

Fish and Wildlife Board Meeting Minutes

Wednesday, April 6, 2022

The Vermont Fish and Wildlife Board held a meeting beginning at 5:00 pm on Wednesday April 6, 2022, at the National Life Building in Montpelier. A recording of the meeting is available on the department's YouTube channel.

Board Members Present: Brad Ferland, Brian Bailey, Michael Bancroft, Michael Kolsun, Bryan McCarthy, David Robillard, Jay Sweeney, Martin Van Buren

Present virtually: David Deen, Jamie Dragon, Nancy Mathews

Procedural Note: Brad Ferland agreed to chair the meeting.

Department Staff Present: Commissioner, Christopher Herrick; Wildlife Director, Mark Scott; Outreach Director, Alison Thomas; General Counsel, Catherine Gjessing; Wildlife Species Program Manager and Waterfowl Project Leader, David Sausville, Deer Project Leader, Nick Fortin, Game Warden Lt., Trevor Szymanowski, Public Information Officer, Joshua Morse

Staff Present Virtually: Law Enforcement Director and Game Warden Col., Jason Batchelder; Furbearer Biologist, Kim Royar; Information Specialist, John Hall

Members of the Public Present: Kevin Lawrence, Newberg VT; Bill Pickens, Elmore VT

Member of the Public Present Virtually: Christen Cameron (town of residence not stated); Barbara Felitti, Huntington VT; Brenna Galdenzi, Stowe VT; Susan G (town of residence not state, last name not stated); Chris Schadler, Project Coyote VT and NH Representative

Agenda items:

Approval of previous minutes

- Feb 16, 2022 board meeting

Public Comments (limited to 2 minutes per speaker)

2022 Migratory Game Bird Season – Final Procedural Vote

2022 Moose Season Recommendation – Final Procedural Vote

Petition Acknowledgement and Discussion

- Petition to amend furbearer management rule on trapping
- Petition to have a regulated coyote hunting season

Commissioner's Update

Roundtable Discussion

The meeting was called to order at 5:00 pm

Approval of Previous Meeting Minutes

Motion: Bryan McCarthy moved to approve the meeting minutes from February 16, 2022. Brian Bailey seconded the motion.

Discussion: None.

Vote: 11 yes, 0 no, 0 abstain

Public Comments (2 minutes per speaker)

Kevin Lawrence (in person) – spoke to the Vermont Trapper’s Association (VTA) petition. Stated the relevance of trapping and voiced his support for the VTA petition on best management practices (BMPs) on the evening’s agenda.

Bill Pickens (in person) – spoke to both petitions. Stated that the VTA would like to see their petition discussed and worked on. Of the Vermont Coyote Coexistence Coalition (VCCC) petition noted that the last coyote season petition brought to the board was not moved on and stated that he felt it was now time for the state to engage with this topic.

Brenna Galdenzi (online) – spoke to both petitions. Stated her opposition to foothold traps as inhumane. Stated that a regulated coyote hunting season would be a compromise. Objected to language of taking emotions out of wildlife policy. Noted that audio quality was poor.

Christen Cameron (online) – spoke to both petitions. Stated support for a regulated season on coyotes. Argued that traps are inherently inhumane and stated her lack of support for changes to trapping that do not ban the use of foothold traps entirely.

Barbara Felitti (online) – spoke to the VCCC petition. Stated support for a regulated season on coyotes. Stated that the best way to dial down the temperature is for the board to take comment and be responsive. Stated there is not evidence that the board and department are being responsive to public comment.

2022 Migratory Game Bird Season – Final Procedural Vote

Mark Scott introduced the final updated proposal as identical to the version introduced on February 16th except for changes made to address the concern of the season ending on Christmas Day. David Sausville described public comment process and noted the March 9 and March 10

additional public meetings held, noting that both meetings were generally quiet with little discussion. Sausville further clarified that Lake Champlain Zone season dates have been changed to Oct 29-Dec 18 and that no other changes were made per Scott's introductory comments.

Board discussion covered concern that the department might issue permits for bass tournaments on waterfowl opening day leading to conflict between waterfowl hunters and anglers. Sausville clarified that this would not be the case. Scott reminded the board that picking between stakeholder groups is a significant challenge and that the department's goal is for all Vermonters who enjoy the outdoors to be able to do so together. Further discussion covered the possibility to push the Woodcock season later in order to target migrating birds. Sausville responded on the need to wait until results of the University of Maine Woodcock study became available before further consideration. Further discussion covered the nuance of youth season and general goose season overlap.

Motion: Martin van Buren moved to accept the recommendations with the changes introduced at this meeting, David Robillard seconded.

Vote: unanimously approved.

