Vermont Fish and Wildlife Board

Meeting Minutes from Wednesday, February 27th, 2019

The Vermont Fish and Wildlife Board held a meeting at 5:00 p.m. on Wednesday February 27, 2019 at 1 National Life Drive, Montpelier, VT 05620 in the Dewey Building.

Members of the Board in attendance: Kevin Lawrence (Board Chair), Theresa Elmer (Vice Chair), Johanna Laggis, Wendy Butler, Michael Kolsun, Dennis Mewes, Tim Biebel, David Fielding, Bill Pickens, Cheryl Frank Sullivan, and David Robillard.

Fish and Wildlife Department Staff: Louis Porter (Commissioner), Mark Scott (Director of Wildlife), Maj. George Scribner (Asst. Director of Law Enforcement), Susan Warner (Director of Outreach), Eric Palmer (Director of Fisheries), Will Duane (Executive Assistant), Kim Royar (Wildlife Biologist), Lt. Carl Wedin, (Game Warden), Dana Joyal (Game Warden), Lt. David Gregory (Game Warden), Jenna Reed (Game Warden) Mary Smith (Law Enforcement Administrative Assistant) Dylan Smith (Access Area Program), Bernie Pientka (Fisheries Biologist), Cedric Alexander (Moose Project Leader), Nick Fortin (Deer Project Leader), David Sausville (Migratory Game Bird Project Leader), Scott Darling (Wildlife Management Manager), Adam Miller (Fish Culture Operations Manager), and Tom Rogers (Information Specialist).

Members of the Public in Attendance: Nicole Paquette, Randy Butler, Evan Spencer, Jay Sweeny, Michael Bancroft, Brian Bailey, Justin Lindholm, Molly Cook, Bill Huff, Terry Norris, Martin Van Buren, and Mark Green.

The Board meeting was called to order at 5:01 PM, by Board Chair Kevin Lawrence

1) Approval of Previous Meeting Minutes

Motion: David Fielding moved to approve the January 30th, 2019 meeting minutes as drafted. Dennis Mewes seconded the motion.

Discussion: Michael Kolsun offered that Section 4 of the January 30th, 2019 meeting minutes be amended to include the following:

There was discussion of a successful similar program initiated by Board Member Michael Kolsun which collected 550 pounds of meat for hungry Vermonters and could serve as a model for this proposal. There was support for this program from the Department by offering a liability

protection for hunters who donate meat to the program. This support from the Department helped to jumpstart that previous program. Going forward, any new program should establish a system of checking the name, license number, and the type of meat donated by a participant.

Vote: Unanimous voice vote to approve the minutes as amended.

The Approved Minutes, as Amended, are Attached at the End of These Minutes.

2) Public Comments (Limited to 2 minutes per speaker)

Nicole Paquette— Thank you to the Board for allowing this opportunity to comment prior to the second vote on the Lamoille River Special Regulations between Johnson and Hyde Park. On January 21, the Vermont Counsel of Trout Unlimited and the Central Vermont Chapter of TU requested that the Board and the Department study the proposal in greater detail before making a final decision to rescind the special regulation on the Lamoille River. Specifically, our points were 1) the Department's own report states that there are no trout population data available for use for evaluation and only angler survey data was used which is limited in scope and not as rigorous as creel surveys. 2) while showing that water temperature range exceeded optimal trout habitat conditions for many years, water temperature does not take into account the fact that trout move miles to cooler water, but also return when conditions improve, shocking or creel survey data might support this claim better than water temperature alone. 3) the Department's social data cites that 93% of those surveyed support special regulations, as well as that 64% support length limits and 51% support bag limits for number of fish caught. The purpose of the special regulations was to assess the biological ability of this reach of stream to sustainably support trout. This proposed change to rescind the special regulation was based solely on a social preference of a small group of anglers. We ask that before any change is made to the special regulation the Department put more effort into obtaining data to properly evaluate the biological potential for wild fish in this reach of stream.

Justin Lindholm— Kevin Lawrence and Theresa Elmer and Pete Allard are ending their terms and it will create a real void. Thank you for your time serving on the Board.

3) Trapping Furbearers for Compensation Rule – 2nd vote

Commissioner Porter and Wildlife Director Scott introduced the regulatory process thus far and the relevant staff who worked on the rulemaking. At the previous meeting the Board requested changes to the draft rule before proceeding to its second vote.

Furbearer biologist Kim Royar highlighted the changes to the rule draft since the January meeting. They include:

- 10 V.S.A. App. §44 (4.6) is now included in its entirety to read: "A person shall not use toothed foothold traps or snares when trapping under this section."
- The inclusion of 10 V.S.A. App. §44 (4.8) now incorporates the additional statement, "however, possession is allowed for the purpose of moving the animal to a more appropriate place for dispatch."
- The inclusion of 10 V.S.A. App. §44 (4.11) now incorporates the additional statement, "unless the animal has already been trapped."

Motion: Board Member Bill Pickens motioned to approve the proposed the rule as amended. Tim Biebel seconded the motion.

Vote: Unanimous roll call vote to approve the proposed rule as amended.

The Proposed Rule, as Approved, is Attached to the End of These Minutes

4) Fish and Waterbody Specific Regulations—10 V.S.A. App. §122—2nd vote

Adam Miller and Bernie Pientka summarized the rulemaking process thus far and distributed the public comments received on this rulemaking proposal to the Board. The rulemaking proposal for 10 V.S.A. App. § 122 are unchanged since the Board's first rulemaking vote and include regulatory changes to Jobs and Martin Ponds, the Lamoille River, and the removal of baitfish regulations from §122 to the newly created 10 V.S.A. App. §141.

Board Chair Kevin Lawrence requested that Miller and Pientka address the public comments regarding the Lamoille River regulatory change. Pientka stated that the section of the river under review is too large to conduct electrofishing for biological data. The water quality analysis referred to by Trout Unlimited bolstered the Department's analysis that repealing the special regulations was appropriate. Because of the size of the river electrofishing for data collection was not possible. The special regulations currently in place on this section of the Lamoille River went into effect in the late 1990s and were modified in 2006.

Motion: Vice Chair Theresa Elmer motioned to approve the proposed rule as amended. Johanna Laggis seconded the motion.

Vote: Unanimous roll call vote to approve the proposed rule.

The Proposed Rule, as Approved, is Attached to the End of These Minutes

5) <u>Baitfish Regulations—10 V.S.A. App. §141—2nd Vote</u>

Adam Miller recapped the baitfish rulemaking process thus far, highlighting the changes made since the Board took its first vote on the proposed rule. Changes to the proposed rule since the first Board vote were based on feedback received during the public comment period and the statewide hearings held by the Department. The changes include:

- 10 V.S.A. App. § 141 (5.5.1) was amended to close a potential loophole whereby a purchaser of baitfish could use bait intended for use only on a blacklisted waterbody to another waterbody located in the same zone. The proposed section now requires that the blacklisted waterbody shall be listed on the baitfish receipt at the time of purchase if the angler wishes to use the receipt to take purchased bait off of the blacklisted water.
- 10 V.S.A. App. § 141 (5.5.2) was amended to prevent individuals from leaving a blacklisted waterbody with commercially purchased rainbow smelt and then resell them at a commercial baitshop as personally harvested baitfish. The proposed section now requires that rainbow smelt not be removed from a blacklisted water after their use.
- 10 V.S.A. App. § 141 (6.1 6.3) were amended to allow the Department to administer and modify the term of the wild baitfish endorsement. This endorsement was previously proposed as an annual endorsement; the proposed amendment will aid in outreach and enforceability.
- 10 V.S.A. App. § 141 (7.2.2) was added to allow and individual who catches baitfish on a waterbody to sell those baitfish to another angler for use on that same waterbody where the baitfish were personally harvested without having to obtain a Commercial Bait Dealers Permit, provided the baitfish do not leave the waterbody.
- 10 V.S.A. App. § 141 (7.2.5) added new language requiring a commercial seller of personally-harvested smelt to sign an affidavit attesting to the source of the baitfish at the shop they are selling the baitfish to. This provision will increase accountability for sellers and aid in enforcement capabilities. This form and affidavit are referenced in the proposed 10 V.S.A. App. § 141 (7.11.1).
- 10 V.S.A. App. § 141 (8.2) was amended to clarify that wild caught smelt can only be taken by open water or ice fishing and may be commercially sold as bait.

• There were additional technical corrections from the previous proposal to ensure proper citations and cross references within the proposed rule.

The Board Members and Department Staff engaged in a discussion on specific scenarios and current practice involving baitfish and changes to the regulations. Miller thanked the Board for its active participation in this process.

Motion: Tim Biebel motioned to approve the proposed rule as amended. Cheryl Frank Sullivan seconded the motion.

Vote: Unanimous roll call vote to approve the proposed rule.

The Proposed Rule, as Approved, is Attached to the End of These Minutes

6) Migratory Game Bird Season Preview (Straw vote)

Wildlife Director Scott discussed the procedural season setting process for migratory game birds. Like annual deer season permit numbers, the migratory game bird seasons are set by Board procedure. Director Scott introduced David Sausville who prepared the Department's 2019 season proposal for migratory game birds. The seasons and bag limits for separate species will be approved as a set; but each species and its season will be discussed by the Board.

David Sausville explained that Vermont is part of a US Fish & Wildlife Services federal framework that regulates migratory waterfowl and upland game birds, and that certain parameters are handed down from the federal government each year for these seasons. The Board then prescribe seasons and bag limits based on Department input, following federal guidelines. The Department is recommending a liberal season length of 60 days and a 6-bird daily bag limit for duck hunting, which can be split into two different seasons. There are three zones within the state. The Vermont Fish and Wildlife Board decides the regulations on the Lake Champlain zone, which we share with New York, as well as the interior Vermont zone. The New Hampshire Fish and Game Board sets the regulations for the Connecticut River zone which is an extension of New Hampshire's interior zone.

David Sausville walked the Board through the proposal and a straw vote was taken to gauge support on each of the proposed items. Those items are listed below, each item was unanimously supported by the Board:

- Hold the liberal season allowed under the federal framework related to season lengths and daily bag limits. The Board has the option to be more conservative.
- For the 2019 Duck Season.

- Open the 2019 duck season on a Thursday, October 10. This year is scheduled to be a Wednesday opening, following our tradition of two Wednesdays and a Saturday opening schedule. It is also consistent with hunter preferences of moving to alternating year approach to Wednesday and Saturday openings. We recommend Thursday to coincide with the goose season.
- o Interior Zone: October 10 and run through December 8.
- o Lake Champlain Zone: October 10 Nov. 1 and Nov. 23 Dec. 29.
- o Changes to the duck bag limits
 - Decrease the northern pintail daily bag limit from two to one daily.
 - Decrease the mallard daily bag limit from four to two (1 hen) daily.
- For the 2019 Goose Seasons
 - Open the resident Canada goose season September 1st and continue through September 25.
 - o Open the migratory Canada goose season on October 10.
 - Open the snow goose season on October 1.
 - o Decrease the migrant Canada goose season from 50 to 30 days.
 - o Reduce the daily bag limit for the migrant Canada goose season from three to two daily.
- Decrease the brant season from 60 to 30 days.
- Hold youth waterfowl hunting weekend September 28-29.
- Hold woodcock/snipe season: October 1- November 14.

The Department will present the Board with its final proposal for a procedural vote after the public comment period has closed.

The Full Proposal, as Presented to the Board, is Attached to the End of These Minutes

7) Controlled Hunt Program Changes

David Sausville spoke to the Board about the history of Vermont's controlled hunt program for waterfowl and changes that will be implemented for this coming season. The two controlled hunt locations are at the Mud Creek WMA and the Dead Creek WMA. For the coming season at Mud Creek there will still be a lottery with assigned blinds for the first two days of the hunt but there will be a self-registration after that. Informational signs will be posted at the WMA. Hunters can still hunt 30 minutes prior to sunrise, and they need to stop hunting by 11:00 am and leave the area by noon.

For Dead Creek WMA the hunt this year will be on a Tuesday and Thursday and the process will be 100% self-registered. The Department will not provide blinds and decoys. Parking areas will be marked, and hunters will go in and set themselves up. Staff will be on site, but they won't be registering or overseeing the hunt. These programs are assisted greatly by volunteers and nearly 100 applications are received annually.

8) 2019 Deer Rule – Recommendations

Wildlife Director Mark Scott introduced Scott Darling and Nick Fortin who presented the Board with proposed changes to the current deer regulations. The purpose of the presentation at this meeting is to gauge the Board's support with a straw poll for the individual items contained in the proposal. The Department will then refine its proposal and present the Board with a rulemaking recommendation at the March 20th meeting. Nick Fortin presented the proposal to the Board

After the presentation, Department staff and the Board discussed the proposal. A straw poll of the Board Members was conducted to gauge support for the individual items contained within. The goals of this proposal are to increase hunter opportunity and to more precisely manage the deer population.

The individual items contained in the proposal are outlined below:

Summary of Proposed Changes

Age Structure Management

1. One Buck Annual Limit—Supported 9-2

- o Reduces buck harvest rate
- o Maintains buck age structure in some WMUs without the need for an antler restriction

2. Regional Antler Point Restriction—Supported 9-2

- o Allows management approach to reflect regional differences in deer density, hunting pressure, habitat, winter severity, etc.
- o Maintain existing legal definition of legal buck having at least one antler of two or more points

Archery Season

3. Extension—Supported 11-0 to season dates but using fixed dates.

- o Early October thru muzzleloader season—<u>Discussion about splitting archery season in order to address confusion over archery season during rifle season. The Department will further develop this section of the proposal.</u>
- o Archery hunters are impacted by the one buck limit
- o Provides additional opportunity to harvest antlerless deer

4. Establish Expanded Archery Zones

- o Developed areas or pockets of high deer density
- o Season starts 2 weeks earlier—Supported 10-1
- o Additional antlerless tags available—Supported 10-1
- Helps address areas with many deer-human conflicts

5. Remove Antler Restriction During Archery Season—Supported 11-0

o Improves antlerless harvest without impacting buck age structure management

6. Allow Crossbows for All Ages—Supported 10-1

- o May increase recruitment of archery hunters
- o Increases participation among existing hunters

New Seasons

1. Establish an Antlerless Season—Supported 11-0

- o 4 days, Thursday-Sunday, 2 weeks before rifle season
- o Limited to muzzleloader hunters with a lottery antlerless permit
- o Helps achieve antlerless harvest objectives

2. Establish a Novice Season—Supported in concept but requires further development by the Department. Discussion about requiring mentorship, the number of years, residency, and if a buck counts toward the annual limit.

- O Allows new adult hunters to hunt during youth season for two years
- o Expect 400-500 hunters each year and no impact on the deer harvest

Youth Season

3. Move youth season to late October—Supported 11-0

- o Still provides youths the first opportunity with a firearm
- o Provides more favorable weather conditions

The Full Proposal, as Presented to the Board, is Attached at the End of these Minutes.

9) 2019 Moose Season Recommendation (Straw vote)

Commissioner Porter and Wildlife Director Scott discussed the Department's concerns with the mandatory moose permit allocations currently contained in statute and board rule. Under current law the Department is obligated to set aside certain numbers of permits for certain groups if the Board determines that a season should be held. When the Department recommends low permit numbers, these mandatory allocations complicate the season's permit allocations. Because of

these complications the Department recommends that the Board issue no moose hunting permits for the 2019 season.

Scott Darling and Cedric Alexander explained that although the moose population could biologically sustain a similar number of permits as issued in 2018, because of the complications with the statutory permit allocations, the Department recommends no permits be issued for 2019. The Department continues to monitor incidental mortalities, hunter sightings, and the moose collared in the Department's ongoing moose study. The Board unanimously supported the proposal as presented.

The Full Proposal, as Presented to the Board, is Attached at the End of These Minutes

10) Bear Tooth Collection update

Wildlife Director Mark Scott provided an update on the collection of teeth from harvested black bears. Prior to this regulatory requirement (new for the 2017 black bear hunt), the voluntary return of a bear tooth had limited compliance. After becoming a mandatory requirement compliance reached around 90%. The Department is pleased with this rate of compliance. There are still some issues to be worked out in the collection process but results thus far have been positive. Teeth are sent to a laboratory for aging in March.

11) Commissioner's Update

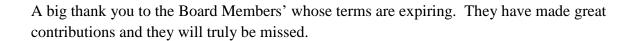
The Department is piloting a new adult hunter conservation camp this year. The first camp will likely be held at the Northern Forest Stewardship Center and is being prepared by the Hunter Education program.

The Department's chronic wasting disease informational talks have been well-attended despite bad weather on the scheduled dates.

The Legislature has introduced a wanton waste bill and a fish and wildlife oversight committee bill that the Department will be monitoring.

The Department plans on hosting a legislative game dinner at the Statehouse later this year.

The Department has received lots of support in the legislature for keeping the Salisbury fish culture station open. The Commissioner and other Department Staff have testified several times on this matter at the Statehouse already this year.



12) Roundtable Discussion

Motion: Vice Chair Theresa Elmer motioned for the meeting to adjourn. Tim Biebel seconded the motion.

Vote: The Board voted to adjourn by a unanimous voice vote.

The meeting was adjourned by the Chair at 9:20 pm.

The mission of the Vermont Fish and Wildlife Department is the conservation of all species of fish, wildlife and plants and their habitats for the people of Vermont.

Attachment 1: January 2019 Minutes as Amended

Vermont Fish and Wildlife Board

Meeting Minutes from Wednesday, January 30, 2019

The Vermont Fish and Wildlife Board held a meeting at 5:00 p.m. on January 30, 2019 at 1 National Life Drive, Montpelier VT 05620 in the Dewey Building.

Members of the Board in attendance: Kevin Lawrence (Board Chair), Theresa Elmer (Vice Chair), David Robillard, Michael Kolsun, Cheryl Frank Sullivan, Bill Pickens, Pete Allard, David Fielding, Brian Wiles, Dennis Mewes, Tim Biebel, Wendy Butler,

Fish and Wildlife Department Staff: Louis Porter (Commissioner), Mark Scott (Director of Wildlife) Mai George Scribner (Asst. Director of Law Enforcement). Susan Warner (Director of

| Members of the Public in Attendance: Rodney Elmer, Brian Bailey | | | | |
|--|--|--|--|--|
| Specialist). | | | | |
| Gregory (Game Warden), Sean Fowler (Game Warden), and Tom Rogers (Information | | | | |
| Outreach), Catherine Gjessing (General Counsel), Kim Royar (Wildlife Biologist), Lt. David | | | | |
| whatie, way. George Scholie (1888). Director of Law Emolection, Susan warner (Director of | | | | |

The Board meeting was called to order at 5:01 PM, by Board Chair Kevin Lawrence

1. Approval of October 24th, 2018 Meeting Minutes

Motion: Tim Biebel moved that the minutes of the previous October 24, 2018 Board meeting be approved as drafted. Theresa Elmer seconded the motion.

Vote: Unanimous voice vote in favor of the motion.

Public Comments (2 minutes per speaker) 2.

None

3. Lifetime Hunting License Drawing

Board Vice-Chair Theresa Elmer did the drawing. Awarded to: Kevin B. Condon of Brattleboro, Vt.

4. Hunters for the Hungry

Commissioner Porter provided background on the difficulties of getting people to donate already processed meat. Many people already do donate to friends and neighbors. There are concerns about the ability for wardens to maintain a donation list. Currently salvageable dead deer are valuable for them for community outreach and developing positive relationships.

Wildlife Director Scott added that the Department has tried to do this before but there has been little interest among the hunting community. There are several obstacles, but the Department will explore this topic more if there is a lot of interest.

Maj. Scribner stated that wardens do quickly find homes for road kills and that that process does work well. Lt. Gregory spoke about existing relationships with wild game butchers. Warden Fowler said that state licensed butchers don't process wild game meat. The food pantries might take it, but it's hard to get to them.

The Board discussed the pros and cons and the issues of creating a formal Hunters for the Hungry program. Concerns included whether hunters would be willing to donate when it may take them several years to get a deer, whether the meat would go to the needy, as there is no screening at Food Shelves, would other species beyond deer go towards this program. Possibility of creating a Hunters for the Hungry stamp or sticker to defray the cost. Perhaps the Department will consider including this in the outreach to deer hunters when surveying them on deer regulations.

There was discussion of a successful similar program initiated by Board Member Michael Kolsun which collected 550 pounds of meat for hungry Vermonters and could serve as a model for this proposal. There was support for this program from the Department by offering a liability protection for hunters who donate meat to the program. This support from the Department helped to jumpstart that previous program. Going forward, any new program should establish a system of checking the name, license number, and the type of meat donated by a participant.

5. <u>Trapping in defense of Property for Compensation Regulatory Proposal and Second Vote</u>

Wildlife Director Scott introduced Furbearer Biologist Kim Royar and General Counsel Catherine Gjessing to discuss the current rulemaking proposal and public comments received for the trapping of rabbits and furbearers doing damage to property for compensation.

Catherine Gjessing summarized the written comments. Of the approximately 166 public comments received, 3 people simply opposed everything, 4 people who generally supported everything. 21 people said snares should be banned. 13 people said trapping should be banned. 41 people said they supported the changes, but snares should banned. 84 said they support the proposal and that it doesn't go far enough and suggested additional mandatory training and special licenses.

A few had substantive feedback – including concerns about 4.12 and what's prohibited when dealing with dens, generally from folks who trap and stated that it would limit their ability to address nuisance issues. Others had concerns about 4.11 and whether the prohibition against the use of poisonous mixtures, prohibited moth balls, carbon dioxide or carbon monoxide. One person said allowing people who trap for compensation to possess wildlife should be clarified to make it clear that possession is temporary and only for certain purposes. The suggestion was to add 4.8 with clarifying language. There were also some

expressions of concern regarding threatened and endangered species.

Mark Scott reiterated that there was some confusion about the changes at the public meeting given there are legislative changes along with the proposed rule. Several people at the public hearing requested that we define compensation and expressed similar concerns about 4.11 and 4.12.

Kim Royar gave a short presentation on the proposed changes to the rule at this round of voting. 3.1 defines Compensation as money, it does not include trading or barter. Add 5.20 and with the exception of T&E species, allow the trapping of these furbearers outside of the season in defense of property (nuisance trapping). Changed "taking" of rabbits and furbearing animals to "trapping" of rabbits and furbearing animals. Delete 4.12 which entails the den prohibitions which included "chemicals" being banned because things like carbon dioxide and carbon monoxide, considered among the most humane methods, would be not be available to compensation trappers.

Board discussed the rule changes.

Additional rule changes highlighted by Catherine were 4.8 which allows temporary moving of wildlife for euthanasia. Also 4.11 might need to be removed because that would remove the ability to use chemicals such as carbon monoxide.

Board Member Bill Pickens suggested changing a rule about beaver trapping in March that hasn't been updated due to the changes to the otter rule.

It was suggested that 4.8 relating to possession be added to apply to compensation trappers with the language "Possession is allowed for the purpose of moving the animal to a more appropriate place for the purpose of euthanasia."

It was suggested to leave 4.11 in the rule so that it applies to compensation trappers, but with the addition of "unless the animal has already been trapped."

Suggested striking 4.12.

Change 5.20 to 5.19 to remain sequential in order.

6.0 Delete "taking" and substitute "trapping in the header.

6.1 deleting nuisance, adding "in defense of property" and adding several things. (MIGHT NEED TO CLARIFY THIS WITH CATHERINE).

Board Chair Kevin Lawrence suggested making the changes and reviewing this in February instead of having a second vote at this meeting.

Motion: Bill Pickens made a motion to move this to February, Pete Allard seconded.

Vote: Voice vote all in favor, none opposed.

6. Commissioner's Update

Read a brief written update on the baitfish rule by Adam Miller and asked anyone with questions to

contact him.

Waterfowl hearing locations are firmed up. Two meeting locations this year rather than three due to generally sparse attendance. March 12 in Whitehall Senior Center in NY, March 14 Winooski High School, Performing Art Center.

Thanks to the Board members for a good day at the deer trainings.

CWD Meetings are coming up – first one cancelled due to weather, next is Barre tomorrow night, then Mendon Fish and Game.

Fishing Festival was huge this year 770. Many people caught fish, big pike taken by person's first fish through the ice. Drew Price was recognized as the first master angler to catch all 33 species.

Asked if the next Board meeting on February 27 works? Members replied that it does.

Summary of preliminary 2018 Harvest data was given out. This is a challenging winter to date for deer with winter severity.

We sent out an electronic survey to license 2018 license buyers who indicated they hunt coyote and bobcat. There has been confusion and concern whether this was a legitimate department survey. Department will be re-contacting everyone who received the initial survey.

Highlighted the Rumble Strip Vermont story that profiled Warden Jeff Whipple.

Only one major Fish & Wildlife Department proposal in this legislative session – to tweak to moose hunting statute to have auction and veteran permits be a percentage rather than specific number and propose that the department can suspend the requirement that people have to apply to keep their bonus points, when issued permit numbers are low. There will be several other bills introduced that Department will need to follow.

Budget issues result in potential closing of Salisbury Fish Culture Station. This will severely affect our ability to stock trout. We're anticipating a phased approach. Salisbury needs a \$12-13 million upgrade to meet water quality standards.

7. Board Member Roundtable Discussion

Motion: Tim Biebel motioned for the meeting to adjourn. Kevin Lawrence seconded the motion.

Vote: The Board voted unanimously to adjourn.

The Board Meeting was adjourned by the Chair at 6:50 PM

The mission of the Vermont Fish and Wildlife Department is the conservation of all species of fish, wildlife and plants and their habitats for the people of Vermont.

Attachment 2: Trapping Furbearing Animals for Compensation as Presented for Second Vote

§ 44. Furbearing species

ANNOTATED

Proposed Changes to Rules in Response to Act 170 based on Public Input

1.0 Authority

- 1.1 This rule is promulgated pursuant to 10 V.S.A. §§ 4081, 4082, 4084, 4828, and 4861. In promulgating this rule, the Fish and Wildlife Board is following the policy established by the General Assembly that the protection, propagation, control, management, and conservation of fish, wildlife, and fur-bearing animals in this State is in the interest of the public welfare and that the safeguarding of these valuable resources for the people of the State requires a constant and continual vigilance.
- 1.2 In accordance with 10 V.S.A. §§ 4082 and 4084, this rule is designed to maintain the best health, population, and utilization levels of the regulated species.
- 1.3 This rule shall apply to all persons who take or attempt to take fur-bearing animals by trapping or hunting.

2.0 Purpose

The purpose of this rule is to regulate the taking of fur-bearing animals.

3.0 Definitions

3.1 "Commissioner" means the Commissioner of the Vermont Department of Fish and Wildlife.

3.2 "Compensation" shall mean money.

- 3.3 "Department" means the Vermont Department of Fish and Wildlife.
- 3.4 "Board" means the Vermont Fish and Wildlife Board.
- 3.5 "Fur-bearing animal" means beaver, otter, marten, mink, raccoon, fisher, fox, skunk, coyote, bobcat, weasel, opossum, lynx, wolf, and muskrat or as amended pursuant to 10 V.S.A. § 4001.
- 3.6 "Trapping" means to take or attempt to take fur-bearing animals with traps including the dispatching of such lawfully trapped fur-bearing animals.
- 3.7 A "trap" means a mechanical device used to capture, kill and/or restrain fur-bearing animals excluding firearms, muzzleloaders and archery equipment.
- 3.8 A "tanned" pelt is one that has been treated to turn the skin into leather.

4.0 Restrictions

- 4.1 A person trapping for fur-bearing animals under this rule shall visit his/her traps at least once every calendar day, except as provided in paragraph 4.2, and dispatch or release any animal caught therein.
- 4.2 A person who sets body gripping traps in the water or under the ice, colony/cage traps underwater or foothold traps under the ice shall visit his/her traps at least once every three calendar days and remove any animal caught therein.
- 4.3 A person shall not set a trap on lands other than his/her own which does not have his/her name and address permanently and legibly stamped or engraved thereon, or on a tag of rustless material securely attached thereto.
- 4.4 All traps under ice will be marked with a tag visible above the ice.
- 4.5 A person shall not set a body gripping trap with a jaw spread over eight inches measured inside the jaws unless the trap is set five feet or more above the ground, or in the water.
- 4.6 A person shall not use toothed foothold traps or snares when trapping under this section.
- 4.7 A person shall not set a trap between December 31 and the following fourth Saturday in October unless the trap is in the water, under the ice, or on a float in the water.
- 4.8 A person shall not possess a living fur-bearing animal, except as provided by rules of the board or 10 V.S.A. part 4.
- 4.9 A person shall not possess a fur-bearing animal trapped outside of its legal season without the written authorization of the Department, not to include animals taken pursuant to 10 V.S.A. § 4828.
- 4.10 A person shall not possess fur or skin of a fur-bearing animal unlawfully taken.
- 4.11 A person shall not take a fur-bearing animal by use of any poisonous mixture.
- 4.12 A person shall not take a fur-bearing animal from dens by cutting, digging, smoking, by the use of chemicals, or by the use of mechanical devices.

