult to dam. This will cause beavers to leave the culvert alone. Our culvert fences have a 98% success rate.

The size of a beaver pond can usually be controlled with well-designed and installed beaver dam pipes. Beavers are stimulated to build their dams by the sound or feel of running water. Well-designed dam pipes create a permanent leak in the beaver dam and prevent beavers from detecting the flow of water into the pipe.

### **What Does It Cost?**

The average culvert protective fence costs \$700 installed. Most beaver dam pipe systems cost \$900 to \$1200 installed. Trapping an entire beaver colony typically costs \$400 to \$600, but may need to be repeated annually. Flow devices save money by protecting property for many years with minimal maintenance. Beaver Solutions is fully insured.

### **Are Permits Needed?**

In Massachusetts, a local Board of Health permit is required to alter a beaver dam or trap beaver out of season. Also, any work on a beaver dam must be reviewed by the local Conservation Commission. Beaver Solutions is able to assist with permitting questions.

## **Beaver Solutions**

*Mike and Ruth Callahan, Owners*  
98 Bay Road Hadley, MA 01035

Phone: (413) 585-9145 Fax: (413) 587-9788

Website: [www.beaversolutions.com](http://www.beaversolutions.com) E-mail: [info@beaversolutions.com](mailto:info@beaversolutions.com)

# GUIDE TO METHODS OF BEAVER MANAGEMENT

	A	B	C	D
1	GUIDE TO METHODS OF BEAVER MANAGEMENT			
2				
3	Methods of Beaver Management	Trapping Colony	Culvert Protective Fence	Pond Leveler Pipes
4	Initial Cost	Variable. Free to \$800 per colony	Average \$700	Average \$900 - \$1200
5	Annual Maintenance Cost	Variable. Free to \$400 per colony	\$100 - \$150	\$50 - \$75
6	Annualized Cost	Variable. \$0 - \$500	\$200 - \$250	\$150 - \$175
7	Year Round Protection	No	Yes	Yes
8	Risk of Problem Recurrence	High	Very Low	Low
9	Length of Effectiveness	Average 1 to 2 years	Indefinite w/ maint.	Indefinite w/ maint.
10	Av. # of Interventions per Colony	1	1	3
11	Permitting	Board of Health	Usually Not Needed	Board of Health
12		If out of Season (4/16 - 10/31): and anytime kill traps are used.		Board of Health w/ Conservation review
13		Negative		
14	Environmental Impact	Negative	Positive	Positive
15	Humaneness	Variable	Yes	Yes
16				
17				
18	Note: Sometimes these methods are used in conjunction with each other.			

## **Brief Synopses of Four Massachusetts Towns**

### Billerica

Due to nearly a decade of beaver problems, beginning in 1999 the Town of Billerica experimented with flow devices. The Pond Leveling Pipes or Culvert Protective Fences have proven such a success that there are now 38 sites managed with these devices in town. There are only 3 areas in town where trapping is still needed. Since 2001 Billerica has had a Comprehensive Beaver Management Plan in place, so that following many years of severe beaver problems, this town now enjoys the benefits of long-term, cost-effective beaver management.

### Chesterfield

In Chesterfield the Highway Department still had problems with road flooding despite years of repeated trapping. Since 1999 thirteen conflict sites have been managed effectively with flow devices (Pond Leveling Pipes or Culvert Protective Fences). In recent years trapping has only been needed at one of these sites, and all the roads in town remain protected from beavers.

### Hubbardston

Culvert damming by beavers over the past 10 years had repeatedly caused flooding of Route 62 in Hubbardston. In 10/03 this state highway was under water and had to be closed. The culverts were opened by the town, and a large culvert protective fence system was installed by Beaver Solutions. Two other problematic culverts were subsequently protected from beavers with culvert fences. All three devices have eliminated beaver damming of the culverts without needing to remove any beavers.

### Westford

Throughout Westford, nine beaver colonies caused eleven conflicts which were resolved by Beaver Solutions with Pond Leveling Pipes or Culvert Protective Fences. One additional site is monitored and trapped to prevent contamination of the town's well field. The Westford customers included: private landowners, businesses, and the Westford Water, Fire, Highway, or Conservation Departments.