Board broke for 30-minute dinner

2022 Moose Season Recommendation – Final Procedural Vote

Mark Scott reintroduced the proposal noting that it was identical to the one introduced in February, but that the department had since held three in-person public meetings on the moose hunt permit proposal in conjunction with those on the status of Vermont's deer herd, and an additional virtual meeting. Scott noted that understanding the moose density/tick relationship continues to be a challenge for some members of the public. He noted that 65% of Vermonters polled in 2013 support a hunting season to reduce death of moose to winter ticks. He then turned the presentation over to Nick Fortin. Fortin walked the board through the status and health of Vermont moose and 2022 hunting proposal, moose/tick relationship, other treatment options, and explained why the department cannot treat ticks instead of reduce moose density. He noted that moose and winter ticks likely co-evolved, and that changing moose abundance changes tick abundance. He explained that fungal pathogen research as means of tick control has piqued public interest but explained that we are a long way from being able to apply that research in the field due to unknown performance outside the lab, possible side effect, and lack of a viable dispersal methods. Fortin concluded that our current moose density in WMU E is higher than desired for landscape health and moose health given winter tick and winter temperature dynamics, and hunting is the best way to limit the population to assure that the herd we do have is healthy.

The board discussed whether there will be additional research done to understand possible pockets of high moose population density outside of WMU E; evidence of uncertainty by some participants in the March hearings on the moose/tick relationship but also evidence of high

public trust in the department's science; and the relationship between habitat and moose numbers in light of ticks.

Motion: Jay Sweeney moved, to accept the 2022 moose season as recommended, Michael Bancroft seconded.

Vote: unanimously approved.

Petition Acknowledgement and Discussion

Brad Ferland summarized the two petitions on the agenda and stated that the role of the petition section of the agenda is to make sure the board understands the purpose of the petitions in question. Board discussion included whether current legislative action could make board action on these petitions moot, and whether to table the petitions until the legislative session concludes. The commissioner advocated against tabling either petition.

Petition to amend furbearer management rule on trapping

Petitioner: Vermont Trappers Association

VTA Vice President Bruce Martin presented the petition. He referenced VTA's longstanding support for and utilization of the Association of Fish and Wildlife Agency's best management practices (BMPs) despite the fact they are not required by regulation in Vermont. He suggested that BMPs be made regulatory based on VTA's positive experiences with BMP traps.

Board discussion included clarification on current trapping standards in Vermont; whether the petition is responding to a problem or a proactive move to adopt good practices; whether standards for humane euthanasia of trapped furbearers exist and could be adopted in Vermont; whether BMPs are required by regulation in other states; the details of S201 regarding possible directives to the Fish and Wildlife board for adopting similar practices to those being petitioned; and clarification that a board motion to move forward with the petition would entail directing the department to develop and present a possible timeline for researching the topic and making a recommendation the board.

Motion: David Robillard moved to open the trapping rule and request the department to develop a timeline for researching and recommending on this and other relevant tabled petitions, seconded by Nancy Matthews.

Vote: unanimously approved.

Petition to have a regulated coyote hunting season

Petitioner: Vermont Coyote Coexistence Coalition

Project Coyote New Hampshire and Vermont Representative Chris Schadler presented the petition, at the request of Vermont Coyote Coexistence Coalition Lead Jane Fitzwilliams who was unable to attend. She stated several reasons supporting VCCC's petition for an Oct 1 – Dec 31 coyote season including the inefficacy of hunting coyotes as a means of population control, the lack of evidence that population control is needed in the northeast, and the potential conflict reduction benefits of eliminating hunting pressure during pup rearing and pup socialization seasons. She concluded that Fish and Wildlife departments nationwide have the power to shape public attitudes towards wildlife coexistence.

Board discussion included clarification of whether the petition was strictly regarding implementing an Oct 1 – Dec 31 hunting season on coyotes or whether it included provisions regarding the use of hounds to hunt coyotes; whether the department has any information on the annual take of coyotes by hunting as opposed to trapping; the nature of reply expected by the petitioners; and whether it made sense to table the petition until S281 is accepted or dismissed by legislature and the governor.

Commissioner Herrick noted that in S281, should the bill be passed, the department will likely be asked to consider a season on coyotes and that given this the VCCC petition opens the board and department to move in the same direction as the legislature. He recommended the board to consider the petition. Mark Scott seconded the commissioner's statement that the department would welcome the opportunity to look at coyote hunting in Vermont. Counsel Gjessing clarified that the rule to which the petition refers in Appendix 10:44 – the furbearer rule.

Motion: Nancy Matthews moved to open the furbearer rule and request the department to develop a timeline for researching and recommending on this and other relevant tabled petitions, seconded by Bryan McCarthy.

Vote: 10 yes, 1 no (Brian Bailey), 0 abstain.

COMMISSIONER'S UPDATE

Commissioner Herrick updated the board on S281 and S201, reiterating that through the department's work two bills that were introduced as bans have been improved into compromises in their current form. He acknowledged Kim Royar's exceptional contributions. He also noted that S129 did not pass, and that instead the board is being encouraged by the committee to demonstrate continued and enhanced listening to voices that are not always in agreement. He concluded that in all of these cases a deliberate, calm, and facts and science-based approach has led to good outcomes. The commissioner also acknowledged Mark Scott and Nick Fortin for their skillful work managing deer public hearings, and the expertise and dedication of department staff on a whole

Motion: David Robillard moved to adjourn at 8:25pm, seconded by Jay Sweeney.

