

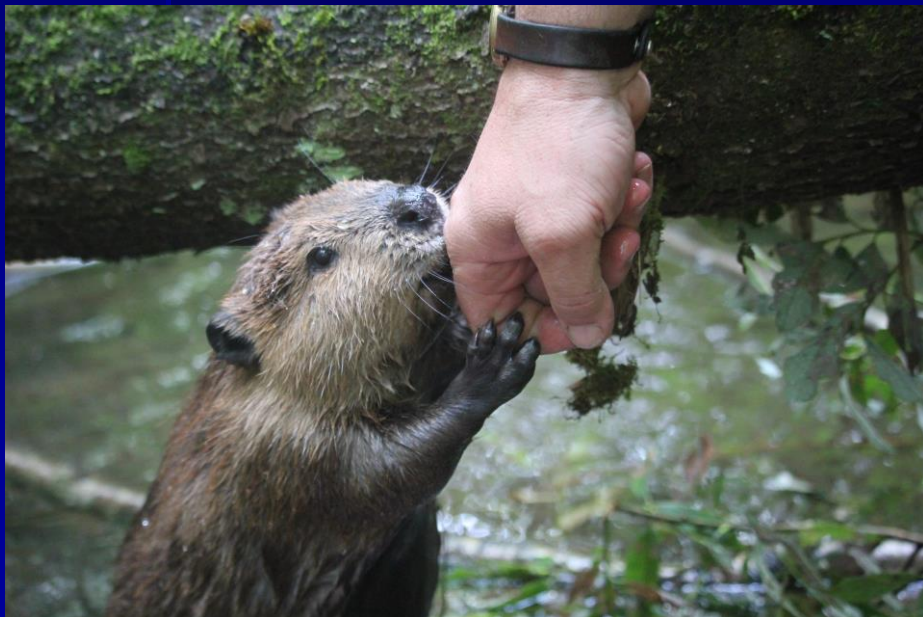
Dr. John Aberth
West Hill Rd, Roxbury, VT 05669
(802) 485-8876

**BK at one
week to 2 ½
months,
May 10-July
18 2020,
1.5-10 lbs**





BK at 3-6 months, July-Autumn 2020, 15-20 lbs





Beaver X-Rays



**Winter-Spring 2020-21, 6
months-1 year, 38 pounds**







**Mrs. Beaver arrives! May
8 2021, 23 lbs.**







**New Outdoor Enclosure, July
13, 2021, Mrs. Beaver-33 lbs.**





July 20, 2021, 8:00 p.m.