## **Case Studies on Solving Beaver Conflicts from Beaver Solutions**

### **CASE STUDY #1 - Installation of Pond Leveling System**

Root Road, Westfield, Massachusetts

In April of 2000 we were contacted by the City of Westfield to evaluate a beaver pond along Root Road. A semicircular beaver dam, approximately 100 feet long, had been built in front of a culvert. The dam had been there for a number of years and the wetland that it created compromised very valuable habitat. Unfortunately the rising height of the dam was threatening the road and members of the highway department had to repeatedly breach the dam in order to keep the water down.

After obtaining a breach permit from the state Division of Fisheries and Wildlife and approval from the Westfield Conservation Commission, we installed two 12" Pond Levelers through the dam. The inlets of these two pipes are surrounded by five-foot protective cages which are sunk into a deep channel in the beaver pond. The flexible 12" pipes then run along the bottom of the pond, up and through the beaver dam, and down into the middle of culvert. A straight piece of fence was placed across the front of the culvert to prevent any damming inside the culvert.

The height at which the pipes go through the beaver dam becomes the "leveling point". When the pond level drops below the peak in the pipes it will cease to flow. When the pond rises above the pipes they will begin to drain. If the eventual height of the pond is higher or lower than necessary, it is a simple matter to readjust the height of the pipes in the beaver dam.

There is relatively little maintenance with this system. The pond level will need to be monitored for a couple of weeks in case adjustments are necessary. The fence in front of culvert should be cleaned of debris 2 to 4 times per year.

### **CASE STUDY #2 - Culvert Protective Fences**

New England Central Railroad, Amherst, Massachusetts

In May of 1999 we installed two trapezoidal culvert fences on two different culverts in South Amherst for the New England Central Railroad. These culverts are in prime beaver habitat and the track crews have been having problems with them being blocked with beaver dams for many years. The two sites had been trapped out repeatedly but due to the good habitat, new beavers would always reoccupy the area.

A roadbed or railbed with a culvert probably appears to a beaver as a wonderful dam with a small hole in it. This is why beavers are so attracted to road culverts. The trapezoidal fence makes the culvert much less attractive for damming. It has a minimum of a sixty foot perimeter and it goes out from the culvert in an unnatural angle for damming so beavers leave it alone.

The railroad track crews had been cleaning the culverts every other day. According to the track supervisor the cost of the two protective fences was less than what the railroad was spending in one week to keep the culverts clear. They have not had to clear them since the installation.

### **CASE STUDY #3 - Trapping and Exclusion**

Amtrak Commuter Rail, Leominster, Massachusetts

The railroad tracks in this area go through prime beaver habitat. There are several culverts which have been blocked with beaver dams repeatedly for years. The very low railbed and beaver-chewed trees near signal wires made this a "no tolerance" zone for beavers and ponding. As it was open trapping season (November 1 - April 15), no special permits were required as long as live traps were used. All the beavers in the area were trapped with Hancock traps and subsequently euthanized in a carbon dioxide chamber.

Once the beavers were removed, the culverts were protected from future damming with low-cost cylindrical fences or "culvert tubes". *It is important when removing beaver from an area to modify the habitat whenever possible, to prevent reoccurrence of the problem.*

### **CASE STUDY #4 - Pond Leveling System and Selective Removal**

Western Massachusetts Electric Company, Montague, Massachusetts

The rising height of two beaver dams made access to transmission towers increasingly difficult, especially in the event of an emergency. With approval of the local conservation commission and with breach permits from the Division of Fisheries and Wildlife, the dams were breached a small amount every morning for several mornings. This slow breaching allowed for a gentle lowering of the ponds and prevented downstream flooding and siltation. Once the ponds were lowered by two feet, we installed a 12" pond leveler through each of the two beaver dams.

The pond was very old and the beaver colony quite large. Aggressive secondary damming downstream of one of the pipe systems necessitated selective removal of the most aggressive dam building beavers. As the trapping occurred during open trapping season and Hancock traps were used, no special permits were necessary. We placed the traps at the new problematic dam far from the beaver lodge. Several very large adult beavers were removed with this technique. The smaller beavers will remain in place to maintain the dams and the wetlands at the lowered level. No new damming has reoccurred.