Vote: unanimously approved

2022-2023 WATERFOWL SEASONS RECOMMENDATIONS

APRIL 6, 2022



**Vermont Fish and Wildlife Department
Agency of Natural Resources
1 National Life Drive, Davis 2
Montpelier, VT 05620-3905**

Executive Summary

The Vermont Fish and Wildlife Department proposes the same recommendations the Board approved by straw vote on February 16, 2022, with changes to recommendation one. The Department makes these recommendations based on the following:

No consensus for change was found during the public meetings or within comments received through emails to warrant a change in Department recommendations. The one common comment was the public wished it did not end on Christmas day. The Department used the information garnered from the 2015 Waterfowl Hunter Survey to make recommendations based on the broader waterfowl hunting public preferences.

Justifications for Recommendations Discussed through Public Input Sources

Recommendation 1 - 2022 Lake Champlain Zone Duck, Merganser and Coot Seasons: That the 2022-2023 duck, mergansers, and coot seasons of the Lake Champlain zone run from October 15 to October 23 and October 29 to December 18, 2022.

- Recommended dates are targeted to find a balance between early season/marsh hunters and late season lake hunters. All hunters do not have access to larger boats and ice-free launch sites.
- We tried to capture season days that provide opportunity for a variety of hunted duck and goose species during their greatest relative abundance within the LCZ.
- Even with a 60-day season we cannot meet all requests including; allowing hunting until the end of the calendar year, hunting during peak migration for early and late migrants, and hunting in November during peak migration of scaup.
- We have tried to provide hunting days during unfrozen conditions for both marsh and big lake hunters, realizing we cannot predict weather conditions.
- We tried to maximize the number of weekend days to provide opportunity to all hunters.

Recommendation that Opening Day occur on a Saturday: That the opening day occur on a Saturday. In 2020 the department began recommending a change from a two Wednesday and one Saturday system to alternating between Wednesdays and Saturdays every other year.

- The 2015 survey indicated Vermont waterfowl hunters prefer their duck season to open on Wednesday (44%), Saturday (30%), and no preference (26%).
- The department tries to provide equal opportunities for hunting to all age and economic groups through opening on a Saturday.
- We try to maximize the number of weekend days.

In review, these are the actions the Department requests that the Board takes tonight for the 2022-2023 migratory game bird seasons: Setting the 2022 duck, goose, merganser, coot, brant, woodcock and snipe seasons dates and daily bag limits, setting the 2022 youth waterfowl hunting weekend dates, and setting the 2022 falconry regulations.

Recommendations (Note: the following text is the same provided to the Board on Feb. 16.)

Recommendation 1 - 2022 Lake Champlain Zone Duck, Merganser and Coot Seasons: That the 2022-2023 duck, mergansers, and coot seasons of the Lake Champlain zone run from October 15 to October 23 and October 29 to December 18, 2022. Within the chosen dates, we recommend the 60-day season with a daily bag limit of no more than 6 ducks (with species restrictions) and 15 coots.

Recommendation 2 – 2022 Interior Vermont Zone Duck, Merganser and Coot Seasons: That the 2022-2023 duck, mergansers, and coot seasons of the Interior Vermont zone run from October 15 to December 13, 2022. Within the chosen dates, we recommend the 60-day season with a daily bag limit of no more than 6 -ducks (with species restrictions) and 15 coots.

Recommendation 3 – 2022 September Resident Canada Goose Season: That the September resident Canada goose season run from September 1-25, 2022, with a daily bag limit of 8 birds per day and a possession limit of 24 birds within the Lake Champlain and Interior Vermont zones. New Hampshire plans to offer the same dates within the Connecticut River zone, but with a daily bag limit of 5 birds per day and a possession limit of 15 birds.

Recommendation 4 – 2022 Lake Champlain and Interior Vermont Zones Migrant Canada Goose Season: That the Lake Champlain and Interior Vermont zones be set for the migrant Canada goose season to run from October 15 to November 13, 2022, with a daily bag limit of 1 bird per day and a possession limit of 3 birds.

Recommendation 5 – 2022 Lake Champlain and Interior Vermont Zones Snow Goose Season: That the Lake Champlain and Interior Vermont zones be set for the snow goose season to run from October 1st to December 31, 2022 and February 24 to March 10, 2023, with a daily bag limit of 25 birds per day and no possession limit.

Recommendation 6 – 2022 Lake Champlain and Interior Vermont Zones Brant Season: That the Lake Champlain and Interior Vermont zones be set for the brant season to run from October 15 to December 3, 2022, with a daily bag limit of 2 birds per day and a possession limit of 6 birds.

Recommendation 7 - 2022 Youth Waterfowl Hunting Days: That the youth waterfowl hunting weekend occur on Saturday and Sunday, September 24 & 25, 2022, within all Vermont zones.

Recommendation 8- 2022 Falconry Season: A person possessing a valid falconry permit may take migratory game birds only during open seasons and within designated shooting times. The daily bag limit shall be a maximum of three legal migratory game birds, singly or in the aggregate, not to exceed restrictive daily bag limits for certain species as listed herein. Possession limit shall be equal to three times the daily limit.