**Beaver Release! May 20, 2022;
each beaver now 50 pounds!**



Beaver Check-Up, May 24



Release House Removal, July 5



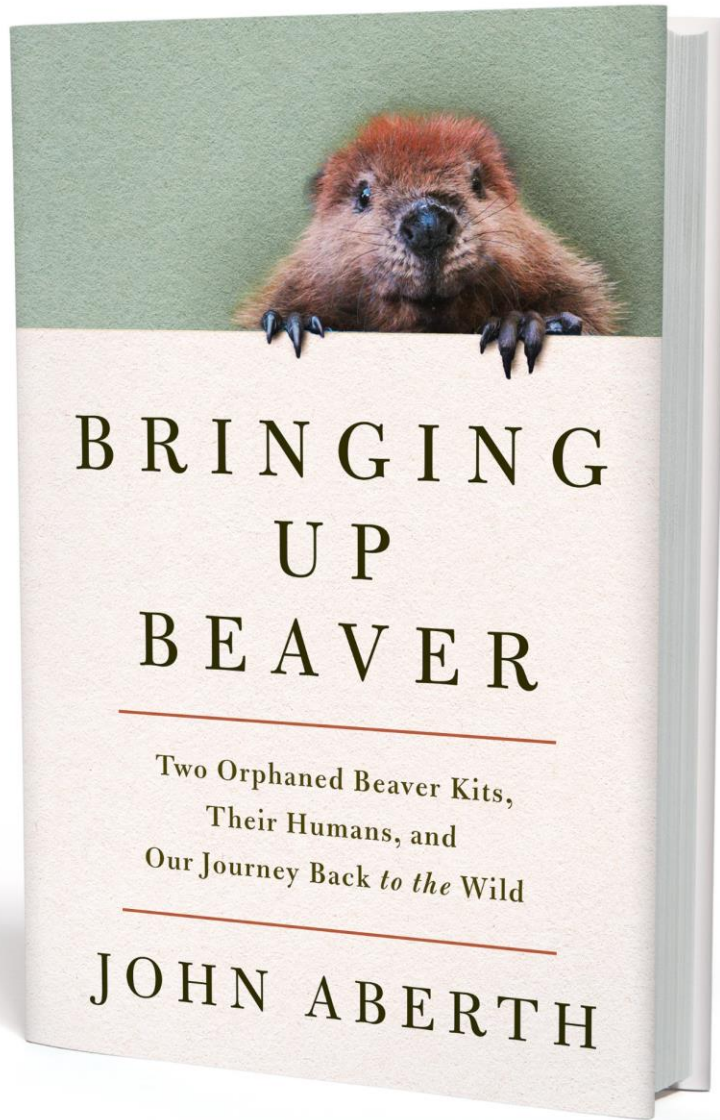


Miss Beaver, 4/24/2021, 14 pounds



**New Beaver: June 1, 2022, 18.45
oz—died, July 25, 2022, 6:30 am**





BRINGING
UP
BEAVER

Two Orphaned Beaver Kits,
Their Humans, and
Our Journey *Back to the Wild*

JOHN ABERTH

Unique Lessons on Beaver Welfare

- Trapping destroys colony dynamics
- Trapping (even in season) orphans beaver kits

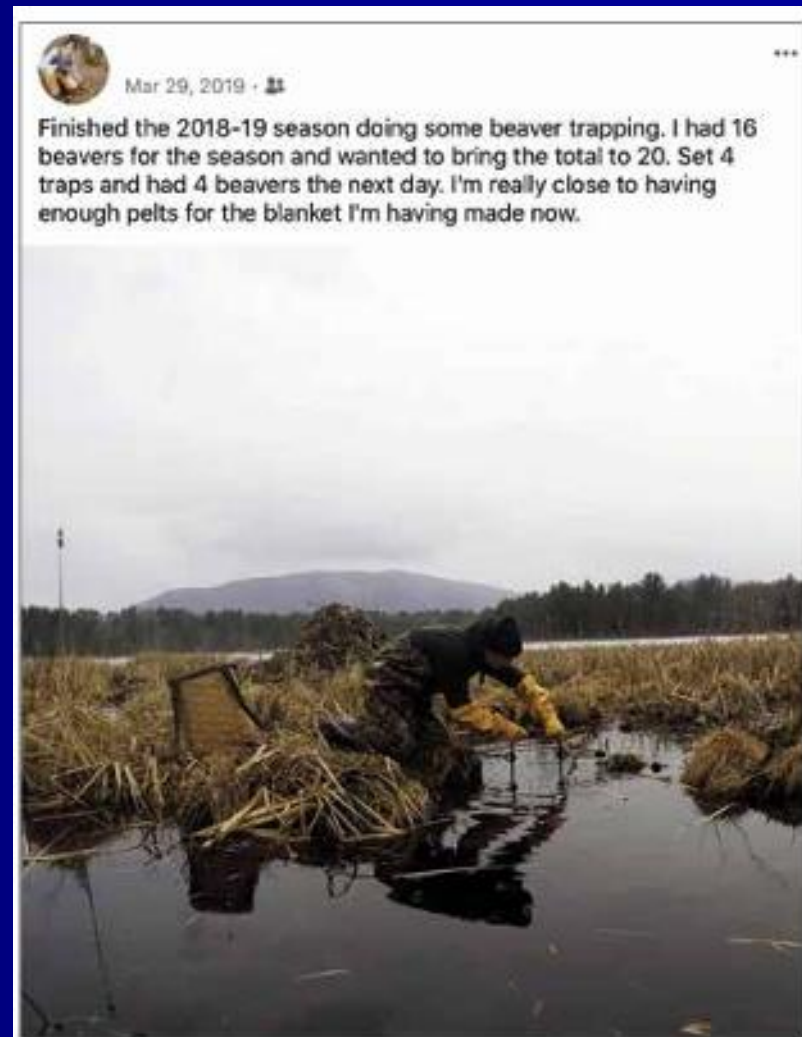
Beaver Colony

- A beaver colony typically has five to six beavers, but can range from two to twelve. The size of a colony depends on the availability of food.
- What's in a beaver colony?
 - **Adult pair:** The male and female parents of the colony
 - **Current year's offspring:** The kits born in the current year (April/May—litters of 1-6)
 - **Previous year's offspring:** The yearlings born in the previous year

Is Recreational Trapping Consistent with Good Beaver Management?