4.13 Beaver Muskrat

- a.) When trapping muskrat between March 1 and March 31, body gripping traps are restricted to 5 inches or less.
- b.) A person shall not disturb or destroy a beaver or muskrat house or den or place a trap therein, thereon, or in the entrance thereof.

- c.) A person may set a trap within 10 feet of the nearest point, above the water, of a beaver house or dam only from the 4th Saturday in October through the last day of February, all dates inclusive.
- d.) Except for the setting of traps as provided under 4.13b and 4.13c, a person shall not interfere in any manner with dams, dens, or houses of beaver except upon prior written approval from the Commissioner.

4.14 Bobcat; Otter; Fisher.

- a.) 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 6 inches measured inside the jaws unless the trap is set 5 or more feet above the ground, or in the water.
- b.) The skins of bobcat, otter, and fisher legally taken may be possessed, transported, bought and sold only when tagged and marked as hereinafter provided.
- c.) A person who takes bobcats, otter, or fisher during these seasons shall notify authorized Department staff within 48 hours of the close of the season. Pelts shall be presented to authorized Department staff for tagging. Such tags shall remain affixed to the pelts until tanned. Carcasses shall be surrendered to authorized Department staff at the time of tagging.
- d.) No bobcat, otter, or fisher pelts or carcasses taken during these seasons shall be transported out of the State of Vermont prior to being tagged by authorized Department staff.
- e.) A person who takes bobcat, fisher, and otter pursuant to 10 V.S.A. § 4828 and who desires to keep the pelt shall notify authorized Department staff with 84 hours of the taking. Pelts shall be presented to authorized Department staff for tagging. Such tags shall remain affixed to the pelts until tanned. Carcasses shall be surrendered to authorized Department staff at the time of tagging.

4.15 Raccoons

- a.) A person shooting raccoons during the raccoon hunting season shall use a 0.22 caliber rimfire firearm or a shotgun with #2 shot or smaller.
- b.) A light may be used to illuminate and shoot a raccoon once treed by a dog, or dogs, during the raccoon hunting season. A light may also be used to illuminate a raccoon once treed by a dog, or dogs, during the training season.

4.16 Lynx

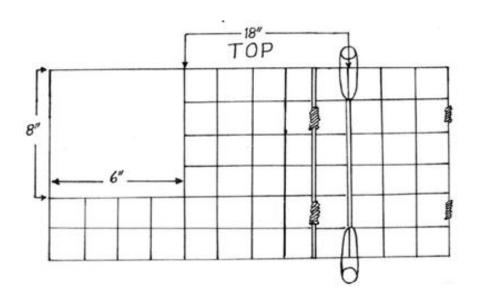
(a) This subsection shall be effective on January 1, 2014.

- (b) Any person who incidentally captures a lynx shall notify the Department immediately.
- (c) The following regulations on traps and trapping shall apply within the Wildlife Management Unit E.
 - (1) Foothold traps set on land must be anchored using a chain or cable no longer than 18" that is center-mounted to the trap using a swivel connection and must have at least one in-line swivel along the chain or cable.
 - (2) From the fourth Saturday in October to December 31, both dates inclusive, all body gripping traps must be set:
 - i. In the water, or;
 - ii. Within a Canada lynx exclusion device as described below and as depicted in Diagram 1:
 - a. the trap jaws shall be completely within the device;
 - b. the trap springs may extend outside of device through openings no larger than 7.5" wide by 1.5" high;
 - c. the device shall not have an opening greater than 6" by 8";
 - d. the opening shall not be directly in front of the trap but shall instead be either on the top or side of the device;
 - e. the trap set within the device shall be a minimum of 18" from the closest edge of the opening to the trap;
 - f. there shall be at least two attachment points for each side of the device where there is a joint or where panels come together;
 - g. the device shall be constructed of wood or of wire mesh of 16 gauge or less wire (.05" diameter wire or greater) and having a mesh size with openings no greater than 1.5" X 1.5" or 1" X 2"; and,
 - h. the trap shall be anchored outside of the device; or
 - iii. Off the ground as described below and as depicted in Diagram 2:
 - a. at least 5' above the ground or if snow is on the ground at least 5 feet above snow level with the exception of the 24-hour period immediately following a snowstorm;

- b. affixed to a standing tree which is free of branches below the trap or to a leaning section of pole that has not been planed or otherwise altered except for the removal of branches and is less than 4" in diameter at the trap and is angled at least 45° along its entire length from the ground to the trap; and
- c. in an area that is free of any object within 4' of the trap.
- (3) From the fourth Saturday in October to December 31, both dates inclusive, body gripping traps no larger than a typical 160 (inside jaw spread up to 6.5") may also be set on the ground if placed:
 - i. Under overhanging stream banks, or;
 - ii. In blind sets without the aid of bait, lure or visual attractants, or;
 - iii. Within a cubby constructed of artificial materials with the trap inserted at least 7" from the front and with an opening no greater than 50 square inches as depicted in Diagram 3.
- (d) The establishment of a ten-year "Lynx Study Period" shall commence on the effective date of this subsection. The Department will assess the status of lynx in Vermont, identify and evaluate additional techniques and devices for avoiding incidental capture of lynx, and develop revisions to these rules in accordance with the findings of such studies and all current information. The rules set forth in this subsection 4.16 shall expire on January 1, 2024 unless such rules are either extended or amended by the Fish and Wildlife Board. The decision to extend or amend these rules shall be based on an evaluation of the following key criteria:
 - (1) Reliable evidence of the presence or absence of a resident, breeding population of Canada lynx;
 - (2) The availability of more effective and/or practical alternatives for avoiding the incidental capture of lynx; and
 - (3) The outcome of Maine's Incidental Take Permit application process.

Diagram 1. Canada lynx exclusion device for body gripping traps.





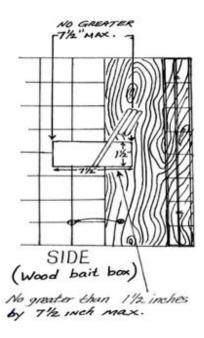


Diagram 2. Off the ground sets for body gripping traps.

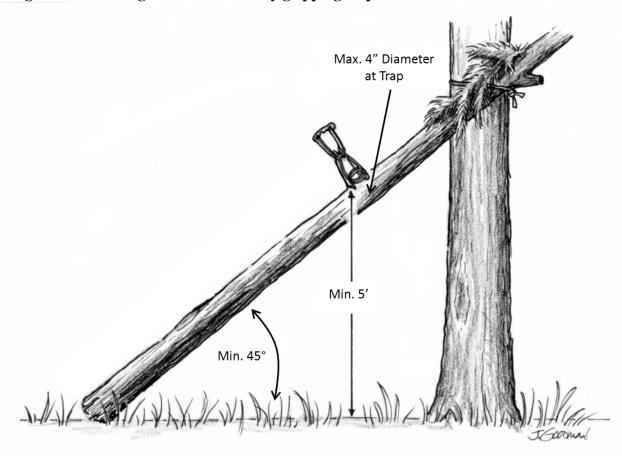
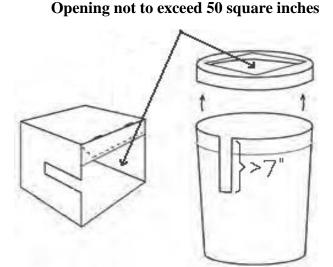


Diagram 3. Cubby sets for body gripping traps no larger than a typical 160.



4.17 Biological Collection

- a) Any person who obtains a trapping license shall complete and submit an annual biological collection trapper survey for the license season to the Department, within the timeline specified by the Commissioner.
- b) The failure to complete and submit a biological collection survey to the Department shall be a nonpoint violation under 10 V.S.A. § 4502.

5.0 Seasons, Bag Limits

The following seasons, methods and bag limits are hereby established for the species listed. All hunting seasons will be with or without dogs, except as otherwise provided. Below is the exclusive, exhaustive list of season and means of take of fur-bearing animals. The taking of fur-bearing animals at other times or by other means, except where otherwise provided by law, is prohibited. All dates are inclusive.

| Seasons | | Dates | Bag Limit |
|---------|-------------|--------------------------------------|-----------|
| 5.1 | Beaver | | |
| | By trapping | Fourth Sat. in Oct. through March 31 | No Limit |
| | By hunting | No open season | Zero |

| 5.2 | Otter By trapping By hunting | Fourth Sat. in Oct last day of March No open season | No limit Zero |
|--|--|---|----------------------|
| 5.3 | Marten | No open season | Zero |
| 5.4 | Mink By trapping By hunting | Fourth Sat in OctDec. 31 No open season | No limit Zero |
| 5.5 | Raccoon By trapping By hunting | Fourth Sat. in OctDec. 31 Second Sat. in OctDec. 31 | No limit No limit |
| 5.6 | Bobcat By trapping By hunting | December 1-December 16 January 10-February 7 | No limit No limit |
| 5.7 | Fox (red or grey) By trapping By hunting | Fourth Sat. in OctDec. 31 Fourth Sat. in Oct. through the second Sun. in Feb. | No limit No limit |
| 5.8 | Skunk By trapping By hunting | Fourth Sat. in OctDec. 31 No closed Season | No limit No limit |
| 5.9 | Muskrat By trapping By hunting | Fourth Sat. in OctMarch 31 March 20-April 19 | No limit No limit |
| 5.10 Coyote By trapping Fourth Sat. in OctDec. 31 No limi | | | No limit |
| | By hunting | No closed season | No limit |
| 5.14 Fisher | | | |
| | By trapping By hunting | December 1-December 31 No open season | No limit Zero |
| 5.15 | Weasel By trapping By hunting | Fourth Sat. in OctDec. 31 No closed season | No limit No limit |
| 5.16 | Opossum By trapping By hunting | Fourth Sat. in OctDec. 31 No closed season | No limit No limit |

| 5.17 Wolf | No open season | Zero |
|-----------|----------------|------|
| 5.18 Lvnx | No open season | Zero |

5.20 With the exception of state and federally listed threatened and endangered species, seasons shall not be applicable to any person, who takes a furbearing animal in defense of persons or property for compensation, in accordance with 10 V.S.A. § 4828.

6.0 Trapping Rabbits and Furbearers in Defense of Property for a Fee

6.1 In accordance with Sec. 11 of Act 170 from the 2017-2018 Adj Session, the following sections and subsections of Board rules set forth in Title 10, Appendix § 44 are applicable to trapping nuisance rabbits and fur-bearing animals in defense of property for compensation: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6 (except that snares shall not be prohibited), 4.8 (however, possession is allowed for the purpose of moving the animal to a more appropriate place for euthanasia dispatch), 4.10, 4.11 (unless the animal has already been trapped), 4.12, 4.14 (e), 4.16 (b), 4.17 (a) and (b).

Attachment 3: Fish Management Regulations as Presented for Second Vote

APPENDIX 122 ANNOTATED

TITLE 10 Conservation and Development APPENDIX CHAPTER 2. FISH Subchapter 2. Seasons, Waters, and Limits

§ 122. Fish Management Regulation.

1.0 Authority

This rule is adopted pursuant to 10 V.S.A. §4081(b). In adopting this rule, the Fish and Wildlife Board is following the policy established by the General Assembly that the protection, propagation, control, management, and conservation of fish, wildlife and fur-bearing animals in this state is in the interest of the public welfare and that the safeguarding of this valuable resource for the people of the state requires a constant and continual vigilance.

In accordance with 10 V.S.A. §4082, this rule is designed to maintain the best health, population and utilization levels of Vermont's fisheries.

In accordance with 10 V.S.A. §4083, this rule establishes open seasons; establishes daily, season, possession limits and size limits; prescribes the manner and means of taking fish; and prescribes the manner of transportation and exportation of fish.

2.0 Purpose

It is the policy of the state that the protection, propagation control, management and conservation of fish, wildlife, and fur-bearing animals in this state is in the interest of the public welfare, and that safeguarding of this valuable resource for the people of the state requires a constant and continual vigilance.

3.0 Open-Water Fishing, legal methods of taking fish

- 3.1 Definitions
- 3.1.1 Department Vermont Department of Fish and Wildlife.
- 3.1.2 Commissioner Vermont Department of Fish and Wildlife Commissioner.
- 3.1.3 Open-water fishing –Fishing by means of hook and line in hand or attached to a rod or other device in open water. Fishing by casting or trolling baited hooks, artificial flies or lures is considered open-water fishing.
- 3.1.4 Baited Hook A single shank hook with 1, 2 or 3 points which may be baited with natural or artificial bait or both.

- 3.1.5 Lure A man-made device designed to catch only 1 fish at a time, to include a spoon, plug, spinner, bait harness, tandem hook streamer or lead head jig.
- 3.1.6 Fly A single pointed hook dressed with feathers, hair, thread, tinsel, or any similar material wound on or about the hook to which no hooks, spinners, spoons, or similar devices have been added.
- 3.1.7 Handheld Spear A manually powered spear used from above the water's surface.
- 3.1.8 Speargun A pneumatic or rubber band powered device, with a line not to exceed 20 feet attached to a spear, used from below the water's surface.
- 3.1.9 Cull Fish Carp, tench, rudd, shad (alewife and gizzard shad), and goldfish. Additional invasive/exotic fish species may be designated by the Commissioner as "cull fish."
- 3.1.10 Immediate Control Such constant control as would enable the angler to respond forthwith to a fish taking their bait, lure or fly promptly and without any delay.
- 3.1.11 Snagging Snagging shall mean the intentional hooking of a fish in a place other than the inside of the fish's mouth. No person shall pull, jerk or otherwise purposefully and/or repeatedly manipulate a hook, or hooks and line to snag or hook a fish in any method other than to entice a fish into taking, by mouth, a hook, lure or fly. Repeated and/or exaggerated jerking or pulling of the fishing line and/or hooks in any attempt to snag fish, whether it results in physically snagging a fish or not, shall be prima facie evidence that snagging has taken place. This shall not apply to the use of a gaff to land a fish that has been legally hooked.
- 3.2 Whether still fishing, casting, or trolling in Vermont waters, a person may take fish only by using not more than two lines over which he or she has immediate control and to each of which lines is attached not more than two baited hooks, or more than three artificial flies, or more than two lures with or without bait, except that at Seymour Lake and Little Averill Lake a person may take fish only by using not more than one line.
- 3.3 A person open-water fishing shall not take fish through the ice, from the ice, or from an object supported by the ice.
- 3.4 A person shall not take any fish pursuant to subsection (3.2) unless it is hooked in the mouth. Any fish taken under subsection (3.2) that is not hooked in the mouth shall be immediately released pursuant to 10 V.S.A. § 4602. A fish hooked in any part of the body other than in the mouth shall be considered to be foul hooked, and shall be prima facie evidence of foul hooking.
- 3.5 Taking or attempting to take fish by snagging is prohibited in all Vermont Waters.

4.0 Ice Fishing

- 4.1 Definitions
- 4.1.1 Ice Fishing Ice fishing is defined as fishing by means of hook and line in hand or attached to a rod, tip-up, jack or bob, where the angler is fishing through a hole in the ice, from the ice or on an object supported by the ice. Fishing by casting or trolling baited hooks, artificial flies or lures shall not be considered ice fishing.
- 4.2 Fish may be taken through the ice with not more than two baited hooks or three artificial flies or two lures on each line. A person shall not operate more than eight lines, except on Lake Champlain where no more than fifteen lines may be operated, and except on Seymour and Little Averill Lakes, where not more than four lines may be operated.
- 4.3 A person ice fishing shall have at all times, have immediate control over all lines they operate. A person ice fishing shall be able to visually observe lines they operate. Any line that indicates a fish shall be tended within 30 minutes.
- 4.4 A person shall not take any fish pursuant to subsection (4.2) unless it is hooked in the mouth. Any fish taken under subsection (4.2) that is not hooked in the mouth shall be immediately released pursuant to 10 V.S.A. § 4602. A fish hooked in any part of the body other than in the mouth shall be considered to be foul hooked, and shall be prima facie evidence of foul hooking.
- 4.5 The definitions of section 3 are applicable to this section.
- 4.6 Taking or attempting to take fish by snagging is prohibited in all Vermont Waters.

5.0 The taking, possessing, transporting, use and selling of baitfish.

5.1 Purpose

- 5.1.1 This rule applies to fish used as bait. This rule shall apply to all persons who take, possess, transport, use, or deal with baitfish.
- 5.1.2 The purpose of this paragraph is to: a) protect the fish, and fisheries in the state, b) ensure the conservation of the fish and fisheries in the state, c) maintain the best health of species of the state, d) prevent the introduction or spread of a disease or parasite harmful to humans and wild species, and e) prevent the escape or release of non-native species or species injurious to or competitive with natural ecological systems and processes.

5.2 Definitions

5.2.1 "Application" means a specific form provided by the Department of Fish and Wildlife.

- 5.2.2 "Baitbox" means a receptacle used for holding or keeping baitfish alive for personal use. A legal baitbox shall not exceed 25 cubic feet in volume.
- 5.2.3 "Baitfish" means fish species and parts thereof, living or dead, used for the purpose of attracting and catching fish.
- 5.2.4 "Commercial Dealing, dealing, or deal" means to sell as defined in Title 10, § 4001, subsection 22.
- 5.2.5 "Fish Hatchery" refers to any fish culture station, hatchery, or artificial rearing pond which grows or maintains baitfish for sale in Vermont.
- 5.2.6 "Permit" is a document from the Commissioner granting a Commercial Bait Dealers Permit.
- 5.2.7 "Waterbody" means any lake, pond, river, or stream including all tributaries upstream to the first barrier impassable to upstream fish movement.
- 5.2.8 "Commercially Preserved Baitfish" means baitfish which are chemically treated in a manner approved by the Department, and then packaged for retail sale.
- 5.2.9 "Personal Baitfish Harvest" means baitfish taken for non-commercial use.

5.3 Personal Baitfish Harvest

- 5.3.1 Personally harvested baitfish may be used only on the same waterbody from which they were collected.
- 5.3.2 A person may harvest for use as bait only those fish species listed under paragraphs 5.6.1, 5.6.2, and 5.6.3.
- 5.3.3 It is unlawful to take baitfish for personal use other than by the following methods: a) minnow traps no longer than eighteen inches with an entrance for fish not exceeding one inch in diameter, b) dip nets, cast nets, and umbrella nets not exceeding a total of 51 square feet of mesh, or a seine net not exceeding 25 feet in length, c) Open water/ice fishing by hook and line.
- 5.3.4 The personal harvest of baitfish is unlawful in Seasonally Closed Waters as listed in Section 9.0 of this regulation, except during the open season for trout, and is prohibited in streams as specified in Section 9.2. Baitfish

- harvest shall be conducted only by Open-water/ice fishing or the use of minnow traps no longer than eighteen inches with an entrance for fish not exceeding one inch in diameter.
- 5.3.5 All traps, nets, baitboxes or other holding receptacles capable of taking, holding or keeping live baitfish in public waters must be marked with the name and address of the owner and user.
- 5.3.6 Personally harvested baitfish shall not be transported by motorized vehicle away from the waterbody from which they were collected.
- 5.3.7 Baitfish may be held on the water in a pen or baitbox as defined in paragraph 5.2.2.
- 5.3.8 Personally harvested baitfish may be collected from a waterbody's tributaries upstream to the first impassable barrier for use on such waterbody. Personally harvested baitfish shall not be transported upstream beyond the first impassable barrier.
- 5.3.9 The personal harvest of baitfish is prohibited on any waterbody of the state that is defined as closed to baitfish harvest. The Department will maintain and make available a list of closed waters.
- 5.3.10 Fish eggs may be collected from legally harvested fish from Vermont waters, and used immediately as bait on the same water where taken unless that waterbody has been closed to baitfish collection. It is illegal to move personally harvested fish eggs to any other waterbody. It is illegal to transport fish eggs away from and return them to the same waterbody for use as bait unless they have been processed in a manner approved by the Department as described on the Department website.

5.4 Commercially Purchased Baitfish

- 5.4.1 It is unlawful to import baitfish into the State of Vermont without a Fish Importation Permit, except as provided for in paragraphs 5.4.7 and 5.4.8.
- 5.4.2 A person purchasing baitfish shall retain and show upon request a transportation receipt issued by a state approved commercial bait dealer, authorizing transportation of baitfish overland by motorized vehicle. The receipt shall contain the following information: 1) A unique receipt identification number, 2) The name and telephone number of the bait dealer, 3) time and date of sale, 4) species purchased, 5) quantity purchased, 6) waterbody (limited to one) on which the baitfish will be used, 7) signature of purchaser.

- 5.4.3 A transportation receipt shall be valid for 96 hours from time and date of sale.
- 5.4.4 A person may transport unused commercially purchased baitfish away from waters of the state by motorized vehicle, and retain for later use on the same waterbody as indicated on the baitfish transportation receipt, within 96 hours from time and date of sale.
- 5.4.5 A person transporting unused commercially purchased baitfish away from the waterbody indicated on the baitfish transportation receipt for later use on said waterbody shall not hold them in any other water of the state.

 These baitfish must be kept in a closed container isolated from any inflow of lake, pond or stream water, or outflow to such waters of the state.
- 5.4.6 Baitfish may be held beyond the 96 hour period on the water in a pen or baitbox as per paragraph 5.2.2.
- 5.4.7 A person may purchase baitfish from a New York baitshop for use on Lake Champlain only, provided the baitshop is Vermont licensed, and the baitfish are accompanied by a Vermont-issued baitfish transportation receipt.
- 5.4.8 A person may purchase baitfish from a New Hampshire baitshop for use on the Connecticut River and its setbacks only, provided the baitshop is Vermont-licensed, and the baitfish are accompanied by a Vermont-issued baitfish transportation receipt. For the purposes of this paragraph, the Connecticut River is defined as all waters of the river including the bays, setbacks, and tributaries, only to the first highway bridge crossing said tributaries on the Vermont side.
- 5.4.9 Commercially prepared and preserved baitfish and fish eggs available from retail stores may be purchased and used as bait, and may be taken home and kept for later use, provided they are retained in the original packaging at all times.

5.5 Commercial Bait Dealers

5.5.1 Any person who buys baitfish for resale or sells baitfish is required to obtain a Commercial Bait Dealers Permit from the Commissioner. Only persons operating a place of business and offering baitfish for sale to the public may apply for and hold a Commercial Bait Dealers permit.

- 5.5.2 Commercial Bait Dealers may sell as bait only those species of fish listed under section 5.6.1. Commercial Bait Dealers may also sell rainbow smelt as bait, provided they are obtained from a fish hatchery approved by the Commissioner as per paragraph 5.5.4 and its subsections below, or harvested by Open water/ice fishing and sold for use on the same waterbody on which the Bait Dealer is located as per paragraph 5.5.5 and its subsections below.
- 5.5.3 Commercial Bait Dealers must declare in their permit application if they will be a Statewide baitfish dealer, or a Waterbody Specific baitfish dealer.
- 5.5.4 Statewide baitfish dealers are prohibited from possessing, buying or selling wild caught baitfish.
- 5.5.4.1 Baitfish sold by Statewide baitfish dealers must originate from a fish hatchery approved by the Commissioner.
- 5.5.4.2 Statewide baitfish dealers must hold or keep baitfish in waters drawn from a secure well or municipal water source, or other water source as approved by the Department of Fish and Wildlife.
- 5.5.4.3 Baitfish sold by Statewide baitfish dealers may be used in waters throughout the state, except those waters as described in Section 6.0 of this regulation.
- 5.5.5 Waterbody-specific baitfish dealers must declare on their permit application the waterbody on which they are located.
- 5.5.5.1 Waterbody specific baitfish dealers may harvest wild baitfish only from the declared waterbody, and offer them for sale and use only on the declared waterbody.
- 5.5.2 Waterbody specific baitfish dealers must have baitfish holding facilities that discharge directly to their declared waterbody. Holding facilities must not discharge to other waters of the state.
- 5.5.5.3 Waterbody-specific baitfish dealers shall not operate dip nets, cast nets, or umbrella nets exceeding 51 square feet of mesh, or a seine net exceeding 125 feet in length, for the purposes of taking fish for bait, unless otherwise provided for on a Commercial Bait Dealers Permit. Baitfish netting is prohibited in all Seasonally Closed Waters as listed in Section 9.0 of this regulation, unless otherwise provided for on a Commercial Bait Dealers Permit.

- 5.5.4 All traps, nets, baitboxes or other holding receptacles capable of taking, holding or keeping live baitfish in public waters must be marked with the name and address of the owner and user.
- 5.5.5.5 The commercial harvest of baitfish is prohibited on any waterbody of the state that is defined as closed to baitfish harvest. The Department will maintain and make available a list of closed waters.
- 5.5.6 A Commercial Bait Dealer shall provide to each customer at the point of sale a copy of a transportation receipt containing the following information: 1) A unique receipt identification number, 2) The name and telephone number of the bait dealer, 3) time and date of sale, 4) species purchased, 5) quantity purchased, 6) waterbody (limited to one) on which the baitfish will be used, 7) signature of purchaser.
- 5.5.7 A transportation receipt shall be valid for 96 hours from time and date of sale.
- 5.5.8 Receipt books shall be provided to Commercial Bait Dealers by the Department.
- 5.5.9 Any holder of a Commercial Bait Dealers Permit shall maintain receipts or records for each lot of wholesaled hatchery raised or wild caught baitfish introduced into their shop. The receipts or records shall include: name, address and telephone number of seller (for wholesaled baitfish), and date received, species identification, and quantity purchased or harvested, for wholesaled and wild caught baitfish. The permit holder shall retain the receipts and records for at least one year after the date of sale or harvest. Receipts or records must be provided to the Department immediately upon request.

5.6 Approved Species of Fish for use as Bait

| 5.6.1 | Banded killifish Fundulus diaphanus |
|------------------|---|
| | Blacknose dace Rhinichthys atratulus |
| | Bluntnose minnow <i>Pimephales notatus</i> |
| | Common shiner Luxilus cornutus |
| | Creek chub Semotilus atromaculatus |
| | Eastern silvery minnow Hybognathus regius |
| | Emerald shiner <i>Notropis atherinoides</i> |
| | Fallfish Semotilus corporalis |
| | Fathead minnow Pimephales promelas |
| | Golden shiner Notemigonus crysoleucas |
| | · |
| | Longnose dace Rhinichthys cataractae |

Longnose sucker Catostomus catostomus
Mimic shiner Notropis volucellus
Northern redbelly dace Phoxinus eos
Spottail shiner Notropis hudsonius
White sucker Catostomus commersoni

5.6.2 The following additional fish species, or parts thereof, may be taken only by Open-water/ice fishing and used for bait only in those waters where taken and shall not be transported alive from those waters; only Rainbow smelt may be commercially sold as bait:

Bluegill Lepomis macrochirus
Pumpkinseed Lepomis gibbosus
Rainbow smelt Osmerus mordax
Rock bass Ambloplites rupestris
Yellow perch Perca flavescens

5.6.3 Lake Champlain – In addition to 5.6.2, the following fish species, or parts thereof, may be taken only by Open water/ice fishing in Lake Champlain and used as bait in Lake Champlain, as described in Section 7.0 of this regulation, and may not be commercially harvested or sold as bait; Alewife may only be used/possessed if dead:

Alewife Alosa pseudoharengus White perch Morone americana

5.6.4 All other species of fish are prohibited for use as bait.

5.7 Commercial Bait Dealer Application Process

- 5.7.1 A party who wishes to obtain a Commercial Bait Dealers Permit shall apply to the Commissioner in writing on a form provided by the Department. The Department may require the applicant to submit such additional information as is necessary to determine that the permitted activities comply with the purposes of this rule, including but not limited to fish health testing, and the impact to Vermont's fish and fisheries.
- 5.7.2 If the application is deficient, the Department shall inform the applicant of the deficiencies and return the application within 30 days of receipt, along with any associated fee, to the applicant for revision and re-submission.
- 5.7.3 If the application is denied, the Commissioner shall, within 30 days of receipt of application, send the applicant a written denial providing the reasons for the denied.

5.8 Permit Compliance

- 5.8.1 The Permittee shall make the permit available upon request by an agent of the Department. Premises and equipment used by persons to take, store, or deal in baitfish shall be accessible for inspection by the Commissioner and his or her agents. Samples for species determination or disease examination shall be made available immediately upon request.
- 5.8.2 Permittees shall provide the Department with additional information as requested on an annual basis or prior to the re-issuance of a new permit.

5.9 Permit Revocation

- 5.9.1 The Commissioner may revoke any permit issued in order to protect regulated species: for any violation of a permit; failure to comply with this rule; a violation of any rules of the Board; or a violation of the provisions of Part 4, Title 10, Vermont Statutes Annotated; if the Commissioner determines it is in the best interest of the fish or fisheries of Vermont.
- 5.9.2 Prior to permit revocation, the Commissioner shall provide a proceeding consistent with 3 V.S.A. § 814(c).
- 5.9.3 Appeals of the decisions of the Commissioner are subject to the Vermont Rules of Civil Procedure.