Recommendation 9 – 2022 Woodcock Season: That the woodcock season run from September 24 to November 7, 2022, with a daily bag limit of 3 birds per day and a possession limit of 9 birds, statewide.

Recommendation 10 – 2022 Snipe Season: That the snipe season run from September 24 to November 7, 2022, with a daily bag limit of 8 birds per day and a possession limit of 24 birds, statewide.

Recommendation 11 – Hybrid Scaup Season: Provide a hybrid season on scaup that allows for a 20-day segment with a two-bird daily bag limit and a 40-day segment that allows for a one bird daily bag limit. The 20-day and two bird daily limit should be placed on the first twenty days within the Lake Champlain and Interior Zones seasons of Vermont. All remaining days of the seasons will be a one bird daily limit.

Recommendation 12 – December Resident Canada Goose Season: That the December resident Canada goose season run from December 1, 2022 to January 21, 2023, with a daily bag limit of 5 birds per day and a possession limit of 15 birds, statewide.

Background

Vermont currently has three waterfowl hunting 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 three zones, Vermont can split any zone once to create two hunting segments. Vermont currently has sixty days to divide between the two duck hunting segments to accommodate the diverse desires of the variety of Vermont waterfowl hunters. Migrant Canada goose season currently only has 30-days to utilize. The zones were also set up to take into consideration the differences in the physiographic regions of the state and the climatic differences each has.

2022 Duck Season: The Board has 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. In 2020 the Department converted to an every other year opening day schedule in which we alternate a weekday and Saturday as opening days.

2022 Goose, Brant, Mergansers, and Coots Seasons: Resident Canada geese have a 25-day season option and may run from September 1st to the 25th. The migrant Canada goose season may not open prior to October 10th. Migrant Canada geese have a 30-day season option with a one-bird daily bag limit. Atlantic brant have a 50-day season option with a two-bird daily bag limit. The Board traditionally has run the merganser and coot seasons concurrently with the duck season. December resident Canada geese have a 52-day season option and may run from December 1st to February 15th.

2022 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.

The age of youth hunter eligibility was changed in 2016 at the federal level. That same year the Board changed the youth waterfowl hunter age to 17 years of age or younger. 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). Vermont also requires all hunters 16 years of age and older to have a state duck stamp. All hunters regardless of age are required to have a HIP number. Within the Connecticut River Zone, youth must be 15 years of age or younger to participate during the youth weekend.

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.

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 31st when the snow goose season closed. The falconry season reopened on February 26, 2022. A three-bird daily bag limit was in effect.

Public Input and Outreach: The Department, in conjunction with the Board, held two public meetings in 2022. Meetings occurred on the evenings of March 9 and 10 and began at 6:30 pm. The March 10th meeting offered a virtual component over the Teams platform. Comments received at the public meetings and the number of attendees is provided within the accompanying document. In addition to the public meetings and online comments the

Department relied heavily on the results of the 2015 Statewide Waterfowl Hunter Survey to set season dates and opening day preferences.

After the Board approves final season dates and bag limits, the Department will submit season 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 2022 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 a full month prior to any migratory bird hunting season. The seasons will be placed on the Department's website within days of approval.

Tally of Public Comments

The Department received a total of 3 emails containing comments on the proposed migratory game bird seasons. Thirty-two citizens attended the two public meetings hosted by the Board and Department. Comments made during the meetings are captured on the attached documents. Below are the main comments received from all sources with the number of individuals that commented.

1. Change Lake Champlain Zone (LCZ) reopener to allow the season to end as late as possible.
2. Move LCZ opener a week earlier, 10/8/22 to allow us a chance at wood ducks and then have a two-week break.
3. Within LCZ, first segment okay, make second section open on November 12 and run to January 1.
4. Extend the first segment of the LCZ by one day and end the second segment on December 24th.
5. Take days off the end of the second segment for LCZ and add them to the beginning to have a Wednesday opener for the second segment. (2)
6. Likes the LCZ season as is. (2)
7. Change the end dates so we don't hunt on Christmas. (2)
8. Can we split the migrant Canada goose season with the duck season in LCZ?
9. Interior Vermont Zone (IVZ) is okay as is.
10. Open IVZ earlier for early migrants.
11. Have a Wednesday instead of a Saturday opener because of less hunting pressure.
12. December resident Canada goose season is okay as long as it conserves the migrants. (2)
13. December resident Canada goose season will be great to try on the water.
14. Likes the flexibility of the late Canada goose season.
15. Proposed woodcock hunting season dates are okay. (2)
16. Hope the mallard numbers increase so the bag can.
17. Make the mallard bag limit three with one hen.
18. We should coordinate with Canada, They have bigger bag limits.
19. Can we have the LCZ only be Lake Champlain?
20. Why can't youth hunters take the resident goose limit during their duck hunt?
21. I will hunt December Canada season if there is no ice.
22. Bass tournaments conflict with a Saturday opener, want to have a Wednesday opener.

23. Wondering why we went from a Wed-Wed-Sat opening day system to a Wed-Sat opener?
24. Open the woodcock season on September 28 and run it to November 11 the Friday before the start of the rifle deer season.