- Trapping Season (well regulated?)
- Trapping as means of Population Tracking/Control
- Trapping to Obtain Biological Samples
- Is Underwater Trapping Legal?

Trapping Season (4th Sat. of Oct.-end of March)
















Mar 29, 2019 · 🌐

Finished the 2018-19 season doing some beaver trapping. I had 16 beavers for the season and wanted to bring the total to 20. Set 4 traps and had 4 beavers the next day. I'm really close to having enough pelts for the blanket I'm having made now.

**1200
beavers
= at
least
200
acres of
lost
wetland
habitat**

Summary of annual trapper mail survey derived estimated* furbearer harvests, 2013-14 through 2023-24.**

Season		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Prior 10-yr Average
Mink		759	831	309	212	168	95	125	184	113	103	59	289.8
Raccoon		1059	997	669	382	504	442	273	361	323	394	352	540.5
Muskrat		8799	9406	8242	2490	1558	1291	686	716	1325	582	427	3509.5
Skunk		312	360	255	204	106	183	89	105	116	107	99	183.7
Opossum		77	214	81	63	109	56	27	66	84	66	98	84.3
Weasel		36	98	14	72	14	54	18	46	25	56	19	43.3
Coyote		726	639	508	378	511	357	298	352	345	299	241	441.2
Red Fox		306	288	202	126	221	118	81	130	89	103	68	166.4
Grey Fox		130	85	79	31	60	51	26	43	45	39	46	58.8
Bobcat		121	57	56	54	44	39	37	44	41	49	49	54.2
Fisher		400	443	241	213	190	239	166	167	121	94	105	227.4
Otter		246	193	163	113	111	73	93	97	105	96	143	129.0
Beaver		2196	1546	1841	1198	865	776	730	844	889	853	1355	1173.9
Total Estimated Harvest		15167	15156	12661	5536	4461	3774	2649	3155	3621	2841	3061	6902.1

Beavers Self-Regulate their Populations

- Lower reproduction rate.
- Lower dispersal rate.
- Infanticide.

Quabbin Reservation, 1952-1996, Busher and Lyons, "Long-Term Population Dynamics of the North American Beaver, *Castor canadensis*, on Quabbin Reservation, Massachusetts, and Sagehen Creek, California," in *Beaver Protection, Management, and Utilization in Europe and North America*, eds. Busher and Dzieciolowski, (Plenum, 1999).