6.0 Use of fish as bait

The use of fish in any form whether alive or dead for bait in fishing is prohibited in:

Adams Reservoir, Woodford;
Beaver Pond, Holland;
Beebe Pond, Sunderland;
Big Mud Pond, Mt. Tabor;
Blake Pond, Sutton;
Bourn Pond, Sunderland;
Branch Pond, Sunderland;
Cow Mountain Pond, Granby;
Griffith Lake, Mt. Tabor;
Jobs Pond, Westmore;
Lewis Pond, Lewis;

Little Rock Pond, Wallingford;

Martins Pond, Peacham;

McIntosh Pond, Royalton;

North Pond, Chittenden:

Notch Pond, Ferdinand:

Red Mill Pond, Woodford;

Sterling Pond, Cambridge;

South America Pond, Ferdinand;

Stratton Pond, Stratton;

Unknown Pond, Averys Gore;

Unknown Pond, Ferdinand

and any ponds as may be created or reclaimed by the Department of Fish and Wildlife. This regulation shall be posted at all waters affected.

7.0 <u>5.0</u> Lake Champlain Boundaries

Lake Champlain proper shall be considered to include the setback at the same level and the major tributaries to the lake to the following boundaries:

Dead Creek to Panton Road bridge in Panton;

East Creek to the falls in Orwell (downstream of Mount Independence Road):

Lamoille River to the top of first dam (Peterson Dam) in Milton;

LaPlatte River to the falls in Shelburne (under Falls Road bridge);

Lewis Creek to falls in North Ferrisburgh (just upstream of Old Hollow Road);

Little Otter Creek to falls in Ferrisburgh Center (downstream of Little Chicago Road);

Malletts Creek to the first falls upstream of Roosevelt Highway (US 2 and US 7) in Colchester;

Mill River in Georgia to the falls in Georgia (just upstream of Georgia Shore Road bridge);

Missisquoi River to the top of Swanton Dam in the Village of Swanton;

Mud Creek to the dam in Alburg (just upstream of Route 78 bridge);

Otter Creek to the top of the dam in the city of Vergennes;

Poultney River to Central Vermont Power Dam at Carver Falls in West Haven.

Rock River to first Canadian border crossing;

Winooski River to the Winooski One hydropower dam west of Main Street (US 7) in Winooski and Burlington;

8.0 <u>6.0</u> Clyde River: Catch and Release

Between September 1 and October 31, on the Clyde River from Lake Memphremagog upstream to Charleston Dam (Lubber Lake), West Charleston, a person may fish with artificial flies and lures only, and all salmon caught must be released.

9.0 7.0 Seasonally Closed Waters

9.1 7.1 The following lakes and ponds or portions thereof are hereby designated Seasonally Closed Waters and shall be closed to all fishing except during the open season for trout as provided in section 8 of these regulations:

Adams Reservoir, Woodford

Ansel Pond, Bethel

Baker Pond, Barton

Bald Hill Pond, Westmore

Bean Pond, Sutton

Beaver Pond, Holland

Beck Pond, Newark

Beebe Pond, Sunderland

Big Averill Lake, Norton and Averill

Big Mud Pond, Mt. Tabor

Blake Pond, Sutton

Bourn Pond, Sunderland

Branch Pond, Sunderland

Brown Pond, Westmore

Caspian Lake, Greensboro

Center Pond, Newark

Colby Pond, Plymouth

Cow Mountain Pond, Granby

Crystal Lake, Barton

Duck Pond, Sutton

Dufresne Pond, Manchester

East Long Pond, Woodbury

Echo Lake, Charleston

Ewell Pond, Peacham

Forest Lake, Averill

Goshen Dam (Sugar Hill Reservoir), Goshen

Griffith Lake, Mt. Tabor

Hapgood Pond, Peru

Hartwell Pond, Albany

Holland Pond, Holland

Jobs Pond, Westmore

Knapp Brook Pond No. 1, Reading and Cavendish

Knapp Brook Pond No. 2, Reading and Cavendish

Lake Dunmore-Salisbury and Leicester - Except from Sucker Brook to the island south, which shall be open.

Levi Pond, Groton

Lewis Pond, Lewis

Little Averill Lake, Averill

Little Elmore Pond, Elmore

Little Rocky Pond, Wallingford

Long Pond, Newbury

Long Pond, Westmore

Maidstone Lake, Maidstone

Marl Pond, Sutton

Martins Pond, Peacham

May Pond, Barton

McIntosh Pond, Royalton

Mud Pond, Hyde Park

Nelson Pond (Forest Lake), Calais and Woodbury

Nichols Pond, Woodbury

North Pond, Chittenden

Norton Pond, Norton

Notch Pond, Ferdinand

Noyes (Seyon) Pond, Groton

Peacham Pond, Peacham

Perch Pond (Zack Woods Pond), Hyde Park

Pigeon Pond, Groton

Red Mill Pond, Woodford

Seymour Lake, Morgan

Shadow Lake, Glover

Silver Lake, Leicester

South America Pond, Ferdinand

South Pond, Marlboro

Spring Lake, Shrewsbury

Stannard Pond, Stannard

Sterling Pond, Cambridge

Stoughton Pond, Weathersfield

Stratton Pond, Stratton

Sunset Lake, Benson

Unknown Pond, Averys Gore

Unknown Pond, Ferdinand

Vail Pond, Sutton

Vernon Hatchery Pond, Vernon

West Mountain Pond, Maidstone

Wheeler Pond, Barton and Sutton

Willoughby Lake, Westmore

Zack Woods (Perch Pond), Hyde Park

- 9.2 7.2 All streams are hereby designated Seasonally Closed Waters and shall be closed to all fishing, except during the open season for trout as provided in section 408 of these regulations; and
 - 9.2.1 7.2.1 except that the following streams shall be open to trout fishing only, and no fishing for other species shall be allowed, from November 1 to the Friday before the second Saturday in April, as set forth in Table 97.2.2.

97.2.2: STREAMS OPEN TO FISHING FOR TROUT ONLY FROM NOVEMBER 1 TO THE FRIDAY BEFORE THE SECOND WEEK IN APRIL

| 1. Waters | 2. Methods | 3.Season | Size | 5.Daily Bag |
|---------------------|-------------------|----------------|--------------|-----------------|
| | | | Restrictions | Limit |
| Listed Below | Artificial fly or | November 1 to | Catch and | Zero-All trout |
| | lure only | the Friday | release only | must be |
| | | before the 2nd | | immediately |
| | | Saturday in | | released to the |
| | | April: | | water where |
| | | | | taken: |

- **Black River** From the top of the Lovejoy Dam in Springfield upstream to the Howard Hill Road Bridge in Cavendish.
- **Deerfield River** From the Woods Road (Medburyville) bridge in Wilmington upstream approximately 2 miles to the VT Route 9W bridge in Searsburg.
- **East Creek (Rutland City)** From the confluence with Otter Creek upstream (approximately 2.7 miles) to the top of the Patch Dam in Rutland City.
- **Hoosic River** From the Vermont/New York border upstream to the Vermont/Massachusetts border.
- **Lamoille River** From the top of the hydroelectric dam at Fairfax Falls upstream to the top of the Cady's Falls Dam in Morristown.
- **Moose River** From the confluence with Passumpsic River upstream to the downstream edge of the Concord Avenue bridge in St. Johnsbury.
- Otter Creek From the top of the Center Rutland Falls in Rutland upstream to the Danby-Mt. Tabor Forest Road Bridge (Forest Road #10) in Mt. Tabor.
- **Passumpsic River** From the Connecticut River boundary upstream to the top of Arnolds Falls Dam in St. Johnsbury.
- **Walloomsac River** From the Vermont/New York border in Bennington upstream to the top of the former Vermont Tissue Plant Dam (downstream of Murphy Road) in Bennington.
- **Winooski River** From the top of the Bolton Dam in Waterbury and Duxbury upstream to the VT Route 2/100 in Duxbury and Waterbury.

10.0 <u>8.0</u> Fish – Open Seasons, Size Restrictions and Daily Bag Limits.

Fish of the species named or described in the tables set forth below may be taken:

In the waters specified in column 1, by the method specified in column 2., during the open season specified in column 3.

Provided they meet any size restrictions specified in column 4., and only in numbers listed under daily bag limits specified in column 5., under no circumstances may a person take in one day, more than the daily bag or weight limit from a listed body of water. No person may take in aggregate more than the daily State-wide aggregate limit for any species listed.

Businesses may buy lawfully taken fish, with the approval of the Commissioner, pursuant to the Commercial angling rules set forth in 10 V.S.A App. 123.

- 10.1 <u>8.1</u> Possession limits are equal to twice the daily bag limits. Fish species with limit restrictions may not be possessed in excess of the possession limits at any time.
 - 10.1.1 8.1.1 No person shall have live fish in their possession that are transported in a manner which attempts to keep them alive when leaving waters of the state (10 V.S.A. §1251(13)), except as follows:

| 10.1.1.1 | <u>8.1.1.1</u> the person has been issued a Commercial |
|---------------------|--|
| | Bait Dealers Permit by the Commissioner, |
| 10.1.1.2 | 8.1.1.2 the person has been issued a scientific |
| | collection permit by the Commissioner which |
| | specifically approves of the activity, |
| 10.1.1.3 | 8.1.1.3 the person has been issued a fish |
| | transportation permit by the Commissioner which |
| | specifically approves of the activity, |
| 10.1.1.4 | 8.1.1.4 the person has been issued a fish breeders |
| | permit or fish importation permit by the |
| | Commissioner which specifically approves of the |
| | activity. |
| | |

- 10.2 <u>8.2</u> The daily bag limit for a fish species on a water body with a closed season for that fish species is zero.
- 10.3 8.3 "General waters" restrictions are the provisions applicable to all waters of the state, except the waters specifically named or described.
- 10.4 <u>8.4</u> Unless otherwise specifically provided, fish not listed in this regulation may be taken at any time and without size or catch limit, in

waters not listed as Seasonally Closed Waters in Section 7 of these regulations.

10.5 <u>8.5</u> Open Seasons, Size Restrictions and Daily Bag Limits Tables

10.5.1 <u>8.5.1</u> STATEWIDE AGGREGRATE DAILY BAG LIMITS (Maximum number of a fish species that may be taken in one day)

| FISH SPECIES | DAILY AGGREGRATE LIMITS |
|--------------------------------|--|
| Brook Trout | 12 fish |
| Brown and Rainbow Trout | Maximum Combination of 6 fish |
| Lake Trout | 2 fish, (3 if taken from Lake Champlain) |
| Salmon | 2 fish |
| Largemouth and Smallmouth Bass | Maximum combination of 5 fish |
| Northern Pike | 5 fish |
| Chain Pickerel | 10 fish |
| Muskellunge | 0 fish |
| Walleye | 3 fish |
| Black and White Crappie | 25 fish |
| American Shad | 0 fish |
| Yellow Perch | 50 fish |
| Yellow Perch exception | Lake Champlain – no daily limit |
| Sauger | 0 fish |

10.5.2 8.5.2 BROOK, BROWN AND RAINBOW TROUT

| 1.Waters | 2. Methods | 3. Season | 4.Size | 5.Daily Bag |
|-------------------|----------------|---------------|----------------|----------------|
| | | | Restrictions | Limit |
| General waters. | Open-water | Second | No restriction | 6 trout |
| (except as listed | fishing | Saturday in | | |
| below) | | April through | | |
| | | October 31 | | |
| Lake | Open-water and | No closed | Minimum | 3 trout |
| Champlain | ice fishing | season | length of 12 | |
| | | | inches | |
| Rivers and | Open-water | Second | No restriction | 12 trout, of |
| Streams | fishing | Saturday in | | which not more |
| | | April through | | than 6 can be |
| | | October 31 | | brown and/or |
| | | | | rainbow |

108.5.3 TROPHY TROUT STREAMS

| 1.Waters | 2. Methods | 3. Season | 4.Size Restrictions | 5.Daily Bag Limit |
|---------------|------------|---------------|------------------------|----------------------|
| Listed Below: | Open-water | Second | No restriction | 2 trout in |
| | fishing | Saturday in | | aggregate |
| | | April through | | |
| | | October 31 | | |

- **Black River** along Rt. 131 in Weathersfield and Cavendish, from Downers covered bridge upstream (approximately 4 miles) to the next bridge across the river, the Howard Hill Bridge.
- **East Creek** in Rutland City -- From the confluence with Otter Creek upstream (approximately 2.7 miles) to the top of the Patch Dam in Rutland City
- **Lamoille River** From the downstream edge of the bridge on Route 104 in the Village of Fairfax upstream (approximately 1.6 miles) to the top of the Fairfax Falls Dam in Fairfax.
- **Little River** From the confluence with Winooski River in Waterbury upstream to the top of the Waterbury Reservoir Dam in Waterbury.
- **Missisquoi River** in Enosburg and Sheldon -- From the downstream edge of Kane Road (TH-3) bridge upstream(approximately 5.7 miles) to the top of the Enosburg Falls Dam in Enosburg Falls.
- Otter Creek in Danby and Mt. Tabor From the Vermont Railway Bridge north of the fishing access upstream (approximately 2 miles) to the Danby- Mt. Tabor Forest Rd. Bridge (Forest Road # 10).
- **Passumpsic River** in the Village of St. Johnsbury From the top of the Gage Dam in St,. Johnsbury upstream (approximately 2.4 miles) to the top of the Arnold Falls Dam.
- **Moose River-** From the confluence with the Passumpsic River upstream (approximately 350 feet) to the downstream edge of the Concord Avenue bridge in the Village of St. Johnsbury
- Walloomsac River in Shaftsbury and Bennington From the Vermont/New York border in Shaftsbury upstream to the top of the former Vermont Tissue Plant Dam (downstream of Murphy Road) in Bennington.
- **Winooski River** in Duxbury and Waterbury, From the top of the Bolton Dam in Duxbury and Waterbury upstream to the Route 2 Bridge (east side of Waterbury Village).

108.5.4 RAINBOW TROUT (Including STEELHEAD) / BROWN TROUT

| 1.WATERS | 2. Methods | 3. Season | 4.Size Restrictions | 5.Daily Bag Limit |
|---------------|--------------------|---|-----------------------------------|----------------------|
| Listed Below: | Open-water fishing | Second Saturday in April through October 31 | Minimum length of 10 inches | 2 trout |

Lakes and Ponds:

Caspian Lake, Greensboro

Echo Lake, Charleston

Lake Memphremagog (including South Bay), Coventry, Derby, Newport City and Newport;

Willoughby Lake, Westmore

Rivers and Streams:

Orleans County:

Barton River - From Lake Memphremagog upstream to the downstream side of the US Route 5 bridge southernmost and closest to the Village of Barton in Barton.

Black River - From Lake Memphremagog upstream to the downstream side of the VT Route 14 / 58 bridge in Irasburg.

Johns River-From the downstream edge of the first bridge (culvert) upstream of Lake Memphremagog on North Derby Road (TH #6) upstream to U.S. 5, in Derby.

Willoughby River - The entire Willoughby River, from confluence with Barton River in Barton upstream to the Willoughby Lake outlet in Westmore.

108.5.5 BROOK, BROWN, RAINBOW, LAKE TROUT AND SALMON – 2 FISH AGGREGATE LIMITS

| 1.Waters | 2.Methods | 3.Season | 4. Size | 5. Daily Bag |
|---------------|------------|---------------|-----------------|--------------|
| | | | Restrictions | Limit |
| Listed below: | Open-water | Second | See regulations | Two fish in |
| | Fishing | Saturday in | for specific | aggregate |
| | | April through | bodies of water | |
| | | October 31 | | |

Big Averill Lake, Norton and Averill

Caspian Lake, Greensboro

Center Pond, Newark

Crystal Lake, Barton

East Long Pond, Woodbury

Echo Lake, Charleston

Elligo Lake, Craftsbury and Greensboro

Forest Lake (Nelson Pond), Calais and Woodbury

Harveys Lake, Barnet

Jobs Pond, Westmore

Lake Dunmore, Salisbury

Lake Memphremagog (including South Bay and the connecting waters), Coventry,

Derby, Newport City and Newport;

Little Averill Lake, Averill

Long Pond, Westmore

Maidstone Lake, Maidstone

Martins Pond, Peacham

Nelson Pond (Forest Lake), Calais and Woodbury

Nichols Pond, Woodbury

Seymour Lake, Morgan

Shadow Lake, Glover

Spring Lake, Shrewsbury

Sunset Lake, Benson

Willoughby Lake, Westmore

108.5.6 STREAMS OPEN TO YEAR ROUND TROUT FISHING

| 1. Waters | 2. Methods | 3. Season | 4. Size | 5. Daily Bag |
|-------------------|-------------------|------------------|------------------|-----------------|
| | | | Restrictions | Limit |
| The following | Artificial fly or | No closed | Catch and | Zero-All trout |
| portions of the | lure only, | season for catch | release only | must be |
| specified rivers | except during | and release | | immediately |
| shall be open to | the open season | only | | returned to the |
| fishing for trout | for trout. | | | waters where |
| year round: | | Open season; | During the | taken, except |
| (Listed below) | | from the 2nd | open season | during the open |
| | | Saturday in | follow any | season, limits |
| | | April through | species | apply in |
| | | October 31 | restrictions for | accordance |
| | | | the selected | with the river |
| | | | river | selected. |

Black River – From the Connecticut River boundary upstream to the top of the Lovejoy Dam in Springfield.

Lamoille River – From the Lake Champlain boundary (top of Peterson Dam in Milton) upstream to the top of the hydroelectric Dam at Fairfax Falls.

Lewis Creek – From the Lake Champlain boundary upstream to the State Prison Hollow Road (TH #3) bridge in Starksboro.

Missisquoi River – From Lake Champlain boundary upstream to the top of the Enosburg Falls Dam in Enosburg Falls.

Ompompanoosuc River – From the Connecticut River boundary upstream to the Union Village Dam in Thetford.

Otter Creek – From the Lake Champlain boundary upstream to top of Center Rutland Falls in Rutland.

Waits River – From the Connecticut River boundary upstream to the top of the Central Vermont Power Dam in Bradford.

West River – From the Connecticut River boundary upstream to the Townshend Dam in Townshend.

White River – From the Connecticut River boundary upstream to the bridge on Route 107 in Bethel.

Williams River – From the Connecticut River boundary upstream to the top of the dam at Brockway Mills Falls in Rockingham.

Winooski River – From the Lake Champlain boundary upstream to the Bolton Dam in Duxbury and Waterbury.

108.5.7 LAKE TROUT AND SALMON

| 1. Waters | 2.Methods | 3.Season | 4. Size Restrictions | 5. Daily Bag Limit |
|---|---|---|--|--|
| General Waters (except as listed below) | Open-water fishing | Second Saturday in April through October 31 | Salmon- Minimum length of 15 inches Lake Trout- Minimum length of 18 inches | 2 Lake Trout or 2 Salmon or 1 of each |
| Lake Champlain | Open-water and ice fishing | No closed season | Lake Trout and Salmon – Minimum length of 15 inches | 3 Lake Trout and 2 Salmon |
| Little Averill Lake and Seymour Lake | Open-water fishing, with not more than 1 line | Angling: second Saturday in April through October 31 | Lake Trout- Minimum length of 20 inches | 1 Lake Trout and 1 Salmon or 2 Salmon |
| | Ice fishing with not more than 4 lines | Ice fishing: third Saturday in January through March 15 | Minimum length of 15 inches | |
| Clyde Pond, Salem Lake, Little Salem Lake, and Clyde River from Lake Memphremagog upstream to Citizen's Charleston Dam (Lubber Lake), | Open-water fishing | Second Saturday in April through August 31 | Lake Trout- Minimum length of 18 inches Salmon- Minimum length of 17 inches | 2 Lake Trout or 2 Salmon or 1 of each |
| West Charleston | Open-water fishing;Clyde River from Lake Memphremagog to Charleston | September 1 through October 31 | Lake Trout- Minimum length of 18 inches | 2 Lake Trout, 0 Salmon (all salmon must be |

| | Dam – Artificial flies and lures only | | | immediately released) |
|-----------------------|---------------------------------------|----------------|--------------|-----------------------|
| Lake | Open-water | Second | Lake Trout- | 2 Lake Trout or |
| Memphremagog | fishing | Saturday in | Minimum | 2 Salmon or 1 |
| (including South | _ | April through | length of 18 | of each |
| Bay) | | October 31 | inches | |
| | Ice fishing | Third Saturday | | |
| | | in January | Salmon- | |
| | | through March | Minimum | |
| | | 15 | length of 17 | |
| | | | inches | |
| Listed Below : | Open-water | Second | Lake Trout- | 2 Lake Trout or |
| | fishing | Saturday in | Minimum | 2 Salmon or 1 |
| | | April through | length of 18 | of each |
| | | October 31 | inches | |
| | | | | |
| | | | Salmon- | |
| | | | Minimum | |
| | | | length of 17 | |
| | | | inches | |

Orleans County:

Barton River - From Lake Memphremagog upstream to the downstream side of the US Route 5 bridge southernmost and closest to the Village of Barton in Barton.

Black River - From Lake Memphremagog upstream to the downstream side of the VT Route 14 / 58 bridge in Irasburg.

Johns River-From the downstream edge of the first bridge (culvert) upstream of Lake Memphremagog on North Derby Road (TH #6) upstream to U.S. 5, in Derby.

Willoughby River - The entire Willoughby River, from confluence with Barton River in Barton upstream to the Willoughby Lake outlet in Westmore.

408.5.8 SPECIAL ICE FISHING PROVISION FOR BROOK, BROWN, RAINBOW, LAKE TROUT, SALMON AND BASS

| 1. Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag Limit |
|----------------------|-------------|----------------|-------------------------|-----------------------|
| Listed below: | Ice fishing | Third Saturday | See species | See species |
| | | in January | restriction for | restriction for |
| | | through March | individual body | individual body |
| | | 15 | of water | of water |

Big Averill Lake, Norton and Averill;

Big Salem Lake, Derby

Caspian Lake, Greensboro;

Chittenden Dam, Chittenden.

Crystal Lake, Barton;

Echo Lake, Charleston;

Echo Lake, Plymouth;

Eden Lake, Eden;

Elligo Lake, Craftsbury and Greensboro

Glen Lake, Castleton, Fair Haven, and Benson;

Harriman Reservoir, Whitingham and Wilmington;

Harveys Lake, Barnet;

Island Pond, Brighton;

Joes Pond, Cabot, Danville;

Lake Bomoseen, Castleton and Hubbardton;

Lake Dunmore, Leicester and, Salisbury;

Lake Fairlee, Thetford, West Fairlee, Fairlee;

Lake Hortonia, Sudbury, Hubbardton;

Lake Memphremagog (including South Bay), Coventry, Derby, Newport City and Newport;

Lake Morey, Fairlee;

Lake Rescue, Ludlow;

Lake St. Catherine, Wells, Poultney;

Little Averill Lake, Averill;

Little Salem Lake Derby;

Maidstone Lake, Maidstone;

Marshfield Dam (Mollys Falls Reservoir), Cabot;

Miles Pond, Concord;

Nelson Pond (Forest Lake), Calais and Woodbury;

Newark Pond, Newark;

Norton Pond, Norton;

Parker Pond, Glover:

Peacham Pond, Peacham;

Pensioner Pond, Charleston;

Seymour Lake, Morgan;

Shadow Lake, Glover;

Somerset Reservoir, Somerset;

Sunset Lake, Benson;

Wallace Pond, Canaan;

Waterbury Reservoir, Waterbury;

Willoughby Lake, Westmore;

Woodbury Lake (Sabin Pond), Calais and Woodbury

108.5.9 SPECIAL REGULATION TROUT STREAMS

| 1. Waters | 2. Method | 3. Season | 4. Size Restrictions | 5. Daily Bag Limit |
|---|--|---|--|--|
| Lamoille River- From the downstream edge of the railroad bridge in Johnson upstream (approximately 3.7 miles) to the downstream edge of the Ten Bends Drive bridge in Hyde Park. | Open-water fishing, with artificial lures and flies only. | Second Saturday in April through October 31. | Minimum length of 16 inches. | 2 trout |
| White River From the confluence with Lilliesville Brook in Stockbridge downstream 3.3 miles to 220 ft. downstream of the confluence with Cleveland Brook in Bethel. | Open-water fishing, with artificial lures and flies only. | Second Saturday in April through October 31. | Minimum length of 18 inches | 1 trout |
| Mettawee River – From the downstream edge of the Route 153 bridge in Pawlet upstream (approximately 16 miles) to the downstream edge of first bridge on Dorset Hollow Road and including tributary: Flower Brook upstream (approximately 1000ft) to the downstream edge of the Route 30 bridge in Pawlet. | Open-water fishing | Second Saturday in April through October 31 | 10 to 14 inches protected slot: (all trout 10 to 14 inches must be released) | 2 trout, only 1 greater than 14 inches |
| Winooski River Tributaries – Listed Below | Open-water fishing | June 1 through October 31 | 10 to 16 inches protected slot: (all fish 10 to 16 inches must be released) | 2 trout, only 1 greater than 16 inches |

Winooski River Tributaries:

Joiner Brook, Bolton - From the confluence of the Winooski River upstream approximately 1900 feet to the first falls.

Pinneo Brook, Bolton – From the confluence of the Winooski River upstream approximately 100 feet to the railroad crossing.

Preston Brook, Bolton - From the confluence of the Winooski River upstream approximately 2600 feet to the first falls.

Ridley Brook, Duxbury – From the confluence of the Winooski River upstream approximately 1700 feet to the first falls.

| Listed Below: | Open-water | Second | 10 to 16 inches | 2 trout, only |
|----------------------|------------|---------------|-----------------|----------------|
| | fishing | Saturday in | protected slot: | 1 greater than |
| | | April through | (all fish 10 to | 16 inches |
| | | October 31 | 16 inches must | |
| | | | be released) | |

New Haven River – From Munger Street Bridge in New Haven upstream (approximately 4.1 miles) to the South Street bridge in Bristol.

Winooski River – From Preston Brook mouth upstream (approximately 4.4 miles) to the Ridley Brook mouth.

| Batten Kill – From the New York State line upstream (approximately 20.6 miles) to downstream side of Depot Street Bridge (Route 11/30) in Manchester. | Open-water fishing | Second Saturday in April through October 31 | All trout must be immediately released. | Zero, all trout must be immediately released. |
|--|---|--|---|---|
| Dog River – From the downstream edge of the Junction Road Bridge in Berlin/Montpelier upstream to the top of the Northfield Falls Dam in Northfield. | Open-water fishing with artificial lures and flies only for anglers 15 years of age and older | Second Saturday in April through October 31 | All trout must be immediately released. | Zero, all trout must be immediately released. |
| Listed below: | Open-water fishing | Second Saturday in April through September 30 | No size restriction. | 12 trout of which not more than 6 can be brown and/or rainbow trout in aggregate. |
| | Open-water fishing | October 1 through October 31 | All trout must be immediately released. | Zero, all trout must be immediately released. |

Batten Kill (East Branch) – In towns of Manchester and Dorset from the downstream side of Depot Street Bridge (Route 11/30) in Manchester upstream (approximately 5.0 miles) to the downstream side of the US Route 7 Bridge south of East Dorset.

Green River – In the towns of Arlington and Sandgate from its confluence with Batten Kill upstream (approximately 8.5 miles) to the confluence with Moffitt Hollow Brook in Beartown.

Roaring Branch – In the towns of Arlington and Sunderland from its confluence with the Batten Kill upstream (approximately 3.0 miles) to the downstream side of the Bridge #14 on Sunderland TH# 3 in East Kansas.

Warm Brook – In the town of Arlington from its Confluence with the Roaring Branch upstream (approximately 0.8 miles) to the base of the so-called Hale Company Dam in East Arlington.