Figure 1.

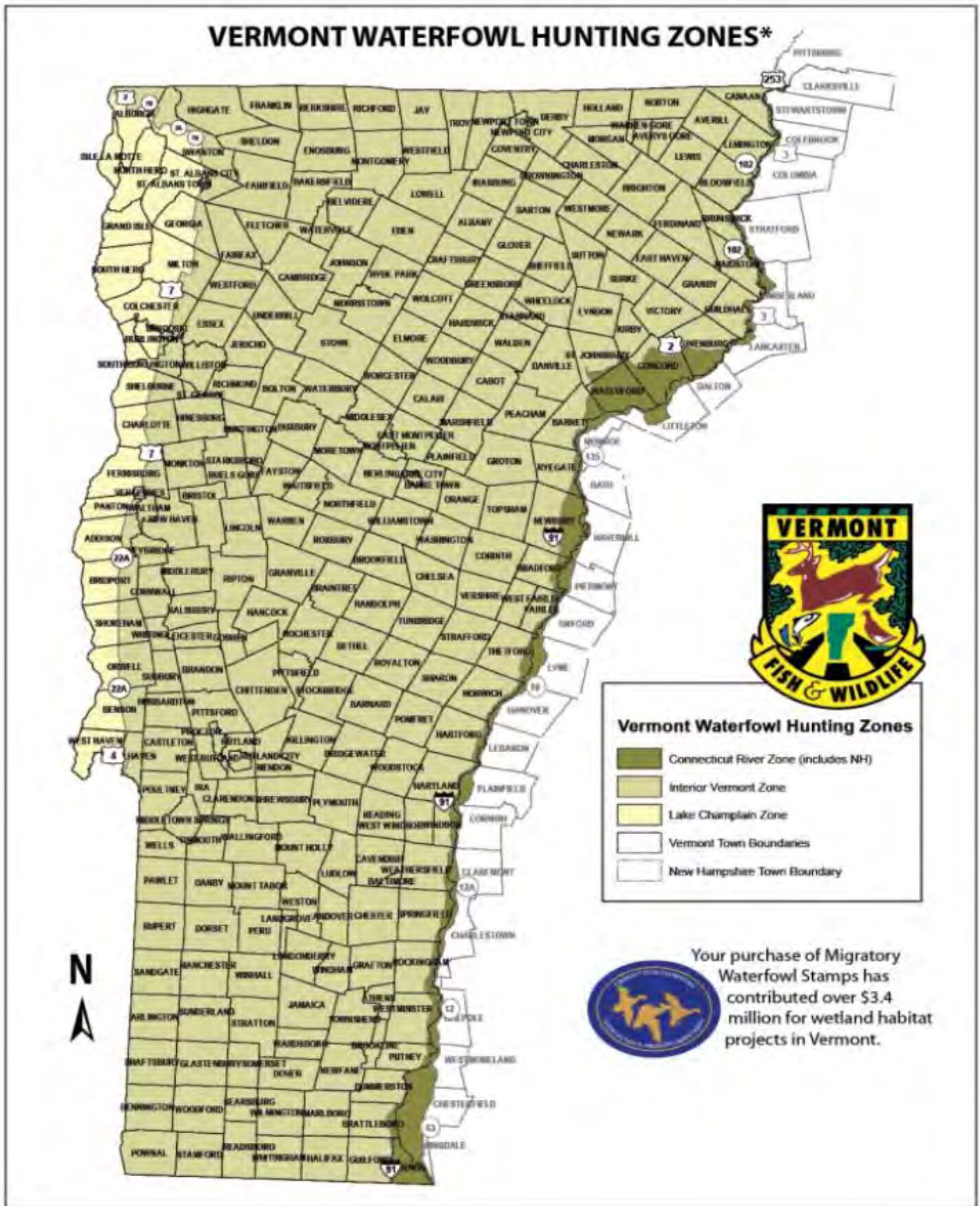


Table 1.

2022 WATERFOWL SEASON RECOMMENDATION

LAKE CHAMPLAIN ZONE

	<u>SEASON TYPE</u>	<u>SEASON LENGTH</u>	<u>INCLUSIVE DATES</u>	<u>DAILY LIMIT</u>	<u>POSSESSION LIMIT</u>
DUCKS *	Split	60 Days	<u>Oct. 15 - Oct. 23</u> & <u>Oct. 29 - Dec. 18</u>	6	18
MERGANSERS *	Split	60 Days	<u>Oct. 15 – Oct. 23</u> & <u>Oct. 29 - Dec. 18</u>	5	15
Scaup*	Split	20 Days	Oct. 15 – Oct. 23 & Oct.29-Nov. 8	2	6
	Hybrid	40 Days	Nov. 9 – Dec. 18	1	3
COOTS	Split	60 Days	<u>Oct. 15 – Oct. 23</u> & <u>Oct. 29 - Dec. 18</u>	15	45
GEESE					
Canada Geese	Straight	25 Days	<u>Sept. 1 - Sept. 25</u>	8	24
	Straight	30 Days	<u>Oct. 15 – Nov. 13</u>	1	3
	Straight	52 Days	Dec. 1, 2022 – Jan. 21, 2023	5	15
Snow Geese **	Straight	107 Days	<u>Oct. 1 - Dec.31, 2022</u>	25	NONE
	Split		<u>Feb. 24 – Mar. 10, 2023</u>	25	NONE
			(CO) <u>Mar. 11 - Apr. 23, 2023</u>	15	NONE
Brant	Straight	50 Days	<u>Oct. 15 – Dec. 3</u>	2	6

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

* Federal species restrictions apply.