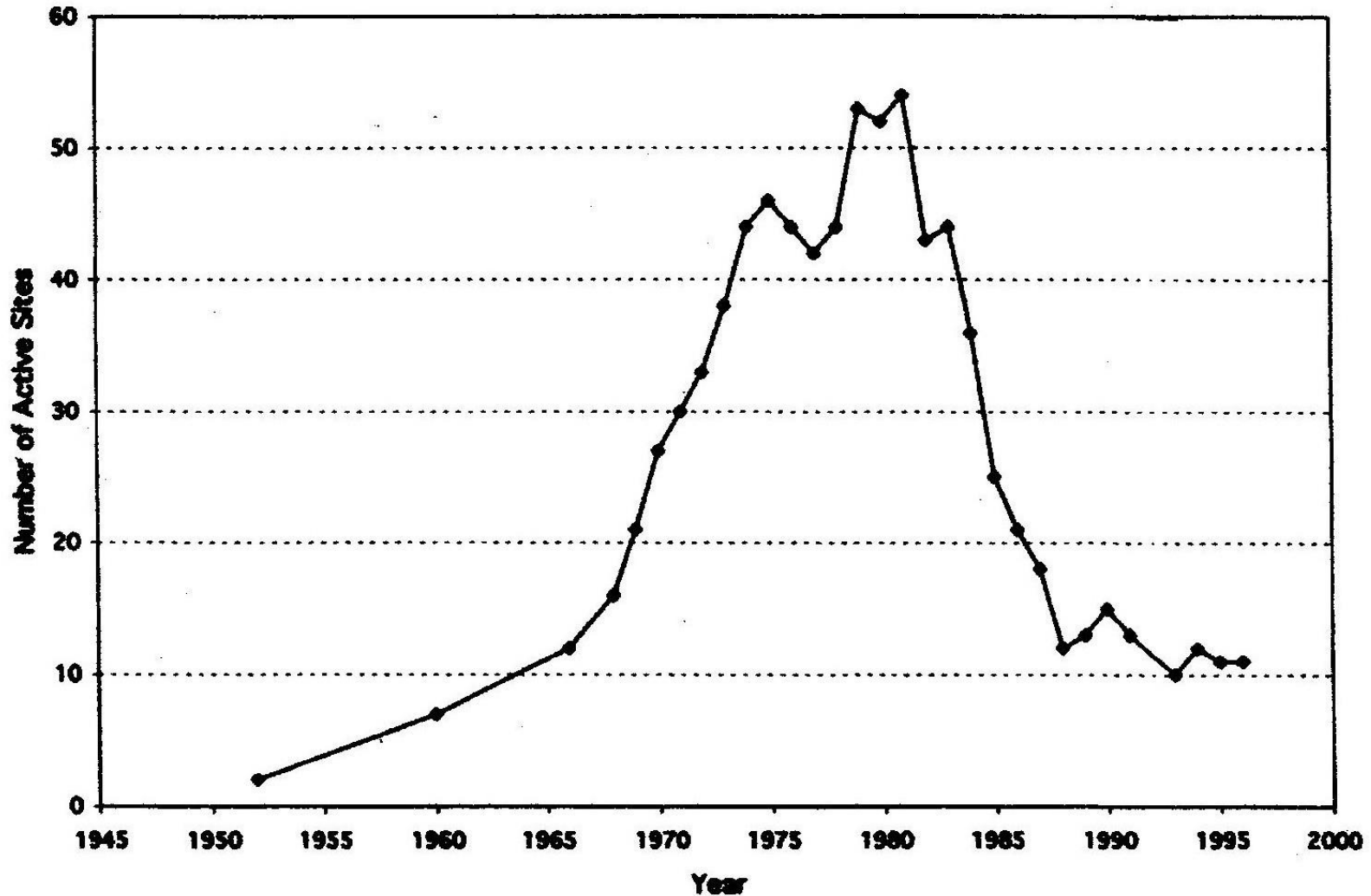


Figure 3. Results of beaver population surveys on Prescott Peninsula, Quabbin Reservation, Massachusetts, 1952-1996.