For more information, contact:

Beaver Solutions

Mike and Ruth Callahan

98 Bay Road, Hadley, MA 01035

Phone: 413-535-9145

Fax: 413-587-9788

E-mail: [mrcallhn@aol.com](mailto:mrcallhn@aol.com)

## IV. The Law

The 1996 Wildlife Protection Act (Question 1) was passed by a 64% majority of Massachusetts' voters and consisted of three sections:

1. It **restricts** the use, setting, manufacturing or possession of body gripping traps (such as leghold traps) to capture fur-bearing mammals;
2. It prohibits the pursuit or hunting of bear or bobcat with dogs;
3. It eliminates the requirements that 5 of the 7 board members of the DFW – the agency responsible for managing wildlife – must have held sporting licenses for 5 consecutive years and that 4 members must represent trapping, hunting and fishing interests.

Section one of this law is the portion that impacts how beaver problems are solved; this section was changed in July 2000. The entire section, M.G.L. Ch. 131 § 80A, is shown below. Please note that regulations written by the Division of Fisheries and Wildlife to accompany the law are important for you to have and are included in this manual under "Regulations."

If you have any questions about the law, please contact the MSPCA's Department of Advocacy at 617-522-7400.

### GENERAL LAWS OF MASSACHUSETTS

Chapter 131: Section 80A. Leghold traps and certain other devices restricted; punishment.

Section 80A. Notwithstanding any other provision of this chapter, a person shall not use, set, place, maintain, manufacture or possess any trap for the purpose of capturing furbearing mammals, except for common type mouse and rat traps, nets, and box or cage type traps, as otherwise permitted by law. A box or cage type trap is one that confines the whole animal without grasping any part of the animal, including Hancock or Bailey's type live trap for beavers. Other than nets and common type mouse or rat traps, traps designed to capture and hold a furbearing mammal by gripping the mammal's body, or body part are prohibited, including steel jaw leghold traps, padded leghold traps, and snares.

The above provision shall not apply to the use of prohibited devices by federal and state departments of health or municipal boards of health as defined in section 1 of chapter 111, for the purpose of protection from threats to human health and safety. A threat to human health and safety may include, but shall not be limited to:

- (a) beaver or muskrat occupancy of a public water supply;
- (b) beaver or muskrat-caused flooding of drinking water wells, well fields or water pumping stations;
- (c) beaver or muskrat-caused flooding of sewage beds, septic systems or sewage pumping stations;
- (d) beaver or muskrat-caused flooding of a public or private way, driveway, railway or airport runway or taxi-way;
- (e) beaver or muskrat -caused flooding of electrical or gas generation plants or transmission or distribution structures or facilities, telephone or other communications facilities or other public utilities;
- (f) beaver or muskrat -caused flooding affecting the public use of hospitals, emergency clinics, nursing homes, homes for the elderly or fire stations;

(g) beaver or muskrat-caused flooding affecting hazardous waste sites or facilities, incineration or resource recovery plants or other structures or facilities whereby flooding may result in the release or escape of hazardous or noxious materials or substances;

(h) the gnawing, chewing, entering, or damage to electrical or gas generation, transmission or distribution equipment, cables, alarm systems or facilities by any beaver or muskrat;

(i) beaver or muskrat-caused flooding or structural instability on property owned by the applicant if such animal problem poses an imminent threat of substantial property damage or income loss, which shall be limited to: (1) flooding of residential, commercial, industrial or commercial buildings or facilities; (2) flooding of or access to commercial agricultural lands which prevents normal agricultural practices from being conducted on such lands; (3) reduction in the production of an agricultural crop caused by flooding or compromised structural stability of commercial agricultural lands; (4) flooding of residential lands in which the municipal board of health, its chair or agent or the state or federal department of health has determined a threat to human health and safety exists. The department of environmental protection shall make any determination of a threat to a public water supply.

An applicant or his duly authorized agent may apply to the municipal board of health for an emergency permit to immediately alleviate a threat to human health and safety, as defined in the previous paragraph. If the municipal board of health determines that such a threat exists, it shall immediately issue said emergency permit to alleviate the existing threat to human health and safety, for a period not exceeding 10 days. If denied, the applicant or his duly authorized agency may appeal said emergency permit application to the state department of public health or director. If the state department of public health or director determines that such a threat exists, it shall immediately issue said emergency permit to alleviate the existing threat to human health and safety, for a period not exceeding 10 days.