** Includes blue geese also.

CO Conservation Order

Table 2.

2022 WATERFOWL SEASON RECOMMENDATION

VERMONT INTERIOR ZONE

	<u>SEASON TYPE</u>	<u>SEASON LENGTH</u>	<u>INCLUSIVE DATES</u>	<u>DAILY LIMIT</u>	<u>POSSESSION LIMIT</u>
DUCKS *	Straight	60 Days	<u>Oct.15 - Dec.13</u>	6	18
MERGANSERS *	Straight	60 Days	<u>Oct.15 - Dec.13</u>	5	15
SCAUP*	Split	20 Days	Oct. 15 – Nov. 3	2	6
	Hybrid	40 Days	Nov. 4 – Dec. 13	1	3
COOTS	Split	60 Days	<u>Oct.15 - Dec.13</u>	15	45
GEESE					
Canada Geese	Straight	25 Days	<u>Sept. 1 - Sept. 25</u>	8	24
	Straight	30 Days	<u>Oct. 15 – Nov. 13</u>	1	3
	Straight	52 Days	Dec. 1, 2022 – Jan. 21, 2023	5	15
Snow Geese **	Straight	107 Days	<u>Oct. 1 - Dec.31, 2022</u>	25	NONE
			<u>Feb. 24 – Mar. 10, 2023</u>	25	NONE
			(CO) <u>Mar. 11 - Apr. 23, 2023</u>	15	NONE
Brant	Straight	50 Days	<u>Oct. 15 – Dec. 3</u>	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.

Appendix A 2022 FALL CALENDAR

	SUN	MON	TUES	WED	THUR	FRI	SAT
SEPTEMBER					1	2	3
	4	5	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	
OCTOBER							1
	2	3	4	5	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					
NOVEMBER			1	2	3	4	5
	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			
DECEMBER					1	2	3
	4	5	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

 Proposed Lake Champlain Zone season
 Rifle deer season

2022
Moose Harvest
Recommendation

to the
Vermont Fish and Wildlife Board



Vermont Fish and Wildlife Department
Agency of Natural Resources
1 National Life Drive, Davis 2
Montpelier, VT 05620-3208
802-828-1000

The Fish & Wildlife Department recommends the same moose hunting permit allocation adopted by the Board by straw vote on February 16, 2022. During the public comment period, which started immediately after the Board meeting on February 16, the Department did not receive any new or additional information to justify changes to the initial recommendation.

The following is the same text the Department submitted to the Board for its February meeting. All public comments received are provided in the appendices. *Note: email comments are still being compiled and are not provided here.*

The Department’s goal is to improve the health of moose in northeastern Vermont by reducing winter tick abundance and their impacts on moose health, survival, and birth rate. The Department recommends issuing 100 moose hunting permits in WMUs E1 and E2 to reduce the moose population and thereby reduce winter tick abundance. See **Table 1** below for specific permit allocations.

The current number of moose in WMU E has been sufficient to sustain winter ticks at high levels that are negatively affecting moose health and survival. Winter ticks are a host-dependent parasite with moose being the primary host responsible for major fluctuations in winter tick densities. Therefore, reduction in moose density decreases the number of available hosts which in turn decreases the number of winter ticks on the landscape. Moose population reduction will be necessary to break the winter tick cycle and improve the health of moose in this region.

Failure to reduce the moose density will perpetuate the current, unhealthy state of the moose population in WMU E for decades and would be inconsistent with the Department’s established objective of managing for a healthy moose population. Importantly, 65% of Vermont residents support maintaining a smaller moose population through hunting if it reduces the number of moose that die each year from winter ticks. Only 15% oppose this approach (Responsive Management 2019).

Although winter ticks can be found on moose throughout the northeast, they do not significantly impact moose populations across the more-peripheral parts of their range, including the rest of Vermont, due to lower moose densities that limit tick abundance.

Table 1. Recommended 2022 moose hunting permit allocations by season, permit type, and WMU.

	E1	E2	Total
Archery Season			
Either-sex	9	6	15
Regular Season¹			
Either-sex	24	15	39
Antlerless-only	24	16	40
Auction²	choice		3
Special Opportunity²	choice		3
TOTAL			100

¹ Veteran permits are a priority draw for the first 5 regular season permits.

² Auction and Special Opportunity Permits are either sex and allow choice of season and WMU.