Sagehen Creek, 1945-1991



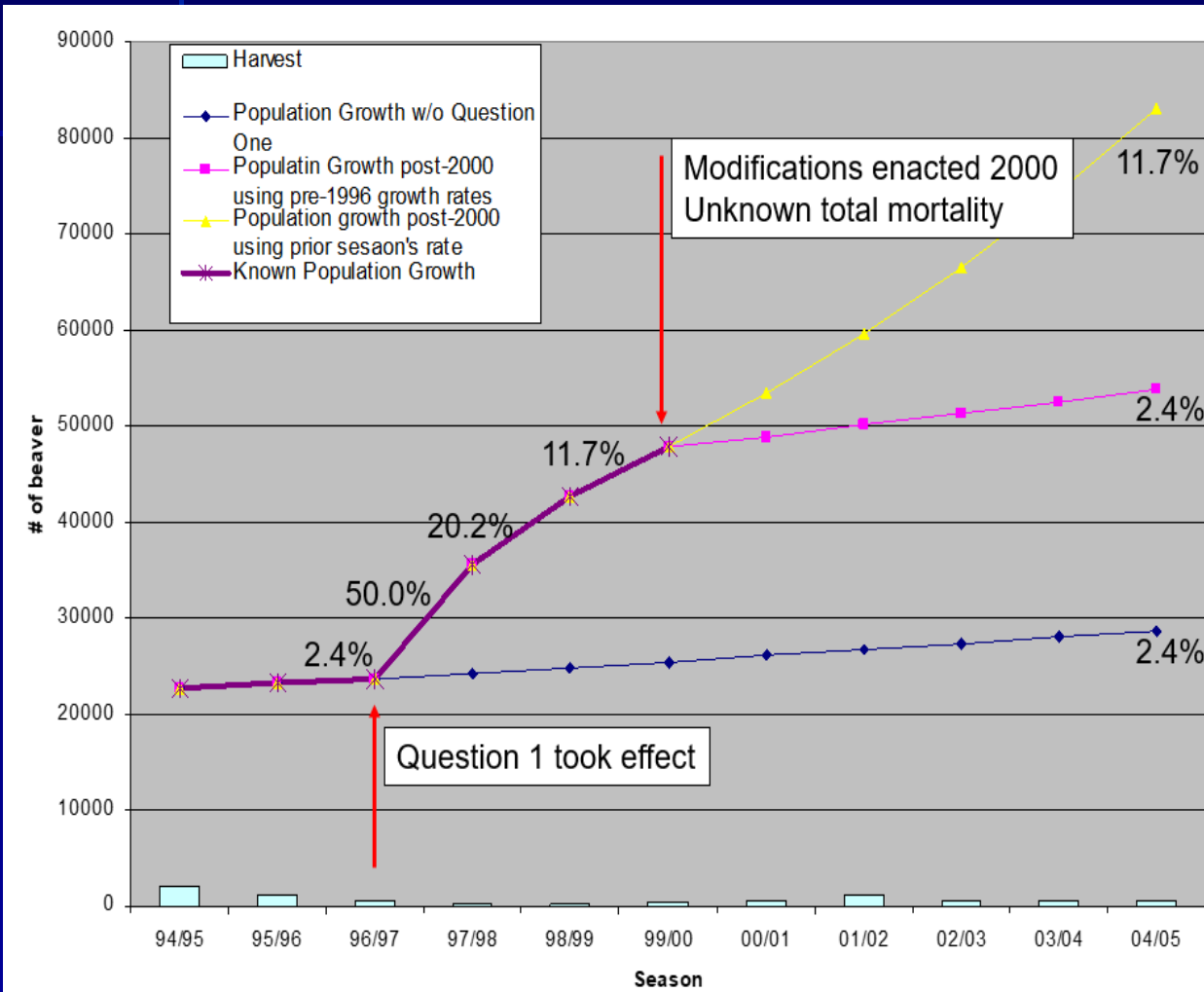
Figure 4. Results of the beaver surveys on the western section of Sagehen Creek, California, 1945–1991.

Trapping is Counterproductive to Self-Regulation

- By removing older adults, trapping stimulates younger female beavers to mature earlier, by as much as eight months, and have larger litters for longer--H.E. Hodgdon, "Social Dynamics within an Unexploited Beaver (*Castor Canadensis*) Population," (Ph.D. dissertation, University of Massachusetts, 1978), pp. 144-45.
- By creating empty habitat niches, trapping stimulates continued dispersal from colonies.

Beaver Armageddon!

“Harvest was greatly reduced after 1996. A valid question is how did that affect the population estimate in those following years? Did low harvest numbers inflate the estimate, lower it, or does it not matter. I am not familiar enough with the inner workings of the model to even speculate.”—Dave Wattles, MA furbearer biologist, 4/1/2021.



The Massachusetts Experience

Unintended Consequences or Nothing is Black and White

The story of how a trapping ban resulted in the killing and waste of beaver, the destruction of wetland habitat, and increasing costs to towns around the state.

Beaver are a “keystone” species that create habitat for many other fish and wildlife. They are critical to a healthy ecosystem.

Increased development resulting in the encroachment of roads, driveways, and other human infrastructure into potential or existing habitat increases the risk of human/beaver conflicts.

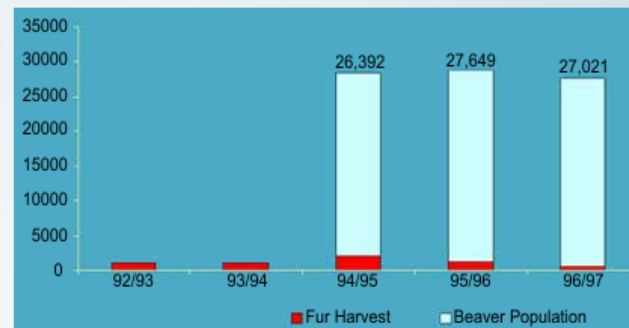
Maintaining public tolerance and support for beaver and the wetlands they create requires many different creative tools including beaver baffles (water control structures), education, and in some cases population control.