$\underline{\textbf{408}}.5.10$ ANADROMOUS ALANTIC SALMON

| 1. Waters | 2. Method | 3. Season | 4. Size | 5. Daily Bag |
|-------------|---|-----------|----------------|---|
| | | | Restrictions | Limit |
| Connecticut | No person shall | No open | All fish must | Zero - All |
| River and | take or attempt to | season | be immediately | Anadromous |
| tributaries | take an anadromous Atlantic salmon, any salmon unintentionally taken shall be immediately released in | | released | Atlantic salmon must be immediately released |
| | accordance with section 4602 | | | |

408.5.11 AMERICAN SHAD

| 1. Waters | 2. Methods | 3. Season | 4. Size | 5. Daily Bag |
|---------------|------------|-----------|---------------|-----------------|
| | | | Restrictions | limits |
| Connecticut | Open-water | No closed | All shad must | Zero – All shad |
| River, | fishing | season | be released | must be |
| including | | | | immediately |
| Vermont river | | | | released. |
| tributaries | | | | |

108.5.12 BOWFIN, REDHORSE SUCKER (MULLET), LONGNOSE GAR.

| 1. Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag limits |
|---|--|--|-------------------------------|--|
| General Waters and as listed below) | Open-water and ice fishing | No closed season | No restriction | No more than 5 fish of any one species |
| General Waters (Except seasonally closed waters and as listed below) Lake Champlain, not to include tributaries | Speargun, bow and crossbow all with line attached to arrow Open-water and ice fishing, speargun, bow and crossbow all with line attached to arrow | No Closed Season No closed season | No restriction No restriction | No more than 5 fish of any one species No more than 5 fish of any one species |
| Lake Champlain, not to include tributaries | Shooting and Handheld Spear | March 25 through May 25, Title 10 (4606e) | No restriction | No more than 5 fish of any one species |

 $\underline{\textbf{10-8}}.5.13$ $\,$ SUCKER (LONGNOSE AND WHITE), and CULL FISH

| 1. Waters | 2. Methods | 3. Season | 4. Size | 5. Daily Bag |
|--|--|--|----------------|--------------|
| | | | Restrictions | limits |
| General Waters | Open-water | No closed | No restriction | No Limit |
| (and as listed below) | and ice fishing | season | | |
| General Waters (Except seasonally closed waters and as listed below) | Speargun, and bow and crossbow all with line attached to arrow | No Closed Season | No restriction | No Limit |
| Lake Champlain, not to include tributaries | Open-water and ice fishing, speargun, and bow and crossbow all with line attached to arrow | No closed season | No restriction | No Limit |
| Lake Champlain, not to include tributaries | Shooting and Handheld Spear | March 25 through May 25, Title 10 (4606e) | No restriction | No Limit |

<u>10-8</u>.5.14 BULLHEAD

| 1. Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag limits |
|----------------|-----------------|--------------|----------------------|---------------------|
| G 1777 | | > 1 1 | | |
| General Waters | Open-water | No closed | No restriction | No Limit |
| (and as listed | and ice fishing | season | | |
| below) | | | | |
| Lake | Open-water | No closed | No restriction | No Limit |
| Champlain, not | and ice fishing | season | | |
| to include | | | | |
| tributaries | | | | |
| Lake | Shooting and | March 25 | No restriction | No Limit |
| Champlain, not | handheld Spear | through May | | |
| to include | | 25, Title 10 | | |
| tributaries | | (4606e) | | |

 $\underline{40}$ - $\underline{8}$.5.15 NORTHERN PIKE

| 1. Waters | 2. Methods | 3. Season | 4. Size | 5. Daily Bag |
|-------------------|----------------|-------------|--------------|--------------|
| | | | Restrictions | limits |
| General Waters | Open-water and | No closed | Minimum | 5 Fish |
| (except as listed | ice fishing | season | length of 20 | |
| below) | | | inches | |
| | Open-water and | No closed | Minimum | 5 Fish |
| | ice fishing, | season | length of 20 | |
| Lake | | | inches | |
| | Shooting and | March 25 | Minimum | 5 Fish |
| Champlain | handheld | through May | length of 20 | |
| | spearing | 25, 10 VSA | inches | |
| | | 4606) | | |

10-8.5.16 CHAIN AND REDFIN PICKEREL

| 1. Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag limits |
|-------------------|----------------|----------------|-------------------------|---------------------|
| | | | | |
| General Waters | Open-water and | No closed | No restriction | No limit |
| (except as listed | ice fishing | season | | |
| below) | | | | |
| | Open-water and | No closed | No restriction | 10 fish |
| Laka | ice fishing | season | | |
| Lake Champlain | Shooting and | March 25 | No restriction | 10 ish |
| Champiani | handheld | through May 25 | | |
| | spearing | - | | |

<u>10-8</u>.5.17 MUSKELLUNGE

| 1. Waters | 2. Methods | 3. Season | 4. Size | 5. Daily |
|----------------|--------------------|------------------|--------------|-------------|
| | | | Restrictions | Bag limits |
| General Waters | Open-water and | No closed season | All | Zero - All |
| (except as | ice fishing; Catch | | muskellunge | muskellunge |
| listed below) | and release with | | must be | must be |
| | artificial lures | | released | immediately |
| | and flies only | | | released |
| | Open-water and | No closed season | All | Zero - All |
| | ice fishing; Catch | | muskellunge | muskellunge |
| | and release with | | must be | must be |
| Lake | artificial lures | | released | immediately |
| Champlain | and flies only | | | released |
| | Shooting and | March 25 | | Zero Fish |
| | handheld | through May 25, | | |
| | spearing | 10 VSA 4606) | | |

10-8.5.18 SMELT

| 1. Waters | 2. Methods | 3. Season | 4. Size | 5. Daily Bag |
|------------|----------------|-----------|----------------|--------------|
| | | | Restrictions | Limit |
| All waters | Open-water and | No closed | No restriction | No limit |
| | ice fishing | season | | |

10-8.5.19 BLACK AND WHITE CRAPPIE

| 1.Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag limits |
|------------|----------------------------|------------------|----------------------------|---------------------|
| All waters | Open-water and ice fishing | No closed season | Minimum length of 8 inches | 25 ish, Combined |

10-8.5.20 YELLOW PERCH

| 1. Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag Limit |
|---|----------------------------|------------------|-------------------------|-----------------------|
| General Waters (except as listed below) | Open-water and ice fishing | No closed season | No restriction | 50 fish, |
| Lake Champlain | Open-water and ice fishing | No closed season | No restriction | No Limit |

Businesses may buy lawfully taken fish, with the approval of the Commissioner, pursuant to the Commercial angling rule set forth in $10\ V.S.A.\ APP\ \S\ 123.$

$\underline{\textbf{10}}~\underline{\textbf{8}}.5.21$ LARGEMOUTH AND SMALLMOUTH BASS

| 1. Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag limits |
|--|---|---|---|---|
| General Waters (except as listed below) | Open-water fishing | No closed season | No restriction | 5 fish |
| Lakes, Ponds and reservoirs | Open-water fishing (Ice fishing - see special provisions) | Second Saturday in June through Nov. 30 th . | Minimum length of 10 inches | 5 Fish |
| Lakes, Ponds and reservoirs (seasonally closed) | Open-water fishing: Catch and release with artificial lures and flies only | Second Saturday in April through the Friday before the Second Saturday in June, both dates inclusive. | All bass must be released | Zero - All bass must be immediately released |
| Lakes, Ponds and reservoirs (not seasonally closed) | Open-water fishing: Catch and release with artificial lures and flies only | Dec. 1 through the Friday before the Second Saturday in June, both dates inclusive. | All bass must be released | Zero - All bass must be immediately released |
| Seasonally Closed Waters - streams | Open-water fishing | Only when such rivers and streams are open to trout fishing except as prohibited by Section 9.2 | No restriction | 5 fish |
| Lake Morey, Fairlee | Open-water fishing (Ice fishing - see special provisions) | Second Saturday in June through Nov. 30 | Largemouth bass – Minimum length of 14 inches | 5 Fish |
| Lake Morey, Fairlee | Open-water fishing: Catch and release | Dec. 1 through the Friday before the | All bass must be released | Zero - All bass must be |

| | with artificial lures and flies only | Second Saturday in June, both dates inclusive. | | immediately released |
|--|---|---|--|---|
| Kent Pond, Killington And Baker Pond, Brookfield | Open-water fishing | Second Saturday in June through Nov. 30. | Largemouth Bass - protected slot: 10- 12 inches (all fish between 10 & 12 inches must be released) | 10 fish, only 1 fish greater than 12 inches. |
| Kent Pond, Killington And Baker Pond, Brookfield | Open-water fishing: Catch and release with artificial lures and flies only | Dec. 1 through the Friday before the Second Saturday in June, both dates inclusive. | All bass must be released | Zero - All bass must be immediately released |

<u>10-8</u>.5.22 WALLEYE

| 1. Waters | 2. Methods | 3. Season | 4. Size Restrictions | 5. Daily Bag limits |
|--|----------------------------|--|--|---|
| General Waters and Lake Champlain (except as listed below) | Open-water and ice fishing | First Saturday in May through March 15. | Minimum length of 18 inches | 3 Fish |
| Lake Carmi, Franklin | Open-water and ice fishing | First Saturday in May through March 15 | Minimum length of 15 inches Protected lengths- 17 to 19 inches (all fish between 17 & 19 inches must be released | 5 fish, provided only 1 is over 19 inches |
| Chittenden Reservoir, Chittenden | Open-water and ice fishing | June 1 through March 15 | Minimum length of 22 inches | 2 fish |

<u>10-8</u>.5.23 SAUGER

| 1. Waters | 2. Methods | 3. Season | 4. Size | 5. Daily Bag |
|----------------|-----------------|-----------|----------------|--------------|
| | | | Restrictions | limits |
| General Waters | Open-water | No open | Any fish taken | Zero – All |
| and Lake | and ice fishing | season | must be | Sauger taken |
| Champlain | | | immediately | must be |
| | | | released | immediately |
| | | | | released |

Spawning grounds for game fish-Generally

10-8.6 The below listed waters are declared spawning grounds for game fish and are hereby closed to the taking of fish from second Saturday in April through May 31 annually.

Chittenden County

- Joiner Brook, Bolton From the confluence of the Winooski River upstream approximately 1900 feet to the first falls.
- Pinneo Brook, Bolton From the confluence of the Winooski River upstream approximately 100 feet to the railroad crossing.
- Preston Brook, Bolton From the confluence of the Winooski River upstream approximately 2600 feet to the first falls.

Orleans County

- Black River From 600 feet below the falls at Old Harman Mill in Coventry upstream to the top of falls at Old Harman Mill in Coventry.
- Ware Brook From the downstream edge of the furthest downstream bridge / culvert on Back Coventry Road (TH #8 in Irasburg) upstream approximately one mile to top of the first major natural falls on Ware Brook.
- Alder (Stony) Brook From its confluence with the Black River upstream 3 1/2 miles to the outlet of Sargent Pond, in Coventry.
- Willoughby River From the confluence of the Brownington Branch of the Willoughby River in Brownington upstream to the downstream edge of the bridge on Vermont Route 58 in the village of Evansville (Brownington); and from the downstream edge of bridge on Tarbox Hill Road in Orleans Village upstream to the top of the natural falls upstream of the bridge on Tarbox Hill Road in Orleans Village.
- Dorin, Wells, Myers, Schoolhouse and Mill Brooks From mouth of brooks at Lake Willoughby upstream approximately 3/4 mile in Dorin Brook, all of Wells Brook, 1/2 mile in Myers Brook, 1/4 mile in the Schoolhouse Brook and, and 1/4 mile in Mill Brook and tributaries, all in Westmore. For identification purpose these brooks are arranged in order from north to south, and flow through Vermont Agency of Transportation structures on Route 5A number 10, 9, 8, 7 and 6, respectively.
- Brownington Branch of the Willoughby River in Brownington From its confluence at the Willoughby River extending upstream to the second road crossing on Brownington Chilafoux Road (TH #15). Said crossing is located approximately 2.4 miles from Brownington Center on Chilafoux Road (TH #15).

- Country Club Brook From its confluence with the Willoughby River extending upstream to Hollow Road (TH #14) in Barton.
- Porter Brook, Greensboro From Caspian Lake upstream to its headwaters. (1987, Fish and Wildlife Commissioner's Reg. No. 970, eff. April 1, 1987.)
- Johns River-From the downstream edge of the bridge on Beebe Road (TH #3) upstream approximately two tenths of a mile to the downstream edge of bridge on Elm Street (TH #2) in Derby.
- Outlet Brook- From the highway bridge near Echo Lake in Charleston upstream to the top of dam at outlet of Seymour Lake

Washington County

- Chase Brook From its confluence with the Dog River upstream approximately ½ mile to the top of the natural falls in Berlin.
- Ridley Brook, Duxbury From the confluence of the Winooski River upstream approximately 1700 feet to the first falls.

Windsor County

- Lilliesville Brook in the Town of Stockbridge from its confluence with the White River upstream to the 2nd bridge on the Lilliesville Brook Road.
- Locust Creek in Bethel from its confluence with the White River upstream to the 2nd bridge on Rt. 12.

10-8.7 The below named waters are closed from March 16 through May 31.

Chittenden County

- Lamoille River From the downstream edge of the bridge on Bear Trap Road in Milton (referred to as the West Milton Bridge upstream to the top of first dam (Peterson Dam) in Milton.
- Winooski River From the Winooski One Hydro dam west of Main Street (US 7) in Winooski and Burlington and extending downstream to the downstream side of the first railroad bridge.

Franklin County

Missisquoi River - From the top of the Swanton dam in the Village of Swanton downstream approximately 850 feet to the water treatment plant on the west side of the river, and downstream approximately 850 feet to the upstream end of the cement breakwater on the east side of the river. (1988, Fish and Wildlife Board Reg. No. 975, eff. April 7, 1988.)

10-8.8 The below named waters are closed from March 16 to the Friday before the 1st Saturday in May, both dates inclusive:

Franklin County

Missisquoi River - From the top of the Swanton Dam in the Village of Swanton extending downstream 5,120 feet to the Northwest corner (downstream) of the Riverside Cemetery and across the river to a pole on the Northeast bank.

10-8.9 The below named waters are closed to fishing year-round:

Orleans County

Clyde River - From 260 feet below the top of the abandoned Mill Dam immediately upstream of the Number 1, 2, 3 hydroelectric powerhouse in Newport City, upstream to the top of the abandoned Mill Dam immediately upstream of the Number 1, 2, 3 hydroelectric powerhouse in Newport City.

10-8.10 The below named waters are closed from October 1 through October 31:

Orleans County

Johns River-From the downstream edge of the first bridge (culvert) upstream of Lake Memphremagog on North Derby Road (TH #6) upstream to U.S. 5, in Derby.

Attachment 4: Baitfish Regulations as Presented to the Board for Second Vote

APPENDIX 141

TITLE 10 Conservation and Development APPENDIX CHAPTER 2. FISH Subchapter 2. Seasons, Waters, and Limits

§ 141. Baitfish Regulation

1.0 Authority

This regulation is adopted pursuant to 10 V.S.A. §4081(b). In adopting this regulation, the Fish and Wildlife Board is implementing the policy that the protection, propagation, control, management, and conservation of fish, wildlife and fur-bearing animals in this state is in the interest of the public welfare and that the safeguarding of this valuable resource for the people of the state requires a constant and continual vigilance.

In accordance with 10 V.S.A. §4082, this regulation is designed to maintain the best health, population and utilization levels of Vermont's fisheries.

In accordance with 10 V.S.A. §4083, this regulation establishes open seasons; establishes daily, season, possession limits and size limits; prescribes the manner and means of taking fish; and prescribes the purchase, sale, and use of baitfish.

2.0 Purpose

- 2.1 This regulation applies to fish used as bait. This regulation shall apply to all persons who take, possess, transport, use, purchase, or sell baitfish.
- 2.2 The purpose of this paragraph is to: a) conserve and protect the fish, and fisheries in the state, b) maintain the best health of species and natural ecological systems in the state, c) prevent the introduction or spread of diseases or parasites harmful to humans and wild species, and d) prevent the escape or release of non-native species or species that injure or compete with natural ecological systems and processes.

3.0 Definitions

- 3.1 "Application" means a specific form provided by the Department of Fish and Wildlife.
- 3.2 "Baitbox" means a receptacle used for holding or keeping baitfish alive for personal use. A legal baitbox shall not exceed 25 cubic feet in volume.

- 3.3 "Baitfish" means fish species and parts thereof, living or dead, used for the purpose of attracting and catching fish.
- 3.4 "Baitfish Zone" means a specific geographic area, where it is permissible to use baitfish in accordance with this regulation, and the area is described and depicted on a map by the Commissioner and posted on the Department website.
- 3.5 "Black-list Water" means a specific waterbody and any listed tributaries where the use of baitfish is restricted in accordance with this regulation, and the waterbody is described and depicted on a map by the Commissioner and posted on the Department website.
- 3.6 "Commissioner" means the Commissioner of the Vermont Department of Fish and Wildlife.
- 3.7 "Department" means the Vermont Department of Fish and Wildlife.
- 3.8 "Fish Hatchery" refers to any fish culture station, hatchery, or artificial rearing pond which grows or maintains baitfish for sale in Vermont.
- 3.9 "Ice Fishing" means a manner of fishing as described in 10 V.S.A App. \$122 Subsection 4.0.
- 3.10 "Open-water Fishing" means a manner of fishing as described in 10 V.S.A. App. § 122 Subsection 3.0.
- 3.11 "Permit" is a document from the Commissioner granting a Commercial Bait Dealers Permit.
- 3.12 "Waterbody" means any lake, pond, river, or stream including all tributaries upstream to the first barrier impassable to upstream fish movement.
- 3.13 "Commercially Preserved Baitfish" means baitfish which are chemically treated in a manner approved by the Department, and then packaged for retail sale.
- 3.14 "Personal Baitfish Harvest" and "Personally Harvested Baitfish" means baitfish taken for non-commercial use.

4.0 Personal Baitfish Harvest

- 4.1 Personally harvested baitfish from black-list waters shall not be used on any other waters or transported away from the black-list water from which they were harvested.
- 4.2 Personally harvested baitfish may be used on multiple waterbodies and may be transported away from the waterbody from which they were collected and retained for later use, provided that all of the following criteria are met:
 - 4.2.1 -The Personally harvested baitfish shall not be harvested from or have been previously used on a black-list water;
 - 4.2.2 Personally harvested baitfish shall only be used in the same baitfish zone they were harvested in; and
 - 4.2.3 A person using personally harvested baitfish on any waterbody that is different from the waterbody where the baitfish was harvested shall possess a wild baitfish endorsement in accordance with Subsection 6.0 of this regulation.
- 4.3 A person shall only harvest for use as bait those fish species listed under Subsection 8.1, 8.2, and 8.3, and 8.4 of this regulation.
- 4.4 Personally Harvested Baitfish shall only be taken by the following methods: a) minnow traps no longer than eighteen inches with an entrance for fish not exceeding one inch in diameter, b) dip nets, cast nets, and umbrella nets not exceeding a total of 51 square feet of mesh, or a seine net not exceeding 25 feet in length, c) Open-water/ice fishing by hook and line.
- 4.5 No person shall personally harvest baitfish in Seasonally Closed Waters for trout as listed in 10 V.S.A. App. § 122, Subsection 7.0, except during the open season for trout. Personal baitfish harvest in seasonally Closed Waters during open seasons for trout shall only be conducted by Openwater/ice fishing or the use of minnow traps no longer than eighteen inches with an entrance for fish not exceeding one inch in diameter.
- 4.6 All traps, nets, baitboxes or other holding receptacles capable of taking, holding or keeping live baitfish in public waters shall be marked with the name, address, and telephone number of the owner and user.
- 4.7 Baitfish may be held on the water in a baitbox as defined in Subsection 3.2 of this regulation.
- 4.8 Only a person with a valid wild baitfish endorsement (Subsection 6.0) may transport unused personally harvested baitfish, collected in non-black-list

waters, away from waters of the state for later use. Baitfish may be held in waters of the baitfish zone where they were harvested provided the water is not a black-list water or waters described in Subsection 12.0. Outside of the baitfish zone where harvested, the baitfish shall be kept in a closed container isolated from any inflow of lake, pond, or stream water, or outflows to such waters of the state. A person transporting unused personally harvested baitfish away from waters of the state for later use shall hold the baitfish in a closed container that does not contain surface waters of the state, and is isolated from any lake, pond or stream water, including any inflow or outflow to such waters of the state. This paragraph applies to all personally harvested baitfish with the following exception:

- 4.8.1 A person transporting personally harvested baitfish away from the waterbody where the baitfish was harvested may hold the baitfish in waters of the baitfish zone where they were harvested provided that water is not a black list water or waters described in Subsection 12.0 of this regulation; and
- 4.8.2 The person transporting and holding the baitfish has a wild baitfish endorsement in accordance with subsection 6.0 of this regulation.
- 4.9 No person shall personally harvest baitfish from any waterbody of the state that is defined as closed to baitfish harvest. The Department will maintain and make available a list of closed waters.
- 4.10 Fish eggs may be collected from legally harvested fish from Vermont waters, and used immediately as bait on the same water where taken unless that waterbody has been closed to baitfish collection. Personally harvested fish eggs shall not be transported and used in any waterbody other than the waterbody where the fish eggs were harvested. No person shall transport fish eggs away from a waterbody and return them to the same waterbody for use as bait unless they have been processed in a manner approved by the Department as described on the Department website.

5.0 Commercially Purchased Baitfish

- 5.1 No person shall import baitfish into the State of Vermont without a Fish Importation Permit, except as provided for in Subsections 5.8 and 5.9 of this regulation.
- 5.2 A person purchasing commercial baitfish shall retain a transportation receipt issued by a state-approved commercial bait dealer, authorizing transportation of baitfish overland. The receipt shall contain the following information: 1) A unique receipt identification number, 2) The name and

telephone number of the bait dealer, 3) time and date of sale, 4) species purchased, 5) quantity purchased, 6) baitfish zone or black-list water (limited to one) in which the baitfish will be used, and 7) the signature of purchaser.

- 5.3 A person in possession of commercially purchased baitfish shall only use those baitfish in the baitfish zone or black-list water recorded on the transportation receipt and shall retain and exhibit the receipt upon request of the Commissioner or the Commissioner's designee(s).
- 5.4 A transportation receipt shall be valid for 10 days from time and date of sale.
- 5.5 A person may transport unused commercially purchased baitfish away from waters of the state, and retain for later use in the same baitfish zone or black-list water as indicated on the baitfish transportation receipt, within 10 days from time and date of sale with the following prohibitions.
 - 5.5.1 A person shall not transport unused commercially purchased baitfish away from a black list water if the baitfish transportation receipt does not specify that black list water.
 - 5.5.2 A person shall not transport unused commercially purchased smelt for the use as bait away from a black list water.
- 5.55.6 A person transporting unused commercially purchased baitfish away from waters of the state for later use shallmay hold them in waters of the baitfish zone listed on the transportation receipt provided that the water is not a black-list water and the holding waters are not listed in Subsection 12.0 of this regulation. Outside of the baitfish zone or black-listed water listed on the transportation receipt, the commercially purchased baitfish shall be kept baitfish in a closed container isolated from any inflow of that does not contain surface waters of the state, and is isolated from any lake, pond, or stream water, including any inflow or outflow to such waters of the state. This paragraph applies to all commercially purchased baitfish with the following exception:
 - 5.6.1 A person transporting unused commercially purchased bait away from waters of the state may hold them in waters of the baitfish zone listed on the transportation receipt provided that the water is not a black list water and the holding waters are not listed in subsection 12.0 of this regulation.
- 5.65.7 Baitfish may be held beyond the 10 days period in a baitfish zone or black-list water provided they remain in the same waterbody in a baitbox in accordance with Subsection 3.2 of this regulation.

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- 5.75.8 A person may purchase baitfish from a New York baitshop for use in the Lake Champlain black-list water, provided the baitshop is Vermont-licensed, and the baitfish are accompanied by a Vermont-issued baitfish transportation receipt. For the purposes of this regulation, the Lake Champlain black-list water are defined in 10 V.S.A. Appendix § 122 Subsection 5.
- 5.85.9 A person may purchase baitfish from a New Hampshire baitshop for use in the Connecticut River black-list water, provided the baitshop is Vermont-licensed, and the baitfish are accompanied by a Vermont-issued baitfish transportation receipt. For the purposes of this regulation, the Connecticut River is defined as all waters of the river including the bays, setbacks, and tributaries, but only to the first highway bridge crossing said tributaries on the Vermont side.
- 5.95.10Commercially prepared and preserved baitfish and fish eggs available from retail stores may be purchased and used as bait, taken home, and kept for later use provided they are retained in the original packaging at all times.

6.0 Wild Baitfish Endorsement

- 6.1 Any person who wishes to use, sell, or transport personally harvested baitfish outside of the waterbody in which they were harvested must possess and exhibit upon request of the Commissioner or the Commissioner's designee(s) an annual wild baitfish endorsement as developed and administered by the Department in addition to their regular fishing or hunting/fishing combination license.
- 6.2 A person who wishes to obtain an annual-wild baitfish endorsement to their regular fishing or hunting/fishing combination license shall satisfactorily complete a wild baitfish certification course. Upon completion of the course, the person shall receive a special notation to their regular fishing or hunting/fishing combination license that indicates an annual wild baitfish endorsement.
- 6.3 An annual wild baitfish endorsement shall only be valid for the license year when the course was completed.
- 6.46.3 The annual wild baitfish certification course shall instruct participants regarding the requirements of the baitfish regulations and the vectors and risks associated with aquatic nuisance species and pathogens.

7.0 Commercial Bait Dealers

- 7.1 Any person who buys baitfish for resale or sells baitfish shall obtain a Commercial Bait Dealers Permit from the Commissioner except as provided for in Subsection 7.2. Only persons operating a place of business and offering baitfish for sale to the public may apply for and hold a Commercial Bait Dealers permit.
- 7.2 A Commercial Bait Dealers Permit is not required when:
 - 7.2.1 A person only sells commercially preserved baitfish as defined in Subsection 3.143 of this regulation.
 - 7.2.2 A person sells baitfish as specified by subsections 8.1 and 8.2 to another angler while on the same waterbody where the baitfish were personally harvested.
 - 7.2.23 A person sells personally harvested rainbow smelt and meets the following criteria:
 - 7.2.23.1 The personally harvested rainbow smelt shall be harvested, transported, and possessed in accordance with subsection 4.0 of this regulation.
 - 7.2.23.2 The buyer shall possess a valid Zone-specific Commercial Bait Dealers permit.
 - 7.2.23.3 The Commercial Bait Dealer's zone designation shall be the same zone from which the personally harvested rainbow smelt were harvested.
 - 7.2.23.4 The seller shall possess a valid annual wild baitfish endorsement in accordance with subsection 6.0 of this regulation.
 - 7.2.23,5 The seller shall complete and sign an affidavit, as specified by Subsection 7.11.1 of this regulation, attesting the waterbody of origin for any personally harvested rainbow smelt that are sold.
 - Commercial Bait Dealers shall only purchase and sell the baitfish species listed under Subsection 8.1 of this regulation. Commercial Bait Dealers may also sell rainbow smelt as bait, provided one of the following criteria
 - 7.3.1 Rainbow smelt are obtained from a fish hatchery approved by the Commissioner as set forth in Subsection 7.5 of this regulation and

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its subsections: or

7.3

- 7.3.2 Rainbow smelt are harvested by Open-water/ice fishing and sold for use on the same waterbody on which the Bait Dealer is located in accordance with Subsection 7.6 of this regulation and its subsections; or
- 7.3.3 Rainbow smelt are commercially purchased or harvested in accordance with Subsection 7.7 and its subsections.
- 7.4 Commercial Bait Dealers must declare in their permit application if they will be a Statewide baitfish dealer, Waterbody-Specific baitfish dealer, or a Zone-Specific baitfish dealer (limited to one).
- 7.5 Statewide baitfish dealers are prohibited from possessing, buying or selling wild-caught baitfish.
 - 7.5.1 Baitfish sold by Statewide baitfish dealers shall originate from a fish hatchery approved by the Commissioner.
 - 7.5.2 Statewide baitfish dealers shall hold or keep baitfish in waters drawn from a secure well, a municipal water source, or other water source approved by the Department.
 - 7.5.3 Baitfish sold by Statewide baitfish dealers may be used in waters throughout the state, except those waters listed in Subsection 12.0 of this regulation.
- 7.6 Waterbody specific baitfish dealers shall declare on their permit application the waterbody on which they are located.
 - 7.6.1 Waterbody-specific baitfish dealers may harvest wild baitfish only from the declared waterbody and offer them for sale and use only on the declared waterbody.
 - 7.6.2- The baitfish facilities of waterbody specific bait fish dealers shall discharge to their declared waterbody. The discharge treatment infrastructure shall adequately filter and disinfect water to the satisfaction of the Department. Note that this does not relieve the baitfish dealer from compliance with all other applicable requirements.
 - 7.6.3 No Waterbody-specific baitfish dealer shall harvest baitfish by netting in or on seasonally closed waters for trout as listed in 10 V.S.A. Appendix § 122 Subsection 7.0 unless otherwise permitted by their Commercial Bait Dealers Permit. Waterbody specific baitfish dealers shall not operate dip nets, cast nets, or umbrella nets exceeding 51 square feet of mesh, or a seine net exceeding

- 125 feet in length, for the purposes of taking fish for bait, unless otherwise permitted by their Commercial Bait Dealers Permit.
- 7.6.4 All traps, nets, baitboxes or other holding receptacles capable of taking, holding or keeping live baitfish in public waters shall be marked with the name, address, and telephone number of the owner and user.
- 7.6.5 No person shall commercially harvest baitfish on any waterbody of the state that is listed as closed to baitfish harvest. The Department will maintain and make available a list of closed waters.
- 7.7 Zone-specific baitfish dealers shall declare on their permit application the waterbody on which they are located, the baitfish zone in which they are located, the baitfish zone from which they intend to harvest, and purchase wild baitfish (limited to one) and the baitfish zone where the baitfish they sell may be used (limited to one).
 - 7.7.1 Zone-specific baitfish dealers shall be located in the baitfish zone which they intend to harvest, purchase, hold, and sell baitfish in, with the following exceptions:
 - 7.7.1.1 Baitfish may be purchased from a fish hatchery approved by the Commissioner outside of the Zone-specific dealer's baitfish zone and sold as Zone-specific baitfish.
 - 7.7.1.2 A Zone-specific baitfish dealer can be physically located outside of the baitfish zone in which they intend to sell baitfish for provided they hold or keep baitfish in water drawn from a secure water source as approved by the Department.
 - 7.7.2 Zone-specific baitfish dealers shall harvest and purchase wild baitfish only from the declared baitfish zone where the baitfish they sell may be used, and such baitfish shall be offered for sale and use only in the declared baitfish zone or black-list water within the declared baitfish zone.
 - 7.7.3 Zone-specific baitfish dealers may purchase wild rainbow smelt provided they meet the provisions of <u>S</u>ubsections 7.2.<u>23</u> and <u>7.11.1</u> of this regulation.
 - 7.7.4 Zone-specific baitfish dealers shall not harvest or purchase wild baitfish which are from or have been used previously on a black-

list water nor shall they hold or keep baitfish in waters drawn from a black-list water.