Summary of Key Points

- The moose population is stable in most of Vermont, including WMU E (E1 & E2).
- Moose density in WMU E remains above the objective of 1 moose/square mile established in the [2020-2030 Big Game Management Plan](#).
 - No WMU outside of the Northeast Kingdom ever had a moose density of 1/mi².
 - Moose densities greater than 1/mi² support high numbers of winter ticks that negatively impact the health of moose.
 - Moose densities below 0.75/mi² support relatively few winter ticks that do not impact moose populations. This is the case in most of Vermont – winter ticks are present, but do not cause population level impacts.
- Results of moose research in WMU E indicate health of moose is very poor in that region.
 - Adult survival remains relatively good, but detrimental health impacts of winter ticks have caused birth rates to be very low.
 - Heavy winter tick loads can cause more than half of moose calves to die in late winter.
- The Department recommends 100 moose hunting permits (60 either sex and 40 antlerless only) be allocated in WMU E to reduce moose numbers and thereby reduce the impacts of winter ticks on the health of moose and help maintain a sustainable moose population.
 - This would result in the harvest of 51-65 moose, or about 5% of the current estimated population in WMU E. This same permit allocation in 2020 resulted in the harvest of 62 moose.
- No permits are recommended for the remaining 19 WMUs, which cover 93% of Vermont, because moose densities remain below objectives and hunting thresholds established in the [2020-2030 Big Game Management Plan](#).

Goals

This recommendation aims to improve the health of moose in WMUs E1 and E2 by reducing the impact of winter ticks and to achieve moose population objectives established in the [2020-2030 Big Game Management Plan](#).

Management Objectives

Moose population objectives for each WMU were established in Vermont's [2020-2030 Big Game Management Plan](#). These objectives aim to maintain healthy regional moose populations at levels that are socially acceptable and ecologically sustainable.

In WMUs D2, E1, and E2, density objectives reflect the impact of winter ticks on the size and health of the region's moose population. Research has found reduced frequency of tick epizootics (where more than 50% of calves die from winter tick infestations) at moose densities below 1.06/mi² and no tick epizootics at densities below 0.75/mi² (Samuel 2007, Jones 2016). The Department will initially try to maintain moose densities at or below 1/mi² to reduce winter tick abundance and the frequency of epizootics, and improve the health of the moose population. However, if tick impacts are not reduced, the moose density may need to be reduced to 0.75/mi². Ultimately, the goal is to have healthy moose, with fewer calves dying each year from heavy winter tick loads and healthier cows with higher birth rates.

Moose density objectives throughout the rest of moose range in Vermont have been set at 0.5 moose/mi² (Figure 1). This lower objective reflects ecological limitations on moose densities in these regions due to limited young forest habitat, higher deer densities, and a warming climate. Moose densities in these WMUs have never reached 1/mi².

Hunting thresholds have also been established for each WMU at 75% of the density objective. The Department will only consider hunting moose when densities exceed this threshold for two consecutive years. This ensures that the other values of moose are maximized at these lower densities.

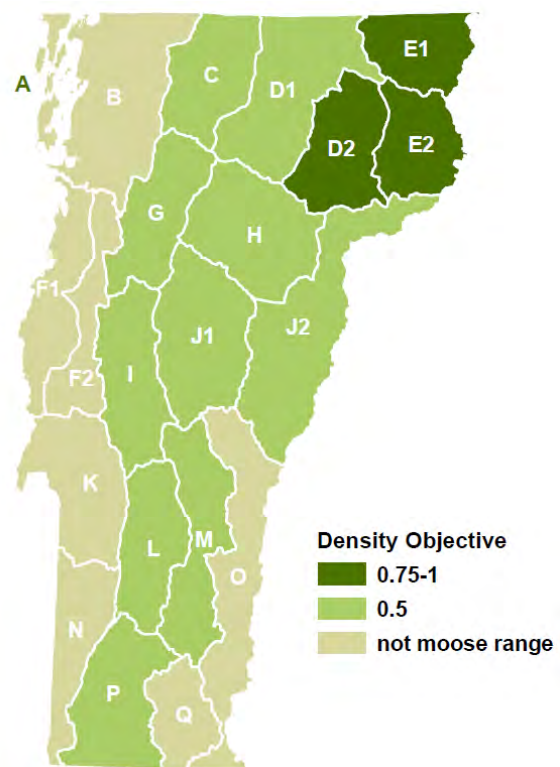


Figure 1. Moose density objectives (moose per square mile of moose habitat) established in Vermont's [2020-2030 Big Game Management Plan](#).

Population Status

Moose and Winter Ticks

Recent studies in Vermont, New Hampshire, and Maine have concluded that winter ticks are the primary cause of moose mortality across their core range in New England (Musante et al. 2007, 2010, Bergeron et al. 2013, Dunfey-Ball 2017, Jones et al. 2017, Ellingwood et al. 2019, Jones et al. 2019, DeBow et al. 2021), with some moose hosting an astonishingly high number of ticks (>50,000/individual; Jones et al. 2019).

Core moose range (continuous red/brown area in **Figure 2**) in New England extends from northeastern Vermont through northern New Hampshire and western and northern Maine. This part of the region has a colder climate with longer winters, low deer densities, large blocks of forest, and an abundance of young forest created by commercial timber management which allows it to sustain higher densities of moose than more peripheral parts of their range. Importantly, population-level effects of winter ticks have only been observed in the region's core moose range, where moose densities have been high enough to support large numbers of winter ticks.