Before 1996, the Massachusetts Department of Fish and Wildlife managed beaver, and most furbearer populations through three mechanisms:

- Education
- Research and Surveys
- Regulated Harvest

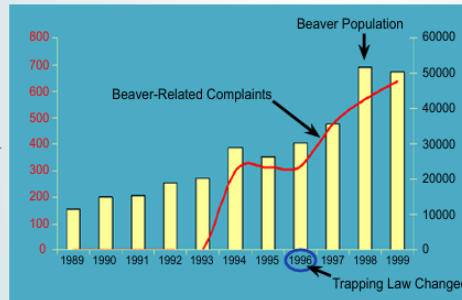
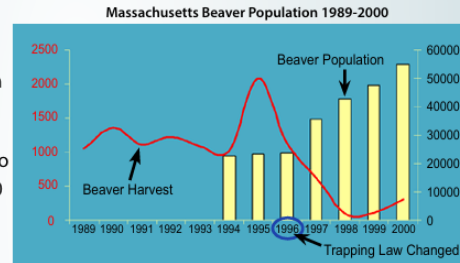
1,000 beavers were annually harvested through regulated harvest by trappers, which played a crucial role in resolving human/wildlife conflicts and stabilizing the beaver population.



1996 Massachusetts passed a law that greatly restricted the use of traditional beaver trapping methods, resulting in...

Beaver harvest dropped from **1,000 to 98**

Beaver population doubled to over **50,000** by 2000



90% increase in beaver-related complaints

Massachusetts Department of Fish and Wildlife spending a majority of their resources addressing and resolving beaver conflicts.

Massachusetts legislature allowed the issuing of "Emergency Permits" to municipalities, letting approved applicants:

- Trap any time of year
- Use body-gripping traps
- Alter dams

Permits are issued only after damage has occurred and only if this damage poses a risk to human safety. There is **NO** reporting requirement.

Reactive management resulted in an increased cost to towns.

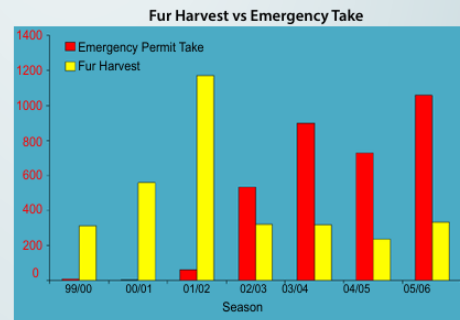
■ Worcester County:

\$4,000 to \$21,000/year from 1998-2002

■ Leicester: Infrastructure damage to a reservoir cost **\$80,000**

■ Spencer: **\$25,000** in 2001 to keep culverts free of debris

■ As many beaver are trapped today as prior to the ban at a much higher cost - averaging **\$300/beaver**



Trapping as a Means of Population and Nuisance Control?

- "The combination of density-dependent effects in reproduction, mortality, and dispersal make it nearly impossible to 'control' populations of pest species by recreational/commercial harvest, or even intensive control efforts" -- Clark and Fritzell, "A Review of Population Dynamics of Furbearers," in McCullough et al. *Wildlife 2001: Populations*, p. 904.
- "Broad generalizations about the effectiveness of avocational trapping at reducing human-wildlife conflicts are unwise." --H. Bryant White, et al. "Best Management Practices for Trapping Furbearers in the United States," *Wildlife Monographs*, December 2020

Trapping as a Means of Population Monitoring

- Trapping is largely dependent on human factors, such as number of active trappers, intensity with which they trap (“trapping nights”), and how they trap (i.e., wipe out a colony or take individuals from several colonies)
- Trapping harvest data, expressed as Catch Per Unit Effort (CPUE), can be interpreted differently.
- “When reviewing the data, keep in mind that factors such as season expansions or reductions, reporting accuracy, and sample size can influence results and must be considered in the interpretation of the outcomes.”—*Vermont Furbearer Newsletter*, 2020, p. 9.

Trapping to Collect Biological Data

- Rabies, rodenticide, avian influenza, etc. occur in much lower or non-existent rates in beavers.
- @500 beavers trapped in “nuisance” conflicts.
- Additional samples provided by roadkills, scat, snag fur samples, etc.



Vermont Agency of Natural Resources
Department of Environmental Conservation
Environmental Compliance Division
1 National Life Drive, Davis 2
Montpelier, VT 05620-3803
Complaint Report Form

This report is considered confidential/sensitive in nature and should be treated as such. The contents may be subject to an exemption under the VT Access to Public Record and Documents Law.