- 7.7.5 The baitfish holding facilities of zone-specific baitfish dealers shall discharge to the declared baitfish zone or to a water treatment infrastructure which adequately filters and disinfects water to the satisfaction of the Department. Note that this does not relieve the baitfish dealer from compliance with all other applicable requirements.
- 7.7.6 No zone-specific baitfish dealer shall harvest baitfish by netting in Seasonally Closed Waters for trout as listed in 10 V.S.A App § 122 Subsection 7.0, unless otherwise permitted by their Commercial Bait Fish Dealers Permit. No zone-specific baitfish dealer shall operate dip nets, cast nets, or umbrella nets that exceed 51 square feet of mesh, or a seine net that exceeds 125 feet in length, for the purposes of taking fish for bait, unless otherwise permitted by their Commercial Bait Dealers Permit.
- 7.7.7 All traps, nets, baitboxes, or other holding receptacles capable of taking, holding, or keeping live baitfish in public waters shall be marked with the name, address, and telephone number of the owner and user.
- 7.7.8 No person shall commercially harvest baitfish on any waterbody of the state that is defined as closed to baitfish harvest. The Department will maintain and make available a list of closed waters.
- 7.8 A Commercial Bait Dealer shall provide to each customer at the point of sale a copy of a transportation receipt containing the following information: 1) A unique receipt identification number, 2) The name and telephone number of the bait dealer, 3) time and date of sale, 4) species purchased, 5) quantity purchased, 6) baitfish zone or black-list water (limited to one) in which the baitfish will be used, and 7) the signature of purchaser.
- 7.9 A transportation receipt shall be valid for 10 days from time and date of sale.
- 7.10 Receipt books shall be provided to Commercial Bait Dealers by the Department.
- 7.11 Any holder of a Commercial Bait Dealers Permit shall maintain receipts or records for each lot of wholesaled hatchery-raised or wild-caught baitfish introduced into their shop. The receipts or records shall include: name,

address and telephone number of seller (for wholesaled baitfish), and date received, species identification, and quantity purchased or harvested, for wholesaled and wild-caught baitfish. The permit holder shall retain the receipts and records for at least one year after the date of sale or harvest. Receipts or records shall be provided to the Department immediately upon request.

7.11.1 Any holder of a Commercial Bait Dealers Permit that purchases personally harvested wild rainbow smelt from a person shall maintain a list of purchases which includes: name, address, telephone number, and signature of the seller, date of sale, quantity of fish purchased, and waterbody of origin. Such form will be provided by the Department to the Commercial Bait Dealer.

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8.0 Approved Species of Fish for use as Bait

8.1 Banded killifish Fundulus diaphanus Blacknose dace Rhinichthys atratulus Bluntnose minnow *Pimephales notatus* Common shiner Luxilus cornutus Creek chub Semotilus atromaculatus Eastern silvery minnow Hybognathus regius Emerald shiner Notropis atherinoides Fallfish Semotilus corporalis Fathead minnow Pimephales promelas Golden shiner Notemigonus crysoleucas Longnose dace Rhinichthys cataractae Longnose sucker Catostomus catostomus Mimic shiner Notropis volucellus Northern redbelly dace Phoxinus eos Spottail shiner *Notropis hudsonius* White sucker Catostomus commersoni

8.2 Rainbow smelt Osmerus mordax, may be taken only by Open-water/ice fishing and may be commercially sold as bait.

8.23 The following additional fish species, or parts thereof, may be taken only by Open-water/ice fishing and used for bait only in those waters where taken and shall not be transported alive from those waters; only Rainbow smelt may be commercially sold as bait:

Bluegill *Lepomis macrochirus*Pumpkinseed *Lepomis gibbosus*Rainbow smelt *Osmerus mordax*Rock bass *Ambloplites rupestris*

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Yellow perch Perca flavescens

8.34 Lake Champlain – In addition to Subsection 8.2, the following fish species, or parts thereof, may be taken only by Open-water/ice fishing in Lake Champlain and used as bait in Lake Champlain, as described in 10 V.S.A. App §122 Subsection 5.0, and may not be commercially harvested or sold as bait; Alewife may only be used/possessed if dead:

Alewife *Alosa pseudoharengus* White perch *Morone americana*

8.45 All other species of fish are prohibited for use as bait.

9.0 Commercial Bait Dealer Application Process

- 9.1 A person who wishes to obtain a Commercial Bait Dealers Permit shall apply to the Commissioner in writing on a form provided by the Department. The Department may require the applicant to submit such additional information as is necessary to determine that the permitted activities comply with the purposes of this regulation, including but not limited to fish health testing, and an analysis of the impact of the sale of baitfish on Vermont's fish species, fisheries, and natural ecosystems and processes.
- 9.2 If the application is deficient, the Department shall inform the applicant of the deficiencies and return the application within 30 days of receipt, along with any associated fee, to the applicant for revision and re-submission.
- 9.3 If the application is denied, the Commissioner shall, within 30 days of receipt of application, send the applicant a written denial setting forth the reasons for the denial.

10.0 Permit Compliance

- 10.1 The Permittee shall make the permit available upon request by Commissioner or Commissioner's designee. Premises and equipment used by persons to take, harvest, purchase, store, or sell in baitfish shall be accessible for inspection by the Commissioner and his or her designee. Samples for species determination or disease examination shall be provided immediately upon request.
- 10.2 Permittees shall provide the Department with additional information as requested on an annual basis or prior to the re-issuance of a new permit.

11.0 Permit Revocation

- 11.1 The Commissioner may revoke any permit for: any violation of a permit; failure to comply with this regulation; a violation of any regulations of the Board; a violation of the provisions of Part 4, Title 10, Vermont Statutes Annotated; or if the Commissioner determines that the revocation is necessary to protect fish or fisheries of Vermont.
- 11.2 The Commissioner shall comply with all applicable requirements of 3 V.S.A. Chapter 25, related to any permit revocation.
- 11.3 Appeals of the decisions of the Commissioner are subject to the Vermont Regulations of Civil Procedure.

12.0 Use of fish as bait

The use of fish in any form whether alive or dead for bait in fishing is prohibited in:

Adams Reservoir, Woodford;

Beaver Pond, Holland;

Beebe Pond, Sunderland;

Big Mud Pond, Mt. Tabor;

Blake Pond, Sutton;

Bourn Pond, Sunderland;

Branch Pond, Sunderland;

Cow Mountain Pond, Granby;

Griffith Lake, Mt. Tabor;

Jobs Pond, Westmore;

Lewis Pond, Lewis;

Little Rock Pond, Wallingford;

Martins Pond, Peacham;

McIntosh Pond, Royalton;

North Pond, Chittenden;

Notch Pond, Ferdinand;

Red Mill Pond, Woodford;

Sterling Pond, Cambridge;

South America Pond, Ferdinand;

Stratton Pond, Stratton;

Unknown Pond, Averys Gore;

Unknown Pond, Ferdinand

and any additional waters created or reclaimed by the Department. This regulation shall be posted at all waters affected.

<u>VERMONT FISH & WILDLIFE DEPARTMENT MIGRATORY GAME BIRD</u> SEASONS PROPOSAL

2019 PREVIEW

Summary of Issues for Consideration:

The majority of Vermont's waterfowl season is driven by the federal framework for the Atlantic Flyway. Below are a few issues that must be decided for the 2019 hunting season. The Department would like the Board to consider the following:

- Hold the liberal season allowed under the federal framework related to season lengths and daily bag limits. The Board has the option to be more conservative.
- For the 2019 Duck Season.
 - Open the 2019 duck season on a Thursday, October 10. This year is scheduled to be a Wednesday opening, following our tradition of two Wednesdays and a Saturday opening schedule. It is also consistent with hunter preferences of moving to alternating year approach to Wednesday and Saturday openings. We recommend Thursday to coincide with the goose season.
 - o Interior Zone: October 10 and run through December 8.
 - o Lake Champlain Zone: October 10 Nov. 1 and Nov. 23 Dec. 29.
 - o Changes to the duck bag limits
 - Decrease the northern pintail daily bag limit from two to one daily.
 - Decrease the mallard daily bag limit from four to two (1 hen) daily.
- For the 2019 Goose Seasons
 - Open the resident Canada goose season September 1st and continue through September 25.
 - o Open the migratory Canada goose season on October 10.
 - Opening the Snow goose season on October 1.
 - o Decrease the migrant Canada goose season from 50 to 30 days.
 - o Reduce the daily bag limit for the migrant Canada goose season from three to two daily.
- Decrease the brant season from 60 to 30 days.
- Hold youth hunting weekend September 28-29.
- Hold woodcock/snipe season: October 1- November 14.
- Be aware of changes to Mud Creek and Dead Creek WMAs controlled hunt operations.

Department Recommendations:

Table 1.

2019-2020 WATERFOWL SEASON RECOMMENDATION

LAKE CHAMPLAIN ZONE

| | SEASON TYPE | SEASON LENGTI | | DAILY <u>LIMIT</u> | POSSESSION <u>LIMIT</u> |
|---------------|----------------------|--------------------|--|-----------------------|----------------------------|
| DUCKS * | Split | 60 Days | Oct. 10 - Nov. 1 & Nov 23 - Dec. 29 | 6 | 18 |
| MERGANSERS * | Split | 60 Days | Oct. 10 - Nov. 1 & Nov 23 - Dec. 29 | 5 | 15 |
| COOTS | Split | 60 Days | Oct. 10 - Nov. 1 & Nov 23 - Dec. 29 | 15 | 45 |
| GEESE | | | | | |
| Canada Geese | Straight Straight | 25 Days 30 Days | Sept. 1 - Sept. 25 Oct. 10 - Nov. 8 | 8 2 | 24 6 |
| Snow Geese ** | Split | 107 Days | Oct. 1 - Dec.31, 2019 | 25 | NONE |
| | Straight(CO) | | Feb. 25 – Mar. 10, 2020 Mar. 11 – Apr. 24, 2020 | | NONE |
| Brant | Straight | 30 Days | Oct. 10 – Nov. 8 | 2 | 6 |

SHOOTING HOURS - All Waterfowl - All Days - ½ hour before sunrise to sunset

CO: Conservation Order

^{*} Federal species restrictions apply.

^{**} Includes blue geese also.

Table 2.

2019-2020 WATERFOWL SEASON RECOMMENDATION

VERMONT INTERIOR ZONE

| | SEASON <u>TYPE</u> | SEASON <u>LENGTH</u> | INCLUSIVE DATES | DAILY <u>LIMIT</u> | POSSESSION <u>LIMIT</u> |
|---------------|-----------------------|-------------------------|--|-----------------------|----------------------------|
| DUCKS * | Straight | 60 Days | Oct. 10 - Dec. 8 | 6 | 18 |
| MERGANSERS * | Straight | 60 Days | Oct. 10 - Dec. 8 | 5 | 15 |
| COOTS | Split | 60 Days | Oct. 10 - Dec. 8 | 15 | 45 |
| GEESE | | | | | |
| Canada Geese | Straight Straight | 24 Days 30 Days | Sept. 1 - Sept. 25 Oct. 10 - Nov. 8 | 8 2 | 24 6 |
| Snow Geese ** | Straight | 107 Days | Oct. 1 - Dec.31, 2019 | 25 | NONE |
| | Straight(CO) | | Feb. 25 – Mar. 10, 2020 Mar. 11 – Apr. 24, 2020 | | NONE |
| Brant | Straight | 30 Days | Oct. 10 – Nov. 8 | 2 | 6 |

SHOOTING HOURS - All Waterfowl - All Days - ½ hour before sunrise to sunset

CO: Conservation Order

^{*} Federal species restrictions apply.

^{**} Includes blue geese also.

Table 3.

2019-2020 VERMONT MIGRATORY GAME BIRD HUNTING SEASONS
(regulations in effect September 1, 2019 through April 24, 2020)

| Species | <u>Lake Champlain</u> <u>Zone</u> | Interior Vermont Zone | Connecticut River Zone |
|-------------------------------------|---|--|--|
| Ducks, Coots and Mergansers | Oct. 10 – Nov. 1 Nov. 23 – Dec. 29 | Oct. 10 – Nov. 8 | Oct. ? – Nov. ? Nov. ? – Dec. ? |
| Canada Geese | Sept. 1 – Sept. 25 Oct. 10 – Nov. 8 | Sept. 1 – Sept. 25 Oct. 10 – Nov. 8 | Sept. ? – Sept. ? Oct. ?2 – Nov. ? Nov. ? – Dec. ? |
| Snow Geese (includes blue geese) | Oct. 1 - Dec. 31, 2019 Feb. 25 - Mar. 10, 2020 | Oct. 1 - Dec. 31, 2019 Feb. 25 - Mar. 10, 2020 | Oct. ? – Dec. ? |
| Brant | Mar.11 – Apr 24, 2020 Oct. 10 – Nov. 8 | Mar.11 – Apr 24, 2020 Oct. 10 – Nov. 8 | Oct. ? - Oct. ? |
| Woodcock | Statewide | Oct. 1 – Nov. 14 | |
| Common Snipe | Statewide | Oct. 1 – Nov. 14 | |

Youth Waterfowl Hunting Weekend - September 28 & 29

BAG LIMITS

The daily bag limit is the maximum number of birds of each species that any person may take (or possess in the field) during any one day. The possession limit is three times the daily bag limit for all waterfowl species except snow geese.

| Species | Daily Limit | Possession Limi | |
|-------------------------|-------------|-----------------|--|
| | | | |
| Ducks * | 6 | 18 | |
| Mergansers ** | 5 | 15 | |
| Coot | 15 | 45 | |
| Canada Geese | | | |
| September season | | | |
| Lake Champlain Zone | 8 | 24 | |
| Interior Vermont Zone | 8 | 24 | |
| Connecticut River Zone | 5 | 15 ? | |
| Oct Dec. season | | | |
| Lake Champlain Zone | 2 | 6 | |
| Interior Vermont Zone | 2 | 6 | |
| Connecticut River Zone | 2 | 6 | |
| Snow Geese | 25 | No limit | |
| Mar. 11 – Apr. 24, 2020 | 15 | No limit | |
| Brant | 2 | 6 | |
| Woodcock | 3 | 9 | |
| Common Snipe | 8 | 24 | |

^{*} The daily limit of 6 ducks may include no harlequin, and no more than 2 mallards (1 of which may be hens), 2 black duck, 3 wood ducks, 1 pintails, 2 canvasback, 2 redheads, 2 scaup, 4 scoters, 4 eiders, and 4 long-tailed duck.

^{**} The daily limit of 5 mergansers is in addition to the regular duck bag, and together may include no more than 2 hooded mergansers.

Background

In 2016 the Department began fully reviewing the migratory game bird season options with the Board without being under a very short time constraint. As part of the United States Fish and Wildlife Service (USFWS) of the Department of Interior's retrospective regulatory review, they developed a schedule for migratory game bird hunting regulations that was more efficient and provided season dates much earlier than was possible under the old process. There are no longer seasons referred to as "early" (September Canada Goose, Woodcock and Snipe seasons) and "late" (migrant Canada Goose, Snow Goose, Brant and Duck seasons) season frameworks and selections to work through. With the changes that occurred within the federal framework setting process, we now combine late and early season selections into a single process. Under the current process, USFWS will develop proposed hunting season frameworks for a given year in the fall of the prior year and finalize those frameworks a few months later. We also have a final selection deadline of April 30th instead of August, allowing us more time to announce seasons to hunters and to have the syllabus with regulations easily printed and distributed prior to the start of any migratory game bird hunting season.

Migratory game bird managers currently base the migratory bird population estimates and recommendations on predictions derived from long-term biological information and harvest strategies instead of current year surveys.

Beginning in 2015 the Board was given authority by Legislature to set the migratory bird hunting regulations by process instead of rule. Part of Title 10 § 4082 reads:

- (b)(1) Except as provided for under subdivision (2) of this subsection, the Board annually may adopt rules relating to the management of migratory game birds, and shall follow the procedures for rulemaking contained in 3 V.S.A. chapter 25. For each such rule, the Board shall conduct a hearing but, when necessary, may schedule the hearing for a day before the terms of the rule are expected to be determined.
- (2) Beginning with the 2015 hunting season, the Board may set by procedure the daily bag and possession limits of migratory game birds that may be harvested in each Waterfowl Hunting Zone annually without following the procedures for rulemaking contained in 3 V.S.A. chapter 25. The annual daily bag and possession limits of migratory game birds shall be consistent with federal requirements. Prior to setting the migratory game bird daily bag and possession limits, the Board shall provide a period of not less than 30 days of public notice and shall conduct at least two public informational hearings. The final migratory game bird daily bag and possession limits shall be enforceable by the Department under its enforcement authority in part 4 of this title.

Tables 4 and 5 provide background information on past migratory game bird hunting seasons. Table 4 shows the hunting seasons approved during 2018 and is provided as a reference while considering bag limits and the seasons frameworks for 2019. Appendix B provides the history, 1942-2018, of Vermont's waterfowl seasons broken down into season type, season length, dates and bag limits. This may help one's understanding of how Vermont arrived at our current zones and season types.

Table 5 provides a historic look at waterfowl hunter participation and estimated harvest levels. Vermont waterfowl stamps sold and the number of individuals that registered with the Harvest Information Program (HIP) are also listed on Table 2. HIP is a method used to generate more reliable estimates of hunting activity and of the number of all migratory birds harvested. The HIP program numbers include youth and adult waterfowl hunters, woodcock and snipe hunters. Only adult waterfowl hunters, 16 years of age and older, are required to purchase the state waterfowl stamp. The Department will populate the remaining portions of the table this summer after the USFWS examines wings collected randomly from hunters and harvest estimates are completed. Vermont currently has three waterfowl zones (Figure 1):

- Lake Champlain Zone that we share with New York. Vermont sets the dates for this zone.
- Interior Zone that is entirely within Vermont.
- Connecticut River Zone that we share with New Hampshire. New Hampshire sets the dates for this zone as an extension of their inland zone.

Under Vermont's current three hunting zones, Vermont is allowed to split any waterfowl season once to create two hunting periods. Vermont currently has sixty days to divide between the two duck hunting periods in an effort to accommodate the diverse desires of the variety of Vermont waterfowl hunters. The hunting zones were also set up to take into consideration the differences in the physiographic regions of the state and the climatic differences each has. Vermont's next opportunity to adjust zone boundaries will occur in 2021. More information about establishing zones and splits for regular duck seasons is located at the end of this proposal, (Appendix C).

Public Waterfowl Hunter Survey

Throughout the development of the season recommendations, the Department relied on findings from the Fall 2015 Waterfowl Hunter Survey Summary. Waterfowl Hunter Survey Summary Memo sent to the Board in 2015 can be found in Appendix E. The final summary was delivered to the Department in June of 2017. Department staff weighed the survey results heavily while considering recommendations. As stated in the summary, "survey responses came from waterfowl hunters with a broad background that varied greatly by age, hunting experience, educational and economic background. Therefore, our results and summaries represent the variation in the entire waterfowl hunting user group, not just those who are vocal at public meetings". We used the results to:

- Decide when to place the majority of duck hunting days by month. Most hunters prefer October to have the most waterfowl hunting opportunity.
- Determine what day of the week to open the season. Regardless of hunting zone, few (less than 12%) hunters do most of their hunting on weekdays. Hunters either hunt weekends or split their time equally between weekdays and weekend hunting.
- Determine when to have the opening day of duck season, Saturday or weekday.
- Determine what week to recommend opening the season. Vermont hunters chose the second week in October as their preferred opening week for ducks and geese.
- Decide which zones to propose for splits and in which seasons. "Goose hunters in the Lake Champlain zone, regardless of residency, chose straight season more than split seasons. For the Interior Vermont zone, Vermont residents chose straight seasons most commonly for duck and goose seasons.

• Decide on the length of the Lake Champlain Zone split. Vermont hunters preferred a two-week season split length if one is to be used.

2019 Migratory Game Bird Season Framework

Tables 6 and 7 provide the USFWS season frameworks for the 2019 duck and goose seasons, respectively, the latter including other migratory game birds as well. Potential changes from 2018 hunting seasons shown on Table 6 include; reducing the bag limit of northern pintail from two to one bird in the daily bag limit, decreasing the daily bag limit on mallards from four to two (1 hen) daily, reducing the brant season from 60 to 30 days and reducing the migrant Canada goose season from 50 to 30 days while reducing the daily bag limit from three to two. Tables 1 and 2 provide the Department's 2019 hunting season proposal as a starting point for the Board to consider.

2019 Duck Season: The 2019 duck season options allow the opportunity to utilize a 60-day season within the dates of September 21, 2019 to January 31, 2020. The allowed daily bag limit is six birds, with species specific limits listed on Table 6. Vermont may allow a possession limit of 18 ducks total. The Board may be more restrictive on the length of the season and bag limits if desired, but the Board cannot set regulations more liberal. The Department recommends taking the liberal hunting option allowed under the federal framework.

The Board has also traditionally held the youth waterfowl weekend the last weekend in September. The Department has withheld any fishing tournament permits for that weekend to reduce conflicts between anglers and youth waterfowlers. The youth weekend must be within 14 days of either end of the federal framework dates.

With updated information from the 2015 Waterfowl Hunters Survey, the Department would like to recommend changing the opening day schedule to a weekday (usually Wednesday) and Saturday on an every other year basis. The survey showed Lake Champlain zone hunters preferred a Wednesday opening day 45%, Saturday 33%, and no preference 22%. The Interior zone hunters preferred opening day to be Wednesday 44%, Saturday 26%, and no preference 30%. An increase in Saturday opening days may allow additional school aged hunters to participate prior to the early season burn out period. One of the Department's goals is to increase the participation of youth hunters and younger adults that may not have leave time built up to allow for mid-week participation.

The mallard has been one of the most abundant duck species in eastern North America for decades. In the past 20 years, eastern mallards have been on the decline. Spring surveys conducted throughout eastern Canada and northeastern U.S. every year since 1998 have provided reliable annual estimates of the breeding population size of eastern mallards. These surveys indicate that mallard numbers in eastern Canada have been relatively stable, but they have decreased steadily in northeastern U.S., declining by about 38% since 1998, (N.E. mallards from 850,000 to 525,000). When the two survey areas are combined, the total breeding mallard population in eastern North America is declining at a steady rate of approximately 1% per year, (total Eastern mallard from 1.3 million to 1 million). Based on banding data, about 60% of the mallards harvested in Atlantic Flyway states are northeastern U.S. birds. Vermont's derivation

of harvest showed 38% of mallard harvested in Vermont originated in eastern Canada and Maine, 61% arrived from the Atlantic flyway northeast plot states, (Virginia to New Hampshire) and 1% came from other areas. The reduced mallard population is reflected in harvest estimates from the annual USFWS survey of waterfowl hunters; from 1998 – 2016 the mallard harvest in the U.S. portion of the Atlantic Flyway has decreased by about 40%.

This year's mallard daily bag limit changes, from four to two birds daily, are intended to stabilize the eastern mallard population. Should the population start to grow again, biologists will have a better understanding of the effects of harvest on the population. Meanwhile, biologists from the Atlantic Flyway and USFWS will keep trying to determine what caused the mallard decline in northeastern U.S. and if that mechanism can be mitigated.

Over the past five years the Atlantic Flyway Council and USFWS have been developing a new approach to duck harvest management by using a Multi-Stock Adaptive Harvest Management strategy based on the status of 4 species (green-winged teal, wood ducks, ring-necked ducks and goldeneyes) in lieu of relying solely upon the status of eastern mallards. The strategy will allow for liberal seasons on species above long-term goals, while maintaining restrictions on populations that we wish to allow growth in.

2019 Goose, Brant, Mergansers, Coots. Snipe, and Woodcock Seasons: Table 7 lays out the season options for geese, brant, mergansers, coots, snipe and woodcock. The available season lengths, outside dates for the seasons, daily bag limits and possession limits are broken down by species. The options for brant is dependent on the mid-winter survey numbers that were flown the first week in January.

We often receive requests to open the migratory Canada goose season in early October. We are not allowed to open the season on migratory Canada geese until October 10th to reduce hunting pressure on the Atlantic population that is flying through the state. Prior to 2010 we were unable to open the season until October 20th. This change came about because of efforts pursued by Vermont and some other New England states. The number of breeding pairs of the Atlantic Population of Canada geese decreased 30% last year from 161,200 to 122,200, while the total number of birds has decreased from 1.35 million to 738,800 from 2003 to 2018. This was a slight increase from 2017, (705,900). The overall population has seen an annual decrease of 4% per year, primarily due to low production caused by weather conditions during the nesting and hatching periods. The 2019 migratory Canada goose season is being reduced from a 50-day season to 30-days and the daily bag limit is reduced from 3-birds to 2-birds daily.

2019 Youth Waterfowl Hunting Days: The Department may select two days per duck-hunting zone, designated as "Youth Waterfowl Hunting Days," in addition to the regular duck seasons. The days must be held outside any regular duck season on a weekend, holiday, or other non-school days when youth hunters would have the maximum opportunity to participate. The days may be held up to 14 days before or after any regular duck-season frameworks or within any split of a regular duck season, or within any other open season on migratory birds. The daily bag limits may include ducks, geese, mergansers and coots, and would be the same as those allowed in the regular season. Flyway species and area restrictions would remain in effect.

The age of youth hunter eligibility changed in 2016 at the federal level, which allowed the Board to consider changing the youth waterfowl hunter age. States were allowed to use their established definition of age for youth hunters. However, youth hunters may not be 18 years of age or older. In addition, an adult at least 18 years of age must accompany the youth hunter into the field. This adult may not duck hunt but may participate in other seasons that are open on the special youth day. Youth hunters 16 years of age and older must possess a Federal Migratory Bird Hunting and Conservation Stamp (also known as Federal Duck Stamp). In 2016 Vermont changed the youth waterfowl hunters age to 17 and younger. Vermont also requires all hunters 16 years of age and older to have a state duck stamp. Historically, Vermont has been more restrictive than the federal law, by not allowing adults to hunt other species on youth hunting weekends while in the presence of a youth hunter who is hunting under the youth weekend regulations (ex. resident Canada geese). In some years, the end of the resident Canada goose season overlaps the youth waterfowl hunting weekend. This will not occur in 2019 if we choose September 28th and 29th as the youth days.

Special Falconry Regulations: Falconry is a permitted means of taking migratory game birds in any State meeting Federal falconry standards in 50 CFR 21.29. These States may select an extended season for taking migratory game birds in accordance with the following: Extended Seasons: For all hunting methods combined, the combined length of the extended season, regular season, and any special or experimental seasons must not exceed 107 days for any species or group of species in a geographical area. Each extended season may be divided into a maximum of 3 segments. Framework Dates: Seasons must fall between September 1 and March 10.

Daily Bag Limits: Falconry daily bag limits for all permitted migratory game birds must not exceed 3 birds, singly or in the aggregate, during extended falconry seasons, any special or experimental seasons, and regular hunting seasons in all States, including those that do not select an extended falconry season.

Regular Seasons: General hunting regulations, including seasons and hunting hours, apply to falconry in each State listed in 50 CFR 21.29. Regular season bag limits do not apply to falconry. The falconry bag limit is not in addition to gun limits.

Vermont has traditionally run the falconry season during any open migratory game bird season. Last year falconers had the opportunity to begin on September 1st with the resident Canada goose season and ended their season on December 31th. A three-bird daily bag limit was in effect.

Public Input and Outreach

The Department, in conjunction with the Board, is currently planning to hold two public meetings in 2019. Meetings are tentatively planned for the evenings of March 12 and 14, beginning at 6:30pm, in Whitehall, New York and Winooski, Vermont, respectively. During the meetings, the Department will review the season options, recommendations, current biological information, answer questions, and record public comments for the Board. The Department also intends to break the meeting into small groups and have staff and board members act as facilitators for the break out groups. The Department will also supply comment cards that can be

dropped off at the end of the meeting for those that do not wish to make public comments verbally. The public will also be encouraged to submit comments directly to any Board member or email them to the Department. Meeting times and places will be advertised on the Department website and through news releases.