The aforementioned emergency permit authorizes the applicant or his duly authorized agent to immediately remedy the threat to human health and safety by one or more of the following options: (a) the use of Conibear or box or cage-type traps, subject to the regulations promulgated by the division; (b) the breaching of dams, dikes, bogs or berms, so-called, subject to determinations and conditions of municipal conservation commissions under section 40; and (c) employing any non-lethal management or water-flow devices, subject to determinations and conditions of municipal conservation commissions under section 40.

If said threat to human health and safety has not been alleviated within said 10 days, the applicant or his duly authorized agent in conjunction with the municipal board of health, shall apply to the director for an extension permit to continue the use of alleviation techniques, specified in this section, for a period not exceeding 30 days. If the director determines that such a threat to human health or safety exists, as defined in this section, the director shall immediately issue an extension permit.

If director determines that said extension permit should be continued for 30 days, the director shall within 30 days of such decision develop, with the assistance of the applicant or his duly authorized agent, municipal board of health and municipal conservation commission, a plan to abate the beaver or muskrat problem using alternative, non-lethal management techniques in combination with water-flow devices, where possible, subject to the determinations and conditions of municipal conservation commissions under section 40, and if necessary, box and cage type-traps in order to provide a long-term solution. The director shall take reasonable steps to implement the plan within this 30-day period.

Compliance with the provisions of any or all of the previous four paragraphs shall not preclude the applicant from applying to the municipal board of health for an additional emergency permit, provided the applicant (a) states in writing that there exists on the property an animal problem which poses a threat to human health and safety, as defined in this section, which cannot reasonably be abated by the use of alternative, non-lethal management techniques or box or cage traps, and that the applicant has attempted to abate the animal problem using alternative, non-lethal management techniques or box or cage traps, or (b) is awaiting the director's approval for an extension permit.

An applicant or his duly authorized agent under clause (b) shall be eligible for only two additional emergency permits, the first of which shall entitle the applicant or his duly authorized agent the use of all or any of the alleviation techniques previously allowed under the initial emergency permit. Said first additional emergency permit shall expire in 10 days. If the director still has not acted within this ten day period, the applicant or his duly authorized agent shall be eligible for a second additional emergency permit. Said second additional emergency permit shall entitle the applicant or his duly authorized agent the use of all alleviation techniques previously allowed in this section, except for the use of Conibear traps. The second additional emergency permit shall expire on the rendering of a decision by the director regarding the extension permit.

The division shall provide a report annually to the joint committee on natural resources and agriculture on the creation, implementation and efficiency of such animal problem plans.

A person or his duly authorized agent may apply to the director for a special permit to use otherwise prohibited traps on property owned by such person. Issuance of such special permits shall be governed by rules and regulations adopted by the director pursuant to chapter 30A. Such rules and regulations shall include, but not be limited to, provisions relative to the following:

The applicant shall apply to the director in writing and shall state that there exists on the property an animal problem which cannot be reasonably abated by the use of traps other than those prohibited by this section, and that the applicant has attempted to abate the problem using traps permitted under this section. If the director determines that the applicant has complied with sections 37 and 80, if required to do so, and any other laws regarding trapping, and that such an animal problem exists which cannot reasonably be abated by the use of alternative, non-lethal management techniques or traps other than those prohibited by this section, the director may authorize the use, setting, placing or maintenance of such traps, not including leghold traps, for a period not exceeding 30 days during which time the applicant shall remain in compliance with the procedures for obtaining a special permit as set forth in regulations adopted pursuant to this section.

Whoever violates any provisions of this section, or any rule or regulation made under the authority thereof, shall be punished by a fine of not less than \$300 nor more than \$1,000, or by imprisonment for not more than six months, or by both such fine and imprisonment for each trap possessed, used, set, placed, maintained, or manufactured. Each day of violation shall constitute a separate offense. A person found guilty of, or convicted of, or assessed in any manner after a plea of nolo contendere, or penalized for, a second violation of this section shall surrender to an officer authorized to enforce this chapter any trapping license and problem animal control permit issued to such person and shall be barred forever from obtaining a trapping license and a problem animal control permit.