Complaint Number: 21EC01146

Related Complaint Number:

Incidents At This 2ENF10385

SPAN

Town: Roxbury

County: Washington

Date of Incident: 9/3/2021

Time of Incident:

Description: Cage installed in Flint Brook to house beaver. Stream alt/1259

Comments: Ryan-

John Aberth, a self described animal rescuer, has constructed a cage in Flint Brook, in Roxbury. As noted in the attached video he indicated that following a rain event the cage was moved and at least temporarily dammed the brook. Can such a device be constructed in this brook and if so, did Mr Aberth obtain a Stream Alteration Permit?

Thanx

Jerry D'Amico

----- Forwarded Message -----

From: Mike Covey <mcovey802@gmail.com>

To: Jerry D'Amico <jerrydamico@tds.net>

Sent: Thu, 26 Aug 2021 09:27:50 -0400 (EDT)

Subject: Beavers

<https://mailchi.mp/3cff6e2bc7fb/vermont-beavers-rescuedtwice>

Directions to Site: 1961 West Hill

SUBJECT PROPERTY

Grand List Year: 2020

Town: Roxbury

Owner 1: Aberth John S

Owner 2: Hamilton Laura

Mailing Address: 1961 West Hill Road Roxbury VT 05669

Property Location: 157.80 Acres & Dwls & Arena

Phone: 802-828-1254

Email: ANR.Enforcement@vermont.gov

Web: <http://dec.vermont.gov/enforcement>

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Agency of Natural Resources
Department of Environmental Conservation
Environmental Compliance Division
1 National Life Drive, Davis 2
Montpelier, VT 05620-3803

NOTICE OF ALLEGED VIOLATION ("NOAV")
10 V.S.A. § 8006(b)

Alleged Violator (Respondent):

John Aberth
1961 West Hill Rd
Roxbury, VT 05669

You are hereby put on notice that the Agency of Natural Resources believes that you are in violation of the Vermont Statutes, Regulations, and Permits noted below:

10 V.S.A. §1259(a) - Prohibited Discharges

Description of Alleged Violation:

The Respondent has placed a metal cage type structure into an unnamed tributary of Flint Brook on property located at 1961 West Hill Road, VT, and further identified with SPAN# 53116710006.

Compliance Directives:

- Within 14 days of receipt of this notice, permanently remove the subject cage structure from State Waters.
- Immediately notify the Environmental Enforcement Officer upon removal of the subject structure.

In response to the alleged violation(s), the Agency may issue a Civil Complaint pursuant to 10 V.S.A. Section 8019 which would assess a penalty. The Agency may also issue an Administrative Order pursuant to 10 V.S.A. Section 8008 which would require full compliance with all applicable statutes, rules, and/or permits; assess penalties; and if necessary, require corrective/restorative action and any other measures deemed appropriate. Prompt correction of the alleged violation(s) may lessen the possibility or severity of any enforcement action taken by the Agency.

If you have any questions, call me at 802.793-3936. Our mailing address is at the top of this Notice. We request a written response within 10 days of receipt of this NOAV, which sets forth the reasons for the existence of the alleged violation and your intentions with respect to prompt correction.

This NOAV was served on the above-designated Respondent by certified mail or by hand.

Sean J. McVeigh
Chief Environmental Enforcement Officer

Dated: 09/28/21

Is Trapping Legal?

- “No person shall discharge any waste, substance, or material into waters of the State” -
-10 V.S.A. § 1259
- “Wild animals acquired and handled pursuant to this regulation shall be housed, fed and cared for as recommended by the biologists of the Fish and Wildlife Department and the rehabilitators’ consulting veterinarian.” --10 App. V.S.A. § 9
- “I guess this will be decided in court by a judge.”—Sean McVeigh, CEEO, DEC, 10/11/2021

Why Ban Recreational Trapping?

- Promotes good wildlife management policy, allowing populations to self-regulate rather than respond to indiscriminate human impacts.
- Maximizes furbearer populations and their benefits on the landscape.
- Popular with the Vermont public.
- Removes political influences on wildlife management policy decisions.
- Promotes sustainable, long-term solutions to human-wildlife conflict.
- Resolves legal ambiguity surrounding underwater trapping.
- Can be flexible, allowing for exceptions for nuisance control, research, relocation, etc. (FL, RI, AZ, CO, MA, CA, WA).