After the Board approves final season dates and bag limits (tentatively scheduled for first Wednesday in April), the Department will submit selections to the U.S. Fish and Wildlife Service by April 30th and the information will be sent to a printer for production of the 2019 syllabus of state and federal hunting regulations. The early decision deadlines will allow the Department to have the syllabus available to the public in print version by August 1st, a full month prior to any migratory bird hunting season. Approved seasons will be placed on the Department's website within days after the Board's vote.

Table 4. 2018 Migratory Bird Hunting Seasons

2018-2019 VERMONT MIGRATORY GAME BIRD HUNTING SEASONS (regulations in effect September 1, 2018 through April 26, 2019)

| Species | Lake Champlain Zone | Interior Vermont Zone | Connecticut River Zone |
|-----------------------------|--|--|--|
| Ducks, Coots and Mergansers | Oct. 13 – Oct. 21 Nov. 10 – Dec. 30 | Oct. 13 – Dec. 11 | Oct. 2 – Nov. 4 Nov. 21 – Dec. 16 |
| Canada Geese | Sept. 1 – Sept. 25 Oct. 13 – Dec. 1 | Sept. 1 – Sept. 25 Oct. 13 – Dec. 1 | Sept. 1 – Sept. 25 Oct. 2 – Nov. 4 Nov. 21 – Dec. 16 |
| Snow Geese | Oct. 1 - Dec. 31, 2018 | Oct. 1 - Dec. 31, 2018 | Oct. 2 – Dec. 16 |
| (includes blue geese) | Feb. 26 - Mar. 10, 2019 | Feb. 26 - Mar. 10, 2019 | Mar. 11-Apr. 26, 2019 applies only to land, not CT |
| Brant | Mar.11 – Apr 26, 2019 Oct. 6 – Dec. 4 | Mar.11 – Apr 26, 2019 Oct. 6 – Dec. 4 | River waters Oct. 2 - Nov. 4 Nov. 21 - Dec. 16 |
| Woodcock | Statewide Oc | t. 1 – Nov. 14 | |
| Common Snipe | Statewide Oc | et. 1 – Nov. 14 | |

Youth Waterfowl Hunting Weekend – September 29 & 30

BAG LIMITS

The daily bag limit is the maximum number of birds of each species that any person may take (or possess in the field) during any one day. The possession limit is three times the daily bag limit for all waterfowl species except snow geese.

| Species | Daily Limit | Possession Limit |
|-------------------------------|-------------|------------------|
| Ducks * | 6 | 18 |
| Mergansers ** | 5 | 15 |
| Coot | 15 | 45 |
| Canada Geese | | |
| September season | | |
| Lake Champlain Zone | 8 | 24 |
| Interior Vermont Zone | 8 | 24 |
| Connecticut River Zone | 5 | 15 |
| Oct Dec. season | | |
| Lake Champlain Zone | 3 | 9 |
| Interior Vermont Zone | 3 | 9 |
| Connecticut River Zone | 2 | 6 |
| Snow Geese | | |
| Oct. 11, 2018 – Mar. 10, 2019 | 25 | No limit |
| Mar. 11, 2019 – Apr. 26, 2019 | 15 | No limit |
| Brant | 2 | 6 |
| Woodcock | 3 | 9 |
| Common Snipe | 8 | 24 |

^{*} The daily limit of 6 ducks may include no harlequin, and no more than 4 mallards (2 of which may be hens), 2 black duck, 3 wood ducks, 2 pintails, 2 canvasback, 2 redheads, 2 scaup, 4 scoters, 4 eiders, and 4 long-tailed duck.

^{**} The daily limit of 5 mergansers is in addition to the regular duck bag, and together may include no more than

² hooded mergansers

Table 5. Vermont Waterfowl Hunting and Harvest Data Comparisons (Lake Champlain and Interior **Vermont Zones Combined**)

| | Federal Duck Stamp Sales | Vermont Duck Stamp Sales | Vermont HIP Registration | No. of Active Adult Duck | Average Seasonal Duck Bagged | Total Season Estimated Duck | Total Season Estimated Canada | Total Season Estimated Snow |
|------|-----------------------------------|--------------------------|--------------------------------|--------------------------|---------------------------------------|--------------------------------------|--|--------------------------------------|
| | Buies | Buies | | Hunters | Per | Harvest | Goose | Goose |
| | | | | | Hunter | | Harvest | Harvest |
| 1994 | 4,821 | 7,998 | | 3,942 | 5.23 | 22,600 | 1,900* | 2,000 |
| 1995 | 4,695 | 6,715 | | 3,955 | 6.97 | 31,700 | 0* | 1,800 |
| 1996 | 4,812 | 7,023 | | 3,807 | 9.35 | 40,000 | 0* | 3,600 |
| 1997 | 3,791 | 6,644 | | 2,981 | 7.85 | 21,600 | 0* | 1,300 |
| 1998 | 4,345 | 6,725 | | 3,132 | 5.78 | 24,000 | 2,700 | 3,300 |
| 1999 | 4,542 | 6,320 | | 1,600 | 11.9 | 25,000 | 4,100 | 1,700 |
| 2000 | 4,741 | 5,418 | | 1,700 | 10.4 | 17,700 | 3,600 | 4,200 |
| 2001 | 4,824 | 5,685 | | 1,700 | 10.4 | 17,600 | 4,300 | 2,200 |
| 2002 | 5,201 | 5,722 | | 2,600 | 9.6 | 26,800 | 7,100 | 1,300 |
| 2003 | 5,242 | 6,012 | | 1,300 | 12.6 | 16,300 | 3,600 | 3,400 |
| 2004 | 4,723 | 6,242 | | 2,600 | 9.3 | 24,300 | 7,100 | 1,700 |
| 2005 | 4,956 | 5,682 | | 2,400 | 10.6 | 25,400 | 9,300 | 400 |
| 2006 | 3,391 | 5,581 | | 2,000 | 9.9 | 19,600 | 7,800 | 100 |
| 2007 | 3,193 | 6,137 | | 2,300 | 9.2 | 16,700 | 6,300 | 500 |
| 2008 | 3,391 | 5,746 | \$5-\$7.50 | 2,900 | 11.9 | 34,800 | 12,300 | 2,100 |
| 2009 | not | 6,051 | _ | 2,400 | 10.7 | 25,500 | 11,500 | 90 |
| | available | | | | | | | |
| 2010 | not | 6,065 | 5,404*** | 2,700 | 8.5 | 22,900 | 9,600 | 0 |
| | available | Last Stamp | | | | | | |
| 2011 | not | 4,872 | 4,949*** | 2,600 | 9.0 | 23,000 | 8,300 | 134 |
| | available | First Tag | | | | | | |
| 2012 | not | 5,882 | 6,283*** | 2,100 | 10.0 | 20,500 | 8,600 | 34 |
| | available | | . = | | | | | |
| 2013 | not | 6,436 | 8,719*** | 4,000 | 8.0 | 31,900 | 9,600 | 0 |
| 2011 | available | | 0.010/04/04 | 2.600 | | 15.000 | 10.000 | 4.5 |
| 2014 | not | 6,635 | 9,913*** | 2,600 | 6.8 | 17,800 | 12,300 | 46 |
| 2015 | available | C 244 | 11 100444 | 2.000 | 5 0 | 14.700 | 6.722 | 0 |
| 2015 | not | 6,244 | 11,122*** | 2,600 | 5.8 | 14,700 | 6,733 | 0 |
| 2016 | available | 6.016 | 18,598*** | 2 400 | 5.2 | 17.600 | 0 000 | 0 |
| 2016 | not | 6,016 | 18,398*** | 3,400 | 5.2 | 17,600 | 8,800 | 0 |
| 2017 | available | 5.054 | 7,006*** | 2.500 | 7.9 | 19,900 | 15,900 | 0 |
| 2017 | not available | 5,954 | 7,000 | 2,500 | 1.9 | 19,900 | 13,900 | U |
| 2018 | not | 5,725 | ? | To date | To date | To date not | To date | To date |
| 2010 | available | 3,143 | ' | not | not | available | not | not |
| | available | | | available | available | available | available | available |
| | | | | avanabic | avanable | | available | avanabic |

^{*} Harvest restrictions in effect ** Figures Preliminary

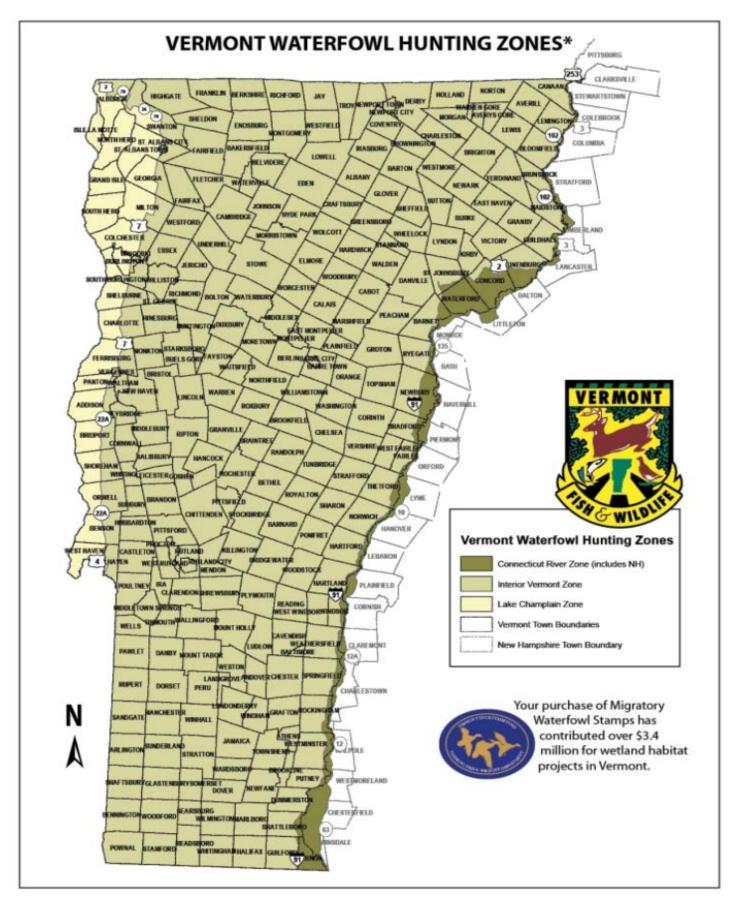


Figure 1. Vermont waterfowl hunting zones

Table 6. USFWS Framework for 2019 Duck Seasons*

| LENGTH | OUTSIDE DATES | DAILY BAG | POSSESSION LIMIT** |
|---------------|--------------------|--------------|-----------------------|
| 60 Days | Sept. 21 – Jan. 31 | 6 | 18 |

| <u>SPECIES</u> <u>RESTRICTIONS</u> - | Daily Bag |
|--------------------------------------|----------------|
| MALLARD | 2 (only 1 hen) |
| WOOD DUCK | 3 |
| BLACK DUCK | 2 |
| PINTAIL | 1 |
| REDHEAD | 2 |
| SCAUP | 2 |
| SCOTER | 4 |
| EIDERS | 4 |
| LONG-TAILED DUCK | 4 |
| CANVASBACK | 2 |
| HARLEQUIN | CLOSED |
| MOTTLED DUCK | 1 |
| FULVOUS WHISTLING DUCK | 1 |
| HOODED MERGANSER | 2 |

^{*} Apply to Lake Champlain, Interior Vermont, and Connecticut River Zones.

SHOOTING HOURS - ½ HOUR BEFORE SUNRISE TO SUNSET (all days – all species)

^{**} Possession limit is equal to three times the daily bag limit for these species.

Table 7. USFWS Framework for 2019 Geese, Brant, Merganser, Coot, Snipe, and Woodcock Seasons

| | SEASON | OUTSIDE | | POSSESSION |
|--------------------|---------------|--------------------|-----|----------------------------------|
| <u>SPECIES</u> | <u>LENGTH</u> | <u>DATES</u> | BAG | LIMIT**_ |
| Canada Geese | | | | |
| Resident | 25 days | Sept. 1 – Sept. 25 | 15 | 45 |
| Regular | 30 days | Oct. 10 – Feb. 5 | 2 | 6 |
| Snow & Blue Geese | 107 days | Oct. 1 – Mar. 10 | 25 | NONE |
| Brant | 30 days | Sept. 22 – Jan. 31 | 2 | 6 (dependent on Mid-W Survey) |
| Mergansers* | 60 days | Sept. 22 – Jan. 27 | 5 | 15 |
| (Hooded Mergansers | s) | | (2) | (6) |
| Coots** | 60 days | Sept. 22 – Jan. 27 | 15 | 45 |
| Snipe | 107 days | Sept. 1 – Jan. 31 | 8 | 24 |
| Woodcock | 45 days | Oct. 1 – Jan. 31 | 3 | 9 |

^{*} Season length for mergansers equals season option chosen for ducks. Mergansers may be included as part of the daily duck bag, in which case the limit would be 6 mergansers/day. Of total merganser bag, only 2 daily and 6 in possession may be Hooded Mergansers.

SHOOTING HOURS - ½ HOUR BEFORE SUNRISE TO SUNSET (all days – all species)

^{**} Season length for coots equals season option chosen for ducks.

APPENDIX A

2019 FALL CALENDAR

| | SUN | MON | TUES | WED | THUR | FRI | SAT |
|-----------|-----|-----|------|-----|------|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| SEPTEMBER | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| - | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| - | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| - | 29 | 30 | | | | | |
| | | | 1 | 2 | 3 | 4 | 5 |
| OCTOBER | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| - | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| - | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| - | 27 | 28 | 29 | 30 | 31 | | |
| | | | | | | 1 | 2 |
| NOVEMBER | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| <u>-</u> | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| <u> </u> | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| <u> </u> | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| DECEMBER | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| <u> </u> | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| <u> </u> | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| <u> </u> | 29 | 30 | 31 | | | | |
| | | | | | | | |
| | | | | | | | |

APPENDIX B

| | Vermont Waterfowl Seasons | | | | | | |
|------|---------------------------|------------------|--------------------------------------|----------------------|--|--|--|
| YEAR | SEASON TYPE | SEASON LENGTH | SEASON DATES | GENERAL BAG LIMIT | | | |
| 1942 | Straight | 70 | Sept. 26 – Dec. 4 | 10-20 | | | |
| 1943 | Straight | 70 | Sept. 25 – Dec. 3 | 10-20 | | | |
| 1944 | Straight | 80 | Sept. 20 – Dec. 8 | 10-20 | | | |
| 1945 | Straight | 80 | Sept. 20 – Dec. 8 | 7-14 | | | |
| 1946 | Straight | 45 | Oct. 5 – Nov. 18 | 7-14 | | | |
| 1947 | Straight | 30 | Oct. 21 – Nov. 19 | 3-6 | | | |
| 1948 | Straight | 30 | Oct. 15 – Nov. 13 | 3-6 | | | |
| 1949 | Straight | 40 | Oct. 21 – Nov. 29 | 3-6 | | | |
| 1950 | Straight | 40 | Oct. 20 – Nov. 28 | 3-6 | | | |
| 1951 | Straight | 45 | Oct. 12 – Nov. 25 | 3-6 | | | |
| 1952 | Straight | 55 | Oct. 7 – Nov. 11 | 3-6 | | | |
| 1953 | Straight | 60 | Oct. 5 – Dec. 3 | 3-6 | | | |
| 1954 | Straight | 60 | Oct. 10 – Dec. 8 | 3-6 | | | |
| 1955 | Straight | 70 | Oct. 5 – Dec. 13 | 3-6 | | | |
| 1956 | Straight | 70 | Oct. 5 – Dec. 13 | 3-6 | | | |
| 1957 | Straight | 70 | Oct. 10 – Dec. 18 | 3-6 | | | |
| 1958 | Straight | 60 | Oct. 10 – Dec. 8 | 3-6 | | | |
| 1959 | Straight | 50 | Oct. 10 – Nov. 28 | 3-6 | | | |
| 1960 | Straight | 50 | Oct. 7 – Nov. 25 | 3-6 | | | |
| 1961 | Straight | 40 | Oct. 14 – Nov. 22 | 3-6 | | | |
| 1962 | Straight | 40 | Oct. 12 – Nov. 20 | 3-6 | | | |
| 1963 | Split | 45 | Oct. 11 – Oct. 27 / Nov. 11 – Dec. 8 | 3-6 | | | |
| 1964 | Straight | 50 | Oct. 10 – Nov. 28 | 3-6 | | | |
| 1965 | Straight | 50 | Oct. 16 – Dec. 4 | 3-6 | | | |
| 1966 | Straight | 55 | Oct. 8 – Dec. 1 | 3-6 | | | |
| 1967 | Split | 45 | Oct. 7 – Nov. 4 / Nov. 25 – Dec. 10 | 3-6 | | | |
| 1968 | Straight | 50 | Oct. 12 – Nov. 30 | 3-6 | | | |
| 1969 | Straight | 50 | Oct. 11 – Nov. 29 | 3-6 | | | |
| 1970 | Straight | 50 | Oct. 10 – Nov. 28 | 4-8 | | | |
| 1971 | Straight | 50 | Oct. 9 – Nov. 27 | 4-8 | | | |
| 1972 | Split | 50 | Oct. 7 – Oct. 15 / Oct. 28 – Dec. 7 | 4-8 | | | |
| 1973 | Split | 45 | Oct. 6 – Oct. 21 / Nov. 3 – Dec. 1 | 4-8 | | | |
| 1974 | Straight | 50 | Oct. 9 – Nov. 27* | 4-8 | | | |
| 1975 | Straight | 50 | Oct. 8 – Nov. 26* | 4-8 | | | |
| 1976 | Straight | 50 | Oct. 6 – Nov. 24* | 4-8 | | | |
| 1977 | Straight | 50 | Oct. 5 – Nov. 23* | 4-8 | | | |
| 1978 | Straight | 50 | Oct. 4 – Nov. 22* | 4-8 | | | |
| 1979 | Split | 50 | Oct. 3 – Oct. 14 / Oct. 27 – Dec. 3* | 4-8 | | | |
| 1980 | Straight | 50 | Oct. 8 – Nov. 26* | 4-8 | | | |
| 1981 | Straight | 50 | Oct. 10 – Nov. 28* | 4-8 | | | |

Vermont Waterfowl Seasons – Page 2

| YEAR | TYPE | | | ~ |
|------|--------------|--------|---|-----------|
| | | LENGTH | SEASON DATES | BAG LIMIT |
| 1000 | G 11. | 70 | 0 + 2 0 + 10 / 0 + 16 N 25* | 5.10 |
| 1982 | Split | 50 | Oct. 2 – Oct. 10 / Oct. 16 – Nov. 25* | 5-10 |
| 1983 | Split | 50 | Oct. 8 – Oct. 16 / Oct. 22 – Dec. 1* | 5-10 |
| 1984 | Straight | 50 | Oct. 10 – Nov. 28* | 5-10 |
| 1985 | Zoned** | 40 | Oct. 9 – Oct. 13 / Oct. 26 – Nov. 29 (LCZ)* | 5-10 |
| | | | Oct. 9 – Nov. 17 (IVZ) | 5-10 |
| 1986 | Zoned** | 40 | Oct. 8 – Oct. 12 / Oct. 25 – Nov. 28 (LCZ)* | 5-10 |
| | | | Oct. 8 – Nov. 16 (IVZ) | 5-10 |
| 1987 | Zoned** | 40 | Oct. 7 – Oct. 11 / Oct. 24 – Nov. 27 (LCZ)* | 4-8 |
| | | | Oct. 7 – Nov. 15 (IVZ) | 4-8 |
| 1988 | Zoned/Split | 30 | Oct. 8 – Oct. 23 / Nov. 24 – Dec. 7 (LCZ)* | 3-6 |
| | | | Oct. 8 – Oct. 30 / Nov. 24 – Nov. 30 (IVZ) | 3-6 |
| 1989 | Zoned/Split | 30 | Oct. 11 – Oct. 29 / Nov. 23 – Dec. 3 (LCZ) | 3-6 |
| | _ | | Oct. 11 – Nov. 5 / Nov. 23 – Nov. 26 (IVZ) | 3-6 |
| 1990 | Zoned/Split | 30 | Oct. 10 – Oct. 21 / Nov. 15 – Dec. 2 (LCZ) | 3-6 |
| | 1 | | Oct. 10 – Nov. 4 / Nov. 22 – Nov. 25 (IVZ) | 3-6 |
| 1991 | Zoned/Split | 30 | Oct. 12 – Oct. 27 / Nov. 23 – Dec. 6 (LCZ) | 3-6 |
| | 1 | | Oct. 12 – Nov. 3 / Nov. 25 – Dec. 1 (IVZ) | 3-6 |
| 1992 | Zoned/Split | 30 | Oct. 7 – Oct. 11 / Nov. 7 – Dec. 1 (LCZ) | 3-6 |
| | 1 | | Oct. 7 – Nov. 1 / Nov. 26 – Nov. 29 (IVZ) | 3-6 |
| 1993 | Zoned/Split | 30 | Oct. 20 – Nov. 7 / Nov. 25 – Dec. 5 (LCZ) | 3-6 |
| | 1 | | Oct. 13 – Nov. 7 / Nov. 25 – Nov. 28 (IVZ) | 3-6 |
| 1994 | Zoned/Split | 40 | Oct. 15 – Nov. 6 / Nov. 19 – Dec. 5 (LCZ) | 3-6 |
| | 1 | | Oct. 8 – Nov. 9 / Nov. 21 – Nov. 27 (IVZ) | 3-6 |
| 1995 | Zoned/Split | 50 | Oct. 11 – Oct. 22 / Nov. 4 – Dec. 11 (LCZ) | 4-8 |
| | 1 | | Oct. 4 – Nov. 12 / Nov. 18 – Nov. 27 (IVZ) | 4-8 |
| 1996 | Zoned/Split | 50 | Oct. 9 – Oct. 20 / Nov. 2 – Dec. 9 (LCZ) | 5-10 |
| | 1 | | Oct. 2 – Nov. 11 / Nov. 23 – Dec. 1 (IVZ) | 5-10 |
| 1997 | Zoned** | 60 | Oct. 4 – Oct. 19 / Oct. 25 – Dec. 7 (LCZ) | 4-8*** |
| | | | Oct. 4 – Dec. 2 (IVZ) | 4-8*** |
| 1998 | Zoned** | 60 | Oct. 7 – Oct. 11 / Oct. 17 – Dec. 10 (LCZ) | 6-12 |
| -,,, | | | Oct. 7 – Dec. 5 (IVZ) | 6-12 |
| 1999 | Zoned** | 60 | Oct. 6 – Oct. 11 / Oct. 23 – Dec. 15 (LCZ) | 6-12 |
| -,,, | | | Oct. 6 – Dec. 4 (IVZ) | 6-12 |
| 2000 | Zoned/Split | 60 | Oct. 7 – Oct. 9 / Oct. 21 – Dec. 16 (LCZ) | 6-12 |
| _000 | pii | | Oct. 7 – Nov. 12 / Nov. 18 – Dec. 10 (IVZ) | 6-12 |
| 2001 | Zoned/Split | 60 | Oct. 10 – Oct. 14 / Oct. 20 – Dec. 13 (LCZ) | 6-12 |
| 2001 | ones, spiit | | Oct. 10 – Dec. 8 (IVZ) | 6-12 |
| | | | Oct. 2 – Nov. 4 / Nov. 21 – Dec. 16 (CRZ)**** | 6-12 |
| 2002 | Zoned/Split | 60 | Oct. 9 – Oct. 13 / Oct. 22 – Dec. 15 (LCZ) | 6-12 |
| 2002 | 20110d/Spiit | | Oct. 9 – Nov. 14 / Nov. 23 – Dec. 15 (IVZ) | 6-12 |
| | | | Oct. 2 – Nov. 147 Nov. 25 – Dec. 15 (172) **** | 6-12 |

Vermont Waterfowl Seasons – Page 3

| | SEASON | SEASON | | GENERAL |
|------|---------|--------|---|--------------|
| YEAR | TYPE | LENGTH | SEASON DATES | BAG LIMIT |
| 2003 | Zoned** | 60 | Oct. 11 - Oct. 13 / Oct. 25 - Dec. 20 (LCZ) | 6-12 |
| | | | Oct. 11 - Dec. 9 (IVZ) | 6-12 |
| | | | Oct. 7 - Nov. 9 / Nov. 26 - Dec. 21 (CRZ)**** | 6-12 |
| 2004 | Zoned** | 60 | Oct. 6 - Oct. 10 / Oct. 23 - Dec. 16 (LCZ) | 6-12 |
| | | | Oct. 6 - Dec. 4 (IVZ) | 6-12 |
| | | | Oct. 5 - Nov. 14 / Nov. 24 - Dec. 12 (CRZ)**** | 6-12 |
| 2005 | Zoned** | 60 | Oct. 5 – Oct. 10 / Oct. 26 – Dec. 18 (LCZ) | 6-12 |
| | | | Oct. 5 – Dec. 3 (IVZ) | 6-12 |
| | | | Oct. 4 – Nov.13/ Nov. 23 - Dec. 11 (CRZ)**** | 6-12 |
| 2006 | Zoned** | 60 | Oct. 7- Oct. 15/ Oct. 25 - Dec. 14 (LCZ) | 6-12 |
| | | | Oct. 7 - Dec. 5 (IVZ) | 6-12 |
| | | | Oct. 3 - Nov. 5/ Nov. 22 - Dec. 17 (CRZ)**** | 6-12 |
| 2007 | Zoned** | 60 | Oct. 10- Oct. 14/ Oct. 27 - Dec. 20 (LCZ) | 6-12 |
| | | | Oct. 10- Dec. 8 (IVZ) | 6-12 |
| | | | Oct. 3- Nov. 4/ Nov. 21 - Dec. 17 (CRZ)**** | 6-12 |
| 2008 | Zoned** | 60 | Oct. 8- Oct. 12/ Oct. 25 - Dec. 18 (LCZ) | 6-12 |
| | | | Oct. 8- Dec. 6 (IVZ) | 6-12 |
| | | _ | Oct. 2- Nov. 2/ Nov. 23 - Dec. 20 (CRZ)**** | 6-12 |
| 2009 | Zoned** | 60 | Oct. 10- Oct. 13/ Oct. 24 - Dec. 18 (LCZ) | 6-12 |
| | | | Oct. 10- Dec. 8 (IVZ) | 6-12 |
| 2010 | | | Oct. 6- Nov. 8/ Nov. 25 - Dec. 20 (CRZ)**** | 6-12 |
| 2010 | Zoned** | 60 | Oct. 6-Oct. 10/Oct. 23 - Dec. 16 (LCZ) | 6-12 |
| | | | Oct. 6-Dec. 4 (IVZ) | 6-12 |
| 2011 | Totale | | Oct. 5-Nov. 7/ Nov. 24 – Dec. 19 (CRZ) | 6-12 |
| 2011 | Zoned** | 60 | Oct. 12-Oct. 16/Oct. 29 - Dec. 22 (LCZ) | 6-12 |
| | | | Oct. 12-Dec 10 (IVZ) | 6-12 |
| 2012 | 77 144 | 60 | Oct. 4-Nov. 6/Nov. 23- Dec. 18 (CRZ)**** | 6-12 |
| 2012 | Zoned** | 60 | Oct. 13-Oct. 17/Oct. 27 - Dec. 20 (LCZ) | 6-12 |
| | | | Oct. 13-Dec 11 (IVZ) | 6-12 |
| 2012 | Zoned** | 60 | Oct. 2-Nov. 4/Nov. 21- Dec. 16 (CRZ)**** | 6-12 |
| 2013 | Zoned | 60 | Oct. 9-Oct. 13/Oct. 26 - Dec. 19 (LCZ) Oct. 9-Dec 7 (IVZ) | 6-18 6-18 |
| | | | Oct. 9-Dec / (1VZ) Oct. 2-Nov. 3/Nov. 19- Dec. 15 (CRZ)**** | 6-18 |
| 2014 | Zoned** | 60 | Oct. 8-Oct. 12/Oct. 25- Dec. 18 (LCZ) | 6-18 |
| 2014 | Zoneu | 00 | Oct. 8-Dec. 6 (IVZ) | 6-18 |
| | | | Oct. 2-Nov. 2/Nov. 16- Dec. 13 (CRZ)**** | 6-18 |
| 2015 | Zoned** | 60 | Oct. 10-Oct. 14/Oct. 24- Dec. 17 (LCZ) | 6-18 |
| 2013 | Zoncu | 00 | Oct. 10-Oct. 14/Oct. 24- Dec. 17 (ECZ) | 6-18 |
| | | | Oct. 6-Nov. 5/Nov. 15- Dec. 13 (CRZ)**** | 6-18 |
| 2016 | Zoned** | 60 | Oct. 12-Oct. 16/Oct. 29- Dec. 22 (LCZ) | 6-18 |
| 2010 | 201100 | | Oct. 12-Oct. 10/Oct. 25- Bec. 22 (BCE) | 6-18 |
| | | | Oct. 4-Nov. 6/Nov. 22- Dec. 22 (CRZ)**** | 6-18 |
| 2017 | Zoned** | 60 | Oct. 11-Oct. 15/Nov. 7 - Dec. 31 (LCZ) | 6-18 |
| 2017 | | | Oct. 11-Dec. 9 (IVZ) | 6-18 |
| | | | Oct. 3-Nov. 5/Nov. 22- Dec. 17 (CRZ)**** | 6-18 |

| 2018 | Zoned** | 60 | Oct. | 13-Oct. 21/Nov. 10 - Dec. 30 (LCZ) | 6-18 |
|------|---------|----|------|--------------------------------------|------|
| | | | Oct. | 13-Dec. 11 (IVZ) | 6-18 |
| | | | Oct. | 23-Nov. 4/Nov. 21- Dec. 16 (CRZ)**** | 6-18 |

^{*} Regular season was followed by a 16-day special goldeneye/scaup season – 3-bird bag

^{**} Lake Champlain Zone – Split Season Interior Vermont Zone – Straight Season

^{***} Two teal (either blue-winged or green-winged) allowed in addition to regular bag limit

^{****} Connecticut River Zone set by New Hampshire Fish and Game Commission, same as NH Inland Zone

APPENDIX C Guidelines for Duck Zones and Split Seasons

Federal Register /Vol. 80, No. 139 /Tuesday, July 21, 2015 / Proposed Rules 43270-71

Guidelines for Duck Zones and Split Seasons

The following zone and split-season guidelines apply only for the regular duck season:

- (1) A zone is a geographic area or portion of a State, with a contiguous boundary, for which independent dates may be selected for the regular duck season.
- (2) Consideration of changes for management-unit boundaries is not subject to the guidelines and provisions governing the use of zones and split seasons for ducks.
- (3) Only minor (less than a county in size) boundary changes will be allowed for any grandfathered arrangement and changes are limited to the open season.
- (4) Once a zone and split option is selected during an open season, it must remain in place for the following 5 years.

Any State may continue the configuration used in the previous 5-year period. If changes are made, the zone and split-season configuration must conform to one of the following options:

- (1) No more than four zones with no splits,
- (2) Split seasons (no more than 3 segments) with no zones, or
- (3) No more than three zones with the option for 2-way (2-segment) split seasons in one, two, or all zones. Grandfathered Zone and Split Arrangements

When we first implemented the zone and split guidelines in 1991, several States had completed experiments with zone and split arrangements different from our original options. We offered

those States a one-time opportunity to continue ("grandfather") those arrangements, with the stipulation that only minor changes could be made to zone boundaries. If any of those States now wish to change their zone and split arrangement:

- (1) The new arrangement must conform to one of the 3 options identified above; and
- (2) The State cannot go back to the grandfathered arrangement that it previously had in place. Management Units

We will continue to utilize the specific limitations previously established regarding the use of zones and split seasons in special management units, including the High Plains Mallard Management Unit. We note that the original justification and objectives established for the High Plains Mallard Management Unit provided for additional days of hunting opportunity at the end of the regular duck season. In order to maintain the integrity of the management unit, current guidelines prohibit simultaneous zoning and/or 3-way split seasons within a management unit and the remainder of the State. Removal of this limitation would allow additional proliferation of zone and split configurations and compromise the original objectives of the management unit.

APPENDIX D

Controlled Hunting Program

The Mud Creek Controlled Hunting Area (MCCHA) was established in 1972. The purpose of this action was to provide a safe, quality hunting experience on an area that had become very crowded resulting in rapid burn out on opening day, high crippling losses, and unsafe hunting conditions.

The number of hunting parties allowed on the area was limited each day. Hunting was initially restricted to Tuesdays, Thursdays, Saturdays and Sundays from legal morning shooting time (1/2 hour before sunrise) until 11:00 AM. All hunters were required to be out of the area by 12:00 noon. Very little change had occurred within the program over the first three and a half decades. The number of parties allowed on the area has been gradually reduced to 6 due to the encroachment of cattails into the west and east sides of the controlled hunting area. From 2010 to 2018 hunting was restricted to Tuesdays, Thursdays, and Saturdays.

The current Mud Creek Controlled Hunting Program framework appears to be running smoothly. Staff will be eliminated during the first two days of the hunting program, maintain the lottery process for the first two days of hunting where hunters self-register the day of the hunt, run the remaining days of the hunt on a self-registration basis and eliminate the fee collected.

The Dead Creek Goose Management Area (DCGMA) was established in 1974 on lands surrounding the Dead Creek Wildlife Management Area. Adjacent private farmlands are leased by the Department annually and comprise approximately 1,000 acres of the DCGMA. The purpose of the DCGMA was to provide a buffer to the small (70-acre) Dead Creek Refuge, provide quality public hunting experiences and minimize goose related crop damages to private farmland. The establishment of the 420-acre Jerome Farm Refuge in 1976 greatly enhanced this program by providing an upland area that could be managed to attract migrant Canada geese into the Dead Creek area.

Given the low success rates experienced over the past nine years, the Department plans to eliminate the permit application process, run the hunt on a self-registration basis, not supply hunting blinds and decoys and eliminate the fee collected. Our current leases run until the end of 2022 and should be renewed to maintain a buffer around the refuge area that limits the hunting pressure. The DCGMA provides a much-needed buffer to the small Dead Creek Refuge (currently 620 acres) and will be maintained. We will maintain a contact point with hunters and wildlife viewers at the Dead Creek office and visitor center during regular business hours.

The Department is working with volunteers, hunter education instructors and NGOs to develop waterfowl hunting workshops targeting youth and first-time hunters. The Mud Creek WMA, Dead Creek WMA and DCGMA lands will play a major role in the program's operation. A pilot workshop is currently being planned for 2019 that will target youth hunters. Additional workshops will be developed off the experiences of the first workshop and will target first time adult hunters.

APPENDIX D
2015 Waterfowl Hunter Survey Summary

Memorandum

TO: Vermont Fish and Wildlife Board

FROM: Mark Scott and Scott Darling

DATE: 10/25/2017

SUBJECT: Results of 2015 Waterfowl Hunter Survey

The 2015 Waterfowl Hunter Survey results, as provided in an August 2017 report, contains some interesting results that run counter to the limited input we receive through the three public meetings the Department holds each winter. The Department will use the information garnered from the survey to make recommendations to the Board related to hunting season frameworks desired by the broader hunting public, within biologic limitations. Below the Department is highlighting the survey findings, primarily of Vermont hunters. The full 80-page report is attached for your review.

Response Rate and Characteristics of Respondents

- 1. In 2015 a sample of 2,741 hunters from the NE zone of New York and the entire state of Vermont were sent surveys. A total of 1,385 surveys were distributed to Vermont's hunters. The sample was drawn from the Harvest Information Program (HIP) that each state maintains. Registration with the HIP program is required to hunt migratory game birds.
- 2. The overall response rate was 18.2% (498 useable surveys returned). The Vermont hunter response rate was 13.7%. New York hunters returned more surveys than Vermont hunters.
- 3. About 8% of respondents in the survey were female, up from 3% in 2004.
- 4. Most Vermont hunters indicated they hunted waterfowl in the Interior Vermont zone (73%), followed by the Lake Champlain zone (67%), Connecticut River zone (13%), and Northeastern NY zone (5%). Hunters were allowed to choose all zones they hunted in.
- 5. Most Vermont respondents indicated they had been hunting waterfowl <10 years (42%), followed by those who hunted between 10 and 30 years (34%), and more than 30 years (24%).
- 6. Most respondents indicated they hunted every or most years, confirming the belief that waterfowl hunters are a loyal hunting group, without much of a churn factor.

- 7. Vermont respondents hunted an average of 18 years and their average age is the mid-40s.
- 8. Recruitment of new and young people, as well as females, to waterfowling remains vital for the future of waterfowling and hunting conservation in general.

Hunter Accessibility and Satisfaction

- 1. Fifty-five percent of Vermont hunters indicated state-owned public land was the type of land they hunted most often. Many of Vermont's marshes are publicly owned.
- 2. When asked what would most improve their overall experience, Vermont residents indicated greater accessibility to hunting lands was most important.
- 3. Most Vermont (77%) and New York (79%) residents indicated they were either satisfied or somewhat satisfied with their waterfowl hunting experience in the past five years (2011-2015).
- 4. Most Vermont hunters (55%) had no opinion or were satisfied (41%) with the zone boundary changes between the Lake Champlain Zone and Interior Zone (Missisquoi region) in 2011.
- 5. When asked to select reasons hunters didn't hunt waterfowl as much as they would like to, regulation complexity and access to public lands were the **least** commonly selected reasons. Hunters in both states commonly selected not enough waterfowl as a reason they do not hunt waterfowl as much as they would like, and a lack of time.

Waterfowl Hunting Effort and Harvest

- 1. Hunters revealed, from their days devoted to hunting perspective, priority is greatest for dabbling ducks, followed by Canada geese, diving ducks, then snow geese and mergansers.
- 2. Only 8% of all respondents from both states indicated they hunted waterfowl occasionally or rarely. This is an important result because it substantiates hunters are active nearly every year, regardless of population changes, weather and other variables that change yearly.

Season Structure and Preference

1. Hunters generally prefer the Canada goose season to open the first week in October, regardless of zone. Goose hunters preferred the season to start the first week in October, matching the general waterfowl hunter's desire.

- 2. Most hunters prefer October as the month when most days are open to waterfowl hunting. The Lake Champlain zone had a second preference to split the remaining days between November and December. Hunters in the Interior zone preferred the majority of days after October to be in November.
- 3. Most hunters only hunt weekends or split their time equally between weekends and week days. Only 12% of hunters primarily hunt week days, regardless of zones.
- 4. Only 29% of Vermont hunters preferred the duck season to begin the first week of October in 2015. In a 2004 survey, 55% of Vermont hunters preferred the season to begin the first week in October.
- 5. The majority of hunters in all zones preferred the duck hunting seasons to begin the first two weeks of October or had no preference.
- 6. Vermont hunters prefer their duck seasons to open on Wednesday (44%), Saturday (30%), and no preference (26%). It may be worth changing from the current two Wednesday openers followed by a Saturday opener, to an every other year system (Saturday alternating with Wednesday) to come more in line with the current hunter preference.
- 7. Managers should be prepared to accommodate a preference for hunting seasons to extend longer into the season, especially if waterfowl alter their migration timing and favorable hunting conditions exist.

Deer Management Rule Change Proposal

to the Vermont Fish and Wildlife Board

February 2019



Vermont Fish and Wildlife Department Agency of Natural Resources 1 National Life Drive, Dewey Building Montpelier, VT 05620-3208 802-828-1000

Background

Periodic changes to hunting regulations are necessary as new issues arise or conditions change. Hunter numbers have been and continue to decline, average age of hunters is getting older, deer numbers and distribution change, winter mortality is less significant as winters become shorter and milder, and the desires of hunters and the general public change. Except for the archery season extension in 2016, no alterations to the timing or structure of Vermont's deer hunting seasons have occurred since 2002, and no changes to seasons other than the youth season have occurred since the late 1980s. There have been additional tweaks to hunting regulations, including establishment of the antler point restriction in 2005, repeated changes to bag limits, various changes to regulations regarding the harvest of antlerless deer, and many others. Vermont's current deer hunting seasons and regulations are the result of these and many other small changes over time, nearly all of which were driven by hunter interest in expanded hunting opportunities.

In early 2013, the Department, in collaboration with the Board, embarked on a comprehensive review of all Vermont deer hunting regulations and potential hunting opportunities. This initiative was partly due to the Board and Department receiving a variety of petitions to change current hunting seasons and regulations (including petitions for a longer archery season, special flintlock season, early muzzleloader hunting, reduced bag limits, and alterations to the antler point restriction). Rather than continue the piecemeal approach, the Department and Board decided that a comprehensive evaluation of current and potential management approaches would be more effective. This evaluation was a means to assess how hunting regulations can best meet the desires of hunters and the general public, while simultaneously ensuring that the Department can achieve deer management objectives.

During phase I, the Department and Board conducted several surveys and public involvement activities. Department staff also began an analysis of the current antler point restriction, which raised some concerns regarding antler development in Vermont's bucks. In April 2015, the Board approved a set of regulation changes and agreed to a three-year evaluation of the effects of those changes along with further evaluation of remaining issues.

Phase II of the Comprehensive Deer Management Evaluation assessed the effects of regulation changes passed in 2015, reviewed options for changes to season timing and structure, and further evaluated the effects of the antler restriction on buck age structure and antler development. The results of this evaluation, as well as evolving deer management and hunter recruitment and retention concerns are the basis for this proposal.

The proposed changes are broad and substantial, and some of them are integrally related. These changes and the overall deer season structure should be considered collectively, as each hunting season influences the other seasons, and each proposed change affects other proposed changes to some degree. This package is intended to provide a quality hunting experience for as many hunters as possible while allowing for more effective deer management.

Goals

The primary goals of these proposed changes are to maximize hunter satisfaction and improve the Department's ability to manage the deer herd and maintain a healthy deer population.

Maximize Hunter Satisfaction

This proposal aims to maximize hunter satisfaction by providing additional hunting opportunity, improving management of buck age structure, and providing additional deer harvest opportunities.

- Longer seasons allow hunters to spend more time afield, which is the primary driver of hunter satisfaction in Vermont. The proposed changes provide additional hunting opportunity for many hunters in a way that will not negatively affect the deer population or other hunters' opportunity.
- Regulations that are simple and easily understandable reduce barriers to participation and increase acceptance and compliance. Some of the proposed changes are inherently more complex than existing regulations, but we have attempted to make them as simple as possible.
- Opportunities to see and harvest bucks, particularly older, larger-antlered bucks, are important drivers of hunter satisfaction. The proposed changes will improve our ability to manage for older bucks without unnecessarily impacting buck harvest opportunities.
- Opportunity to see and harvest any deer is also an important driver of hunter satisfaction. The
 proposed changes provide additional antlerless deer harvest opportunities, which will increase
 some hunters chance of harvesting a deer and improve management of locally abundant deer.
 This also helps minimize unnecessary impacts on lower density rural deer populations as
 antlerless harvest will be more targeted.

Improve Management of the Deer Herd

This proposal aims to improve the Department's ability to achieve WMU-specific deer density objectives and buck population age structure objectives that will be established in the 2020-2030 Big Game Management Plan.

- Adequate antlerless harvests are critical for effective deer management. The proposed changes
 increase our ability to harvest more antlerless deer when and where it is necessary, while
 maintaining the ability to limit antlerless harvest when appropriate.
- There are substantial regional differences in deer habitat, deer density, hunting pressure, and winter severity across Vermont. As a result, a one-size-fits-all approach to buck age structure management can be unnecessarily restrictive in some areas and ineffective in others. The proposed changes allow for different approaches in different regions to more effectively manage for older bucks.

Summary of Proposed Changes

Buck Age Structure Management

1. One Buck Annual Limit

- Reduces buck harvest rate
- o Maintains buck age structure in some WMUs without the need for an antler restriction

2. Regional Antler Point Restriction

 Allows management approach to reflect regional differences in deer density, hunting pressure, habitat, winter severity, etc.

Archery Season

3. Extension

- o Early October thru muzzleloader season
- Archery hunters are impacted by the one buck limit
- o Provides additional opportunity to harvest antlerless deer

4. Establish Expanded Archery Zones

- Developed areas or pockets of high deer density
- Season starts 2 weeks earlier
- Additional antlerless tags available
- Helps address areas with many deer-human conflicts

5. Remove Antler Restriction During Archery Season

o Improves antlerless harvest without impacting buck age structure management

6. Allow Crossbows for All Ages

- May increase recruitment of archery hunters
- o Increases participation among existing hunters

New Seasons

7. Establish an Antlerless Season

- 4 days, Thursday-Sunday, 2 weeks before rifle season
- o Limited to muzzleloader hunters with a lottery antlerless permit
- o Helps achieve antlerless harvest objectives

8. Establish a Novice Season

- Allows new adult hunters to hunt during youth season for two years
- o Expect 400-500 hunters each year and no impact on the deer harvest

Youth Season

9. Move youth season to late October

- o Still provides youths the first opportunity with a firearm
- Provides more favorable weather conditions

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December

^{*}Crosshatched areas represent new hunting opportunities

Related Changes

Several of the changes proposed here are related and cannot be considered separately. These include:

- The one buck annual limit and regional APR are intended to work together to achieve buck age structure goals. A one buck annual limit is unnecessary in many WMUs if the APR is continued, but if the APR is removed the one buck limit is necessary to achieve buck age structure goals.
- The archery season extension would not be appropriate without the one buck annual limit, as it would increase the buck harvest and reduce our ability to achieve buck age structure goals. Without the extension, the one buck limit would have an undue impact on the archery season.
- The antlerless season is a critical element of the proposal. Not only does it provide a needed tool to improve the effectiveness of our deer population management, but it also improves the effectiveness of buck age structure management by allowing more hunters to harvest an antlerless deer for meat prior to the rifle season.

Buck Age Structure Management

The 2018 Big Game Survey found that 74% of Vermont hunters are interested in managing for older, larger deer. Further, the most important drivers of hunter satisfaction, after "just going deer hunting," were "harvesting an older, larger-antlered buck" and "the amount of buck sign in the woods." With strong interest in bucks among Vermont hunters, and relatively high hunting pressure for a northern state with relatively low deer densities, the pressure on our buck population is high. For perspective, we estimate as many as 70,000 active deer hunters in Vermont in 2018 pursuing an estimated 27,000 bucks, or about 2.6 hunters for every buck. For these reasons, it would not be appropriate to completely abandon managing for older bucks.

While the current antler point restriction (APR) is supported by the majority of hunters, it is not the only option for managing buck age structure. The Department also remains concerned about potential negative effects on antler development and overall population fitness resulting from the selective harvest caused by the current APR (for more information on the Department's evaluation of these concerns, please see the *Comprehensive Deer Management Evaluation Final Report*). Alternative approaches can be more effective at achieving buck age structure goals while simultaneously reducing the potential for negative effects and meeting other population management and hunter satisfaction objectives.

The following changes are recommended to improve our ability to meet buck population age structure goals that will be proposed in the 2020-2030 Big Game Management Plan. Those goals will likely involve maintaining current proportions of older bucks in the population, which can be achieved by ensuring that yearling bucks comprise less than 50% of the total buck harvest.

1. One Buck Annual Limit

The Department recommends reducing the annual limit for antlered bucks from two to one. The intent of this change is to reduce the harvest rate of bucks, thereby allowing more to survive to older age classes. From 2015-2017, 5% of the total buck harvest was a hunter's second buck. More importantly, this regulation will result in many hunters passing opportunities to harvest bucks, particularly younger bucks early in the season, because they do not want to be done buck hunting. It is not clear exactly how much this selectivity could affect the buck harvest, but it is likely to exceed the 5% reduction caused simply by eliminating the harvest of second bucks. Therefore, we expect this change to achieve at least a 10% reduction in the buck harvest rate.

This change will have the greatest impact on hunters who currently hunt during multiple seasons and, therefore, are allowed to harvest multiple bucks. Archery hunters will be particularly impacted, as they will be giving up their opportunity to hunt during the rifle season if they choose to harvest a buck during the archery season. Archers, however, will have a longer hunting season and additional opportunity to harvest antierless deer.

By providing additional antlerless harvest opportunities prior to rifle season, more hunters will have already harvested a deer (have venison to eat) and may be more willing to not shoot a small buck. This helps reduce the buck harvest rate further, and effectively shifts some hunting pressure from bucks to antlerless deer.

The Department recommends that bucks harvested by youth hunters during youth weekend not count toward this annual limit. In 2017, a total of 38 youth hunters harvested a buck in youth season and a buck in another season.

2. Regional Antler Point Restriction

Vermont is a small state, but there are substantial regional differences in deer habitat, deer density, hunting pressure, and winter severity. As a result, the effect of regulations like an antler restriction differs from one region to another. What works in parts of Vermont may be unnecessarily restrictive in some areas and ineffective in others. Therefore, the Department recommends a regional APR where the current APR is maintained in some WMUs, while others would have no APR. The definition of a legal buck in these WMUs would return to "one antler 3 inches or more in length."

No APR is recommended in WMUs where the reduced buck harvest rate caused by the one buck limit will be sufficient to maintain the current buck population age structure. In WMUs where maintaining the current APR is recommended, relatively few bucks currently survive beyond 2 years old. The combination of the APR and a one buck limit will allow more bucks to survive to older age classes.

The following criteria were considered when determining which regulation would work best in each WMU:

Experimental Design Needs

The Department remains concerned about the APR's potential negative effects on antler development and overall fitness of the deer population. It is critical that we continue to evaluate these concerns. A regional APR will allow us to develop a new, robust experimental design to provide better data and new insights in a timely manner.

A major limitation of evaluations to date has been the necessity of comparing youth season data (post-APR) to rifle season data (pre-APR; see *CDME Final Report* for additional detail). These datasets do not appear directly comparable, but it is not clear how or why they are different. A regional APR where comparisons can be made between youth and rifle season harvests in the same years under similar regulations (in WMUs with no APR) and between similar WMUs with different regulations (APR vs. no APR) will provide valuable new insights. For this design to work, it is imperative that some WMUs with moderate-high deer densities and good youth season sample sizes be included in each group.

Buck Harvest Age Composition

The current age composition of the buck harvest is a good indicator of the buck harvest rate (the proportion of all bucks that are harvested by hunters each year) and the proportion of bucks surviving to older age classes. This provides an index of the buck population age structure and whether we are achieving a desired age structure.

Deer Density

Hunters in areas with more deer have a better chance of encountering multiple bucks in a season; therefore, they are less impacted by an antler restriction than hunters in low density areas. Further, in low density areas antlerless harvest opportunities are limited, so harvesting a buck is many hunters only opportunity to harvest a deer.

Hunting Pressure

Hunting pressure (hunters per square mile) affects the buck harvest rate. Antler restrictions have the greatest potential impact in areas with high hunting pressure because it's more difficult for a buck to avoid hunters in these areas. Conversely, in areas of low hunting pressure a one buck limit may be sufficient because most bucks would only need to be passed once, if at all, to survive the season.

Deer Habitat Composition

The proportion of deer habitat in a WMU that is forested was used as an index of how vulnerable deer are to hunters. Hunters are more effective in areas with more open habitats (less forest) because cover and travel routes for deer are limited, and the open areas allow hunters to see and harvest deer at greater distances.

Winter Severity

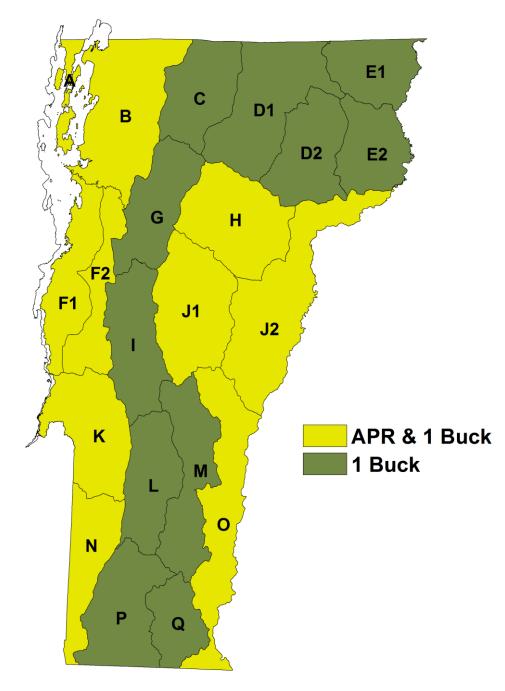
Winter severity affects the proportion of deer that die outside of the hunting seasons. In areas with more-severe winters, fewer deer will survive from one hunting season to the next. Therefore, antler restrictions will be less effective in these areas because many of the deer that were spared from hunters will subsequently die during the winter.

Geographic Simplicity

A regional approach is inherently complex, and rifle season hunters in Vermont have never had to worry about which WMU they were hunting in, unless they were reporting a deer. To minimize potential confusion and law enforcement challenges, WMUs with the same regulation should be clustered as much as possible.

Based on these criteria, the Department recommends the following buck age structure management strategies for the following WMUs:

| Wildlife Management Units | BASM Strategies |
|---|--|
| A, B, F1, F2, H, J1, J2, K, N, and O | Maintain Current APR & 1 Buck Annual Limit |
| C, D1, D2, E1, E2, G, I, L, M, P, and Q | 1 Buck Annual Limit |



Archery Season

3. Extend Archery Season

The Department recommends extending the archery season so that it runs continuously from early October through the end of muzzleloader season. This extension would provide additional hunting opportunity, counteract impacts to this season resulting from a one buck limit, and help to manage locally overabundant deer.

This extension will allow archers to hunt during the rut, when bucks are more active, thereby providing a more desirable hunting experience. While bucks may be more vulnerable during this period, this is not expected to result in an increased buck harvest with a one buck annual limit in place. Based on the effects of the 5-day archery season extension that took effect in 2016 and experiences in other states, this extension is not expected to result in increased hunter effort. Instead, existing effort will be spread out over the longer season.

Importantly, a longer season, in concert with a one buck limit, should maintain or slightly increase the archery antlerless harvest. Because archery hunters tend to hunt in areas with higher deer densities, the antlerless harvest during this season comes from the areas where it is most needed. Archers are also more effective at harvesting deer in more developed landscapes where firearm hunting is prohibited by local ordinances, less tolerated by the public, or simply not the experience most hunters are looking for. Thus, maintaining and promoting the harvest of antlerless deer during the archery season is, and will continue to be, a key component of deer management in Vermont.

The Department recommends antierless deer harvest be allowed during the entire archery season, except during the November rifle season. This will minimize law enforcement challenges.

The Department proposes that the season start, as it currently does, on the first Saturday in October. The season would end, as it currently does, on the final Sunday of the December muzzleloader season (see calendar). This adds two weeks of archery hunting prior to rifle season and 5 days between rifle and muzzleloader season, resulting in a 72-day season in most years and a 65-day season in others. Hunters can currently use archery equipment during the rifle season, so with a one buck limit and hunters limited to hunting legal bucks during this period there is no additional opportunity being provided during rifle season.

Alternative start date:

• October 1: Using a fixed start date is easier for hunters to remember. However, this would result in opening day often falling on a weekday and would also result in a variable-length season, ranging from 70-76 days.

4. Establish Expanded Archery Zones

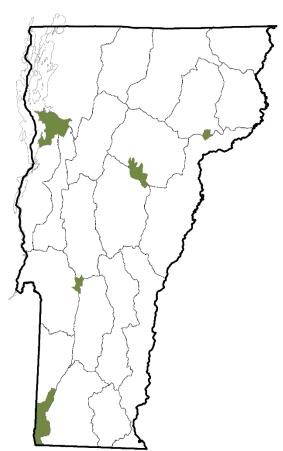
The Department recommends establishing Expanded Archery Zones in select areas where deer are overabundant or at risk of becoming overabundant and where firearm hunting is limited by regulation or development or is otherwise unable to achieve antlerless harvest objectives (primarily suburban and exurban areas around major cities and towns). Within these zones, the archery season would start two weeks early (September 17-23, see calendar) and be limited to antlerless deer only until the regular archery season started. Hunters could use their regular archery tags when hunting in these zones, and they would be able to purchase *expanded archery antlerless tags*, for use only in these zones.

The intent of this approach is to encourage additional archery antlerless harvest (or at least concentrate existing antlerless harvest) in these areas. By starting the season earlier, hunters who wish to hunt at that time will be directed to these areas. By providing additional, over-the-counter antlerless tags for these zones the antlerless harvest can be further increased. The earlier start date is likely to have a greater influence on the harvest than the availability of additional tags, as experience from other states with liberal bag limits indicates few individual hunters will harvest more than two deer per year. However, the Department does not believe it is appropriate to limit antlerless deer harvest in these areas, particularly by limiting the most effective hunters. Overall, increases in the antlerless harvest in these zones as a result of these expanded opportunities are likely to be modest; however, it will be critical for effectively managing deer abundance in these areas.

Expanded archery zones would be established (or dissolved) as part of the annual antierless harvest recommendation. Zones will be bounded by public roadways, and detailed maps of each zone will be published annually.

Initial proposed zones would include the following:

- Greater Burlington Area
- Barre-Montpelier Area
- Part of the Town of St. Johnsbury
- Parts of Rutland City and Rutland Town
- Bennington Area
- Other areas as appropriate



5. Remove Antler Restriction During Archery Season

In WMUs with an APR (see regional antler point restriction), the Department recommends that the APR not apply during the archery season. This is intended to facilitate additional antlerless harvest by minimizing hunters' concerns about accidentally harvesting an illegal buck. Most archery harvest occurs near dawn and dusk, when low light conditions can make it challenging to discern whether a deer has small antlers or no antlers. The hunter knows it's a deer, knows they have a safe and ethical shot, but must pass because they aren't certain that it doesn't have spike antlers. This is an unnecessary restriction that has no meaningful effect on buck age structure management. Archery season typically accounts for less than 10% of the total buck harvest, so small changes to this harvest will not affect the overall buck harvest. Further, with a one buck limit in place, the buck harvest is unlikely to increase as a result of this change.

6. Allow Crossbows for All Ages

The Department recommends allowing all hunters to use crossbows any time a vertical bow can be used. The exact impact of this change on the archery harvest will depend on the level of adoption by hunters currently using vertical bows. It will likely result in a small increase in the archery harvest due to greater success rates with crossbows; however, any increase in the buck harvest should be counteracted by the one buck annual limit. An increase in the archery antlerless harvest is generally desirable. It is not clear whether liberalization of crossbow use will facilitate recruitment of new archery hunters, but it did increase participation by older hunters.

New Seasons

7. Establish an Antlerless Season

Antlerless permit fill rates during the muzzleloader season have been slowly declining, averaging about 15% in recent years. As a result, the Department needs to recommend additional permits to harvest the desired number of antlerless deer. Currently, the number of permits required to achieve harvest objectives often exceeds the number of muzzleloader hunters in some WMUs. Increasing permit fill rates would reduce the number of permits required to achieve antlerless harvest objectives.

To increase the antlerless permit fill rate and provide additional hunting opportunity, the Department recommends establishing a 4-day, antlerless deer season in late October that would be restricted to hunters holding a lottery antlerless deer permit. Weather at this time of year will be more favorable to most hunters, potentially increasing hunter effort and/or encouraging more hunters to participate. Holding this season prior to the rifle season means that deer will have been less pressured, won't have adjusted their behavior to avoid hunters, and will be less concentrated in areas hunters don't have access to. Additionally, many firearm hunters will be able to harvest an antlerless deer for meat before the buck-only rifle season. This effectively shifts some hunting pressure from bucks to antlerless deer, which helps achieve antlerless harvest objectives while simultaneously contributing to buck age structure management. Further, hunters that have already harvested a deer will presumably be more willing to pass young bucks during the rifle season.

The Department recommends that this season be restricted to muzzleloaders, meaning that a muzzleloader permit would be required. This would appear to hunters as an extension of the current muzzleloader season (except antlerless only), which may help minimize confusion and maximize acceptance. In the 2018 Big Game Survey, the majority of hunters supported harvesting antlerless deer with muzzleloaders, while the majority remained opposed to harvesting antlerless deer with rifles. Further, requiring a muzzleloader permit to hunt in this season will avoid dramatic changes in license sales, which avoids the need for dramatic changes in license fees. However, this is being proposed as a separate season because it may eventually become necessary, as hunter numbers continue to decline, to allow the use of rifles during this season.

The Department proposes to start this season on a Thursday, two weeks (16 days) prior to the rifle season, resulting in season dates ranging from October 25-28 to October 31-November 3 (see calendar). This timing aims to remove antlerless deer earlier in the season, but late enough to avoid the foliage season and associated tourism and minimize conflicts with other hunting seasons and recreational activities. Removing deer earlier helps to alleviate browsing impacts in problem areas as deer begin browsing around this time. It also minimizes potential impacts to the rifle season by providing a longer break between seasons. The Thursday start is intended to soften the effects of hunting pressure during this season while still including a weekend. Some hunters would be able to fill their tags during the week and be out of the woods before the weekend, when the majority of hunters are able to hunt. The weekday start may also help to concentrate harvest where it is most needed, as many hunters will hunt in the morning or evening, before or after work, closer to home than they might hunt during the weekend.

8. Establish a Novice Season

The Department recommends establishing a hunting season for new, first-time hunters that are too old to participate in the youth season. This season would be concurrent with the youth season (see calendar) and would be open to hunters 16 years or older, who have completed hunter education, and hold one of their first two hunting licenses. The Department proposes to charge a fee for this permit and its associated tag, which will be determined later.

Hunters would hunt under the same rules and restrictions as youth hunters during youth season (e.g., landowner permission required), except that they would not be required to have a mentor. The Department would still encourage the use of mentors during this season. Hunters during this season would be allowed to harvest one deer with the same restrictions on sex, age, and antler characteristics as youth hunters during youth season. However, a buck harvested during this season would count toward the annual limit, whereas a buck harvested during the youth season would not count.

Currently, about 500 people over age 16 complete hunter safety each year. Therefore, a maximum of about 1,000 hunters are expected to be eligible for this season in a given year. Since many of these are parents that took the course with their child, or others that had no intention of hunting, the Department reasonably expects 400-500 people would actually participate in this season annually. In the short term, this may counteract declining youth season participation (youth season tag sales have declined by about 200 tags per year over the past 10 years) and stabilize the harvest, but it is not expected to result in an increased harvest.

Youth Season

9. Move Youth Season to Late October

The Department recommends moving the youth season two weeks earlier so that it would be three weeks prior to rifle season and the weekend before the proposed antlerless season (see calendar). This would result in season dates ranging from October 20-21 to October 26-27. This timing provides more favorable weather conditions and would continue to offer youth hunters the first opportunity to harvest deer with a gun. This would also ensure that the season is always before Daylight Savings Time ends (currently ends during or one week prior to youth season), providing more evening hunting time.

Antlerless Harvest Management

The Department recognizes that this recommendation proposes substantial increases in hunting opportunity, particularly antlerless harvest opportunities, and that may cause concerns about overharvest. Therefore, it is important to also clarify how the antlerless harvest will be limited when and where it is necessary.

First, it is important to note that much of the increased antlerless harvest opportunity is focused on increasing the harvest in more-developed areas and pockets of higher deer density while maintaining current harvest levels in more rural areas. The primary means of controlling the antlerless harvest will continue to be modifications to the antlerless permit allocation through the annual antlerless harvest recommendation. With expanded opportunities providing increased antlerless harvest during the archery season and greater fill rates of antlerless permits, it is expected that fewer antlerless permits will need to be allocated each year in order to achieve harvest objectives.

Archery antlerless harvest is the Department's best deer management tool and, as such, we would like to encourage it as much as possible. Archery hunters harvest deer primarily where deer densities are highest and have little or no impact on deer numbers in other areas. They are also the only effective option in developed areas where firearm hunting is limited due to local ordinances, access challenges, and safety concerns. As a result, this harvest is important for managing locally abundant deer without unnecessarily impacting lower-density areas. The Department will continue to be able to restrict archery antlerless harvest in specific WMUs by limiting which WMUs the 2nd archery antlerless tag may be used in, or, in extreme cases, by closing a WMU to all archery antlerless harvest.

Bag Limits

The one buck limit will be defined in regulation, but all bag limits will be functionally determined by tag availability. Each tag allows a hunter to harvest one deer. A hunter may purchase/hold only one of each tag, except for expanded archery antlerless tags and lottery antlerless deer permits/tags (if unallocated permits are available). If a hunter holds a valid, unused tag, they will be allowed to fill it.

A typical adult hunter purchasing over-the-counter permits/tags for all seasons will be limited to three deer (one buck and two archery antlerless deer). It will be possible for some hunters to harvest additional antlerless deer if they receive a lottery antlerless deer permit or hunt in an expanded archery zone.

Licensing/Tag Structure

Hunting License

- Buck Tag: (Included with hunting license)
 - To be used on any buck harvested in any season, except youth season

Archery License (required to hunt during the archery season)

- Archery Antlerless Tag: (included with archery license)
- 2nd Archery Antlerless Tag: (purchased separately)
 - May be limited to certain WMUs, determined by annual antlerless harvest recommendation
- Expanded Archery Antierless Tag: (purchased separately)
 - Valid only in Expanded Archery Zones
 - May purchase multiple tags

Muzzleloader License (required to hunt during antlerless season or muzzleloader season)

o Does not include any additional tags

Novice Permit (required to hunt during novice season)

<u>Novice Antlerless Tag</u> (included with permit)

Youth Deer Weekend Tag (required to hunt during youth season)

o Valid for deer of either sex, determined by annual antlerless harvest recommendation

Antlerless Permit (required to hunt in antlerless season)

- Antlerless Tag (included with permit)
 - Allocated through a lottery
 - Unallocated tags may be purchased over-the-counter
 - Availability determined by annual antlerless harvest recommendation
 - May be used during archery, antlerless, or muzzleloader seasons

Implementation Plan

The Department recommends that any enacted changes remain in place for a minimum of five years, and that no additional substantial changes be made during that time. This period is necessary to determine how the changes affect hunter numbers and participation, deer harvests, and buck age structure. Buck age structure management approaches should be adjusted at that time, if necessary, to ensure that buck age structure goals established in the 2020-2030 Big Game Management Plan are being met.

2018 Moose Season Report Vermont Fish & Wildlife Department

Ten moose were harvested in Vermont's 2018 moose seasons. One moose was taken during the archery-only season and 9 in the regular season. An estimated 1.5 tons of moose venison was harvested during the combined seasons, providing an estimated 12,000 meals.

Archery Season

Due to the low number of overall permits allocated, no lottery was held for the archery-only moose season. Three of the 5 moose auction winners, however, elected to hunt during the archery season. The bull-only permits were valid for Wildlife Management Unit (WMU) E1 or E2.

Harvest Data

The archery moose season ran for 7 days, from October 1-7, during the peak of the moose rutting season. Bulls are more responsive to calling at this time of year compared to mid-October, thus increasing the odds that bow hunters can call in moose to within shooting distance. The one harvested moose was taken by crossbow, and its biological measurements are shown in **Table 1.**

Table 1. 2018 Vermont Moose Archery Season Harvest Data

| WMU | TOWN OF KILL | AGE | ESTIMATED WEIGHT (pounds) | SPREAD (inches) | TOTAL POINTS |
|-----|--------------|-----|---------------------------|-----------------|--------------|
| E1 | LEMINGTON | 2 | 650 | 31 | 7 |

Regular Season

For the 2018 regular season, 3 permits were granted as Special Opportunity Permits, issued through a sponsoring organization to youths with a life-threatening illness. The remaining 5 permits were issued through a lottery, open only to resident military veterans. A total of 100 valid Veteran applications were received. Two of the auction winners elected to hunt during the regular season, making a total of 10 permits issued for the regular season. The 5 winning auction bids (archery included) totaled \$43,702.83, which will help fund Fish & Wildlife Department educational programs such as the Green Mountain Conservation Camps for youths. All permits were valid only for bull moose.

Harvest Data

Vermont's 26th moose season began on the third Saturday in October (20th) and ran for 6 days. The opening weekend weather was generally favorable, with cool overnight temperatures climbing into the 50's on Saturday and 30's on Sunday. There was no appreciable precipitation except light flurries on Sunday, and winds were generally light with only occasional high gusts. Completely-dressed carcass weights were obtained from all moose harvested in the regular season (**Table 2**). The largest was a 756 pound, 9-year old taken in Lemington. This bull also had the widest spread, largest beam diameter, and the most points.

Table 2. 2018 Vermont Moose Regular Season Harvest Data

| WMU | TOWN of KILL | AGE | WEIGHT | BEAM | PTS/L | PTS/R | SPREAD |
|-----|--------------|-----|--------|------|-------|-------|--------|
| E1 | AVERILL | 1 | 598 | 45.5 | 4 | 4 | 31 |
| E1 | AVERILL | 4 | 675 | 51.5 | 5 | 6 | 43 |
| E1 | BLOOMFIELD | 2 | 579 | 44 | 4 | 4 | 33 |
| E1 | BLOOMFIELD | 3 | 664 | 45 | 5 | 6 | 41 |
| E1 | BRIGHTON | 1 | 466 | 32 | 3 | 2 | 25.5 |
| E2 | E HAVEN | 3 | 544 | 42 | 3 | 3 | 31.5 |
| E1 | LEMINGTON | 9 | 756 | 64 | 9 | 8 | 51 |
| E1 | LEMINGTON | 2 | 545 | 40.5 | 5 | 4 | 33 |
| E2 | MAIDSTONE | 11 | 535 | 47 | 7 | 5 | 43 |

Weight is carcass weight completely dressed in lbs., Beam is in millimeters, Pts./Left and Right are number of points at least 1 inch long; Spread is in inches measured to the nearest half-inch. Age is cementum age except for 0.5 is a calf aged by tooth replacement at Department-operated check station; Blank cells are unknown or missing data.

The Department again sampled larval winter tick loads on moose harvested in 2018 and found an average of 33.8 ticks/bull, up from 25.5 the previous year but 32% lower the first count in 2013 (49.6 ticks/bull). These sample counts ranged from 6 to 75 ticks/moose and represent only a small fraction of the actual number of larval ticks attached to each moose, which is often in the tens of thousands. In some years an extended warm autumn with no appreciable snowfall can prolong the period when larval tick can attach to moose, resulting in moose carrying even a heavier burden of ticks into the winter. The cold and snow arrived relatively early last autumn, and hopefully the tick-attachment period ended during or shortly after moose season.

A central incisor tooth was collected from all 10 harvested moose to establish age data. The average age of adult moose was 3.90 years. Thirty percent of adults were 4 years old or older, which is slightly above the minimum goal of 25% as called for in the 10-year Big Game Plan. The oldest moose was a 11-year-old bull taken in Maidstone.

Hunter Success

Eighty percent of resident permit holders (4/5) were successful, as were all of the non-residents (5/5). Non-resident permittees hailed from 4 different states; two from Ohio and one each from New Hampshire, Pennsylvania and Kentucky. Subpermittees took 3 (33%) of the moose killed. All moose were taken with a rifle.

Attachment 7

2019 Moose Management Recommendation

to the Vermont Fish and Wildlife Board February 27, 2019



Vermont Fish and Wildlife Department Agency of Natural Resources 1 National Life Drive, Dewey Building Montpelier, VT 05620-3208 802-828-1000

Recommendation

The Vermont Fish and Wildlife Department recommends that the Fish and Wildlife Board approve zero (0) permits for the 2019 moose hunting seasons. The Department's commitment to fair and equitable access to hunting warrants that priority be given to addressing changes in current Vermont statutes and Board regulations that constrain opportunities across all hunters in Vermont's moose hunting permit allocation structure. The Board should anticipate that once the statutory issues are addressed by the Vermont Legislature, the Department will recommend a set of changes to the moose rule for 2020 hunting seasons.

Moose Management Issues

Existing biological data support a limited hunting season of bulls-only in Wildlife Management Unit E. This hunt would have very limited influence on moose population numbers there.

A basic tenet of wildlife conservation and management is the fair and equitable access and enjoyment of wildlife. The Vermont Fish and Wildlife Department strives for equitable access for hunters. As we learned in 2018; however, the existing statutory and regulatory framework for the allocation of moose hunting permits prevents a fair opportunity for hunters. The current system was developed at a time when permit numbers far exceeded the numbers that can be sustained by the lower moose densities now experienced throughout the state.

Last years' experience highlighted the need to make several changes to Vermont statutes and regulations to accommodate issuing lower permit numbers. These potential changes include the following:

- Consistency between statute and the moose rule regarding the number of auction permits;
- Adjusting veteran permits and auction permits from a set number to a percentage of the total moose permit recommendation; and
- Addressing the expiration or maintenance of bonus points when permit numbers are so low that the applicants have virtually no chance of being drawn and are consequently forced to submit money or lose their total bonus points.

It is the Department's position that holding another moose hunting season under the constraints experienced last year is not consistent with the tenet described above, and there is merit in addressing this matter prior to holding another moose hunting season. It is important to note that the pending moose management plan will incorporate the final analysis and conclusions of the moose study into long-term management strategies to conserve and manage moose in Vermont. This may require establishing revised moose density objectives, addressing public opinions and input on management strategies, and informing the public of the management challenges ahead for moose. The public discussion around the moose management issues alone from the planning process will be helpful in guiding the Department's moose plan. The outcome of the plan will be important in setting the stage for moose management as early as 2020.

Biological Status of Moose

The Vermont Fish and Wildlife Department evaluated the biological status of Vermont's moose population using several key datasets. After its analysis at the regional level, the Department's Big Game Team determined that a moose season of 13 bulls-only permits limited to Region E (WMUs E1 and E2) will, once again, have no significant effect on moose population trends. These permit numbers, however, will once again be subject to the statutory and regulatory constraints regarding the number of permits delegated to auction, veterans and special opportunity hunts with no allowance for the general hunting public.

Status of Vermont's Moose Population

The Vermont Fish and Wildlife Department uses several datasets that inform its moose population models to monitor population trends at the statewide and regional levels (Figure 1).

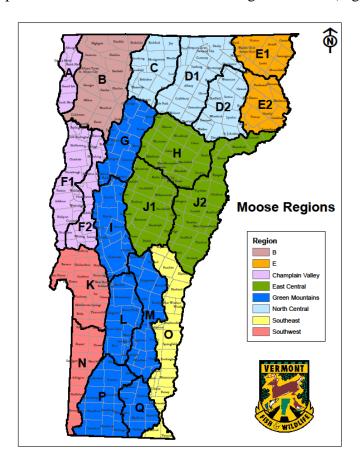


Figure 1. Vermont moose management regions

Rolling three-year averaged moose sighting rates from deer hunter surveys are used as a population index that is incorporated into our moose population estimation formula. The moose sighting rates are an index of the population and not necessarily reflective of the true population, because many factors (e.g., weather, hunter behavior) can affect sighting rates from one year to the next. Thus,

we use other indexes of population such as incidental mortality reports along with survival and productivity from the three-year moose study to assess how closely our population estimate matches the true population. While moose sightings from the 2018 Deer Hunter Survey were greater than the three-year average, and in Region E were 110% greater than the three-year average (Table 1), comparison with incidental mortality, survival and productivity data suggest the population is more likely to have remained stable with previous years or continued declining in some regions.

Table 1. Moose sighting rates in 2018 compared to 2016-2018 average.

| | Sigh | ting | |
|------------------|-------|------|------------|
| | rat | • | Percent |
| Region | 2016- | | Difference |
| | 2018 | 2018 | |
| WMU E1 & E2 | 1.31 | 2.75 | 110 |
| North Central | 0.3 | 0.32 | 7 |
| East Central | 0.2 | 0.31 | 55 |
| Green Mountains | 0.19 | 0.17 | -11 |
| WMU B | 0.08 | 0.13 | 63 |
| Champlain Valley | 0.02 | 0.02 | 0 |
| Southeast | 0.02 | 0.02 | 0 |
| Southwest | 0.02 | 0.02 | 0 |

Moose population estimates: The increased sighting rates of moose by November season deer hunters in 2018 resulted in greater three-year moose population estimates for four (4) of eight (8) regions (Table 2). Of the four regions with target moose densities, only Region E (WMUs E1 and E2) is within the current established threshold for hunting (25% of the target population). The bull: cow ratios from last year's Deer Hunter Survey are still good statewide (88 bulls:100 cows) and within Region E (80 bulls:100 cows), and they remain consistent with adult sex ratio objectives.

The new rolling three-year estimate for Region E is 1.3 moose/mile² (Table 2). It's unlikely, however, that the population in Region E could have grown that much with the 52% calf mortality rates and relatively low fecundity rates observed in our collared moose study last year. Forty hunters returned a Region E survey in 2018, and 9 different hunters saw a total of 90 moose. One hunter, over 12 hunting days, saw 38, or 42% of all moose seen in Region E. If this one hunter had not returned a survey, the Region E population estimate would have remained fairly stable at 1.11 moose/mile², with an 80% confidence interval range of 0.95 to 1.28 moose/mile².

Table 2. Rolling 3-Year 2016-2018 Moose population Estimate by Region

| REGION | Target Density (Moose/Mile²) | Target Popn | 2016 – 18 Pop Est (Density/mi²) | Difference | Percent Difference |
|--------|---------------------------------|----------------|---------------------------------------|------------|-----------------------|
| E | 1.0 | 632 | 830 (1.3) | 198 | 0.31 |
| NC | 0.5-1.0 | 834 | 342 (0.3) | -491 | -0.59 |
| EC | 0.25 - 0.5 | 507 | 309 (0.2) | -198 | -0.39 |
| GM | 0.0 - 0.5 | 994 | 410 (0.19) | -584 | -0.59 |
| В | NA | NA | 34 | 34 | 0.00 |
| CV | NA | NA | 0 | 0 | 0.00 |
| SE | NA | NA | 12 | 12 | 0.00 |
| SW | NA | NA | 0 | 0 | 0.00 |
| Total | | 2967 | 1938 | -1029 | -0.35 |

Non-hunting Moose Mortalities: We maintain a statewide database of all recorded non-hunting moose mortalities that occur in addition to the legal hunting harvest (Table 3). These data are collected and reported on a biological year basis, which begins on June 1, after most of the moose calves have been born. We review summaries of non-hunting moose mortalities each year when we develop season recommendations, as this information helps us assess how well our moose population estimate matches the true population.

The total number of moose dying from non-hunting causes in the Biological Year ending May 31, 2018 was 93, virtually unchanged from the previous year. The total for WMU E also remained stable (26 vs. 25), supporting evidence that the WMU E population may not have increased as indicated by the deer hunter sighting rates.

Table 3: Non-hunting Moose Mortality for Biological Year 2017 (7/01/17 – 6/30/18)

| Region | Illegal | Motor Vehicle | Suspected Brainworm | Tick | Other | Unknown | Total BY2017 | Total BY2016 |
|--------|---------|------------------|------------------------|------|-------|---------|-----------------|-----------------|
| Е | 0 | 19 | 1 | 2 | 0 | 4 | 26 | 25 |
| Others | 2 | 34 | 17 | 2 | 4 | 8 | 67 | 66 |
| Total | 2 | 53 | 18 | 4 | 4 | 12 | 93 | 91 |

Moose Study Mortality and Productivity: In the second year of a three-year study, 30 8-month old calves, along with 6 cows, were radio-collared in January 2018. Only 1 of 33 cows died during the winter, resulting in a survival rate of 97%. Of 30 collared calves, one slipped its collar partway through the winter season, and 15 of the remaining 29 calves died by the end of May. The 48% calf survival rate was down from 60% the previous year (Figure 2).

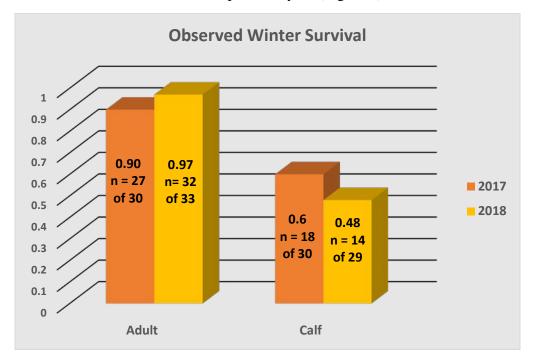


Figure 2. Vermont collared cow and calf winter survival rates, 2018 – 2019.

Infestation by winter ticks was implicated in the cause of death for many of these calves, and in 2018, 6 calves were also infected with brainworm. Over the two years of the study thus far, winter ticks and brainworm have caused over two-thirds of collared moose mortalities (Figure 3).

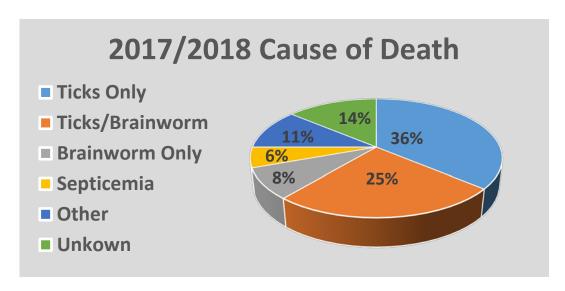


Figure 3. Cause of death of Vermont collared moose, 2017-2018.

Total tick counts were made on 4 half-hides collected from deceased calves. The average estimated tick load (actual number of ticks counted times 2) was 31,147 ticks (range 19,660 – 58,778). This average was 47% higher than the 2017 average count of 21,134 ticks on 4 calf hides.

Similarly, the average number of ticks counted on rump and shoulder transects of live calves at time of capture in January 2018 was 33.4, up 45% from 23.1 the previous year (Figure 3). The observed increase in overwinter mortality in the second year of the study was therefore not surprising.

Thirty additional 8-month old calves were collared in January 2019, and their average tick load at capture was 32.6 ticks, representing no significant change from 2018 (Figure 4).

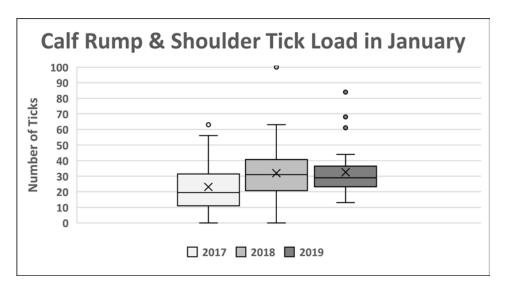


Figure 4. Average tick counts (from shoulder and rump transects) on Vermont calves at time of capture in January, 2017-2019.

In addition to tick loads carried into the winter season, calf body weights have been correlated with tick-induced mortality by published studies of New England moose. The average weight of Vermont calves at time of capture has remained close to 380 pounds through all 3 years (Figure 5). With similar average tick count and body weight of calves collared in 2018 and 2019, losing half of our calves this winter is once again possible.

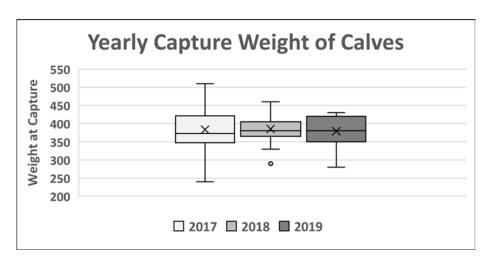


Figure 5. Average weight of collared Vermont calves at time of capture, 2017-2019.

Population Models: For Region E, we use a population model (MOOSPOP) to estimate the impact of hunter harvest on the moose population. This model incorporates estimates of 1) current-year population size, age structure, and adult sex ratio; 2) number of moose hunting permits to be issued; 3) hunter success rates; 4) seasonal mortality by age classes; and 5) ovulation rate by age class of the cow. The starting population size is from the rolling 3-year average deer hunter sightings.

The Department applied analyses of moose data for Region E similarly to past years to quantify the effects of various harvest prescriptions on the moose population trend. Trials were run using limited versus zero moose hunting permits beginning in 2019. These trials were run with very conservative application of moderate to severe population effects from winter ticks with a low tick year every three years, as prescribed from moose research in New Hampshire. We also applied the lower 80% confidence interval 2018 population estimate for Region E as a conservative starting point (718 moose/1.14 moose/mile² vs. 830 moose/1.31 moose/mile²). Tables 4 and 5 illustrate the stabilizing effect of annually applying 13 bull-only permits under the winter tick scenarios offered above. Of course, annual adjustments to the permit numbers allow for adaptive management to achieve the target population. Interannual variability in survival and reproduction are impossible to accurately predict, thus an adaptive management approach also allows for adjustments based on what the final year of the moose study show and what subsequent years of non-hunting mortality and moose sighting data show.

Table 4. MoosPop trial for Region E with 0 permits.

| Model | Calendar | November Population | Density | | | | | |
|-------|----------|---|------------------|--------|---------|---------|--|--|
| Year | Year | Estimate | (Moose/Sq. Mile) | | Permits | in Year | | |
| 0 | 2018 | 718 | 1.14 | Lambda | 0 | 2019 | | |
| 1 | 2019 | 695 | 1.10 | -0.03 | 0 | 2020 | | |
| 2 | 2020 | 708 | 1.12 | 0.02 | 0 | 2021 | | |
| 3 | 2021 | 823 | 1.30 | 0.16 | 0 | 2022 | | |
| 4 | 2022 | 765 | 1.21 | -0.07 | 0 | 2023 | | |
| 5 | 2023 | 769 | 1.22 | 0.01 | 0 | 2024 | | |
| | | 1.0 Moose/Square Mile = 632 moose (target population) | | | | | | |

Table 5. MoosPop trial for Region E with 13 permits.

| Model | Calendar | November Population | Density | | | | | | |
|-------|----------|---|------------------|--------|---------|---------|--|--|--|
| Year | Year | Estimate | (Moose/Sq. Mile) | | Permits | in Year | | | |
| 0 | 2018 | 718 | 1.14 | Lambda | 13 | 2019 | | | |
| 1 | 2019 | 684 | 1.08 | -0.05 | 13 | 2020 | | | |
| 2 | 2020 | 689 | 1.09 | 0.01 | 13 | 2021 | | | |
| 3 | 2021 | 797 | 1.26 | 0.16 | 13 | 2022 | | | |
| 4 | 2022 | 733 | 1.16 | -0.08 | 13 | 2023 | | | |
| 5 | 2023 | 733 | 1.16 | 0.00 | 13 | 2024 | | | |
| | | 1.0 Moose/Square Mile = 632 moose (target population) | | | | | | | |

Harvest Potential

The issuance of a small number of bull-only permits produces slightly different density estimates but does not drive overall moose density trends in WMU E. Instead, fluctuations in winter mortality of calves from winter ticks more significantly influences increases and decreases in moose density over the five-year period. A season recommendation of 13 bulls-only permits for WMU E is sustainable, will not influence the population over time, and is consistent with the goals of the current moose plan, one of which is to provide hunting opportunities and local meat.

Proposed Timing and Outreach

The proposed moose management recommendation will be presented to the Fish and Wildlife Board at their February 27, 2018 meeting. The Department will collect public comments for a minimum of 30 days. Public input will be sought at three Department held public hearings to be held in conjunction with the March deer meetings and through emails. The Department will announce the public comment period through press releases, email distribution lists and its website.