Although winter ticks can be found on moose throughout the region, they are not impacting moose populations across the more-peripheral parts of their range in the northeast, including the rest of Vermont, due to lower moose densities which limit tick abundance. Moose numbers outside of the Northeast Kingdom have declined, but the main cause of that decline was not winter ticks. Rather, it was likely due to a combination of declining quantity of young forest, increased parasite loads (particularly brainworm linked to increasing deer densities), and fewer moose in core moose range to migrate out to these other regions.

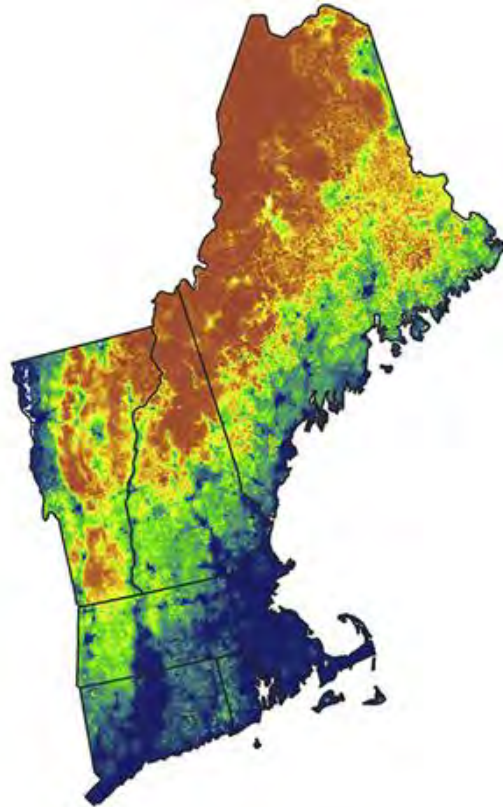


Figure 2. Estimated probability of occurrence of moose in the New England region from Pearman-Gilman et al. 2020.

Vermont Research

During 2017–2019, 126 moose (36 adult cows and 90 calves) were fitted with GPS radio collars in WMU E to monitor survival and birth rates. Results of this research clearly showed that chronic, high winter tick loads caused the health of moose in WMU E to be poor. Birth rates were low and overwinter calf survival was poor (49%; DeBow et al. 2021). Although observed adult female survival remained relatively good, it was lower than expected for a population without major predators. Survival of breeding age females has significant influence on population trends in long-lived species like moose.

Ongoing and Future Research

Fieldwork associated with the survival study concluded in 2019; however, the Department continues to monitor survival and calf recruitment in the remaining collared cows. Additionally, the large amounts of data collected during this study allowed University of Vermont researchers to analyze other aspects of moose and winter tick ecology. This related research focused on understanding 1) How winter tick impacts on moose relate to habitat use and quality (*see Blouin et al. 2021a and Blouin et al. 2021b*), and 2) How winter ticks affect moose nutritional condition and stress levels (*see Rosenblatt et al. 2021*).

Other recently completed research at UVM assessed the effect of various fungal pathogens on survival of winter tick larvae (*see Sullivan et al. 2020a and Sullivan et al. 2020b*). While some of these fungi resulted in high mortality of winter tick larvae in the lab, an important next step is to determine the effectiveness and feasibility of using these pathogens to control winter ticks in the field.

The Department is currently partnering with UVM, the University of Massachusetts, New Hampshire Fish and Game, Maine Department of Inland Fisheries and Wildlife, Massachusetts Division of Fisheries and Wildlife, New York Department of Environmental Conservation, and the US Forest service on a large, regional research effort focused on non-invasive monitoring of moose and winter ticks. The project includes the following: deployment of more than 400 long-term camera monitoring stations across the five states; track surveys; collection and analysis of urine and feces; winter tick surveys; and development of an integrated population model that can incorporate all of these data.

For more information about moose research in Vermont and New England, visit vtfishandwildlife.com.

Population Health

Many factors affect the health of individual moose and the overall population. These include diseases and parasites (e.g., winter ticks and brainworm), habitat quality, and environmental conditions. Ultimately, how fast a population grows and how resilient it is to additional sources of mortality is determined by how long individuals can be expected to live (i.e., the survival rate) and how many new individuals are added to the population each year (i.e., the birth rate).

In the early 2000s, moose were overabundant in WMU E. They were causing significant damage to forest regeneration and their physical condition was declining as habitat quality declined. The Department actively reduced the moose population in this area to bring it into balance with the habitat and to improve the health of moose. By 2011, the population had been reduced to a level the habitat could support; however, health measures did not improve (**Figures 3 and 4**).

Moose are not currently limited by habitat in the core part of their range, including WMU E (Dunfey-Ball 2017). There is enough available habitat and adequate forage to support the current population. However, habitat quality can influence the distribution of moose on the landscape (i.e., higher densities of moose in areas with the highest quality habitat), which can influence local winter tick abundance and impacts on moose health (Healy et al. 2019, Blouin et al. 2021a and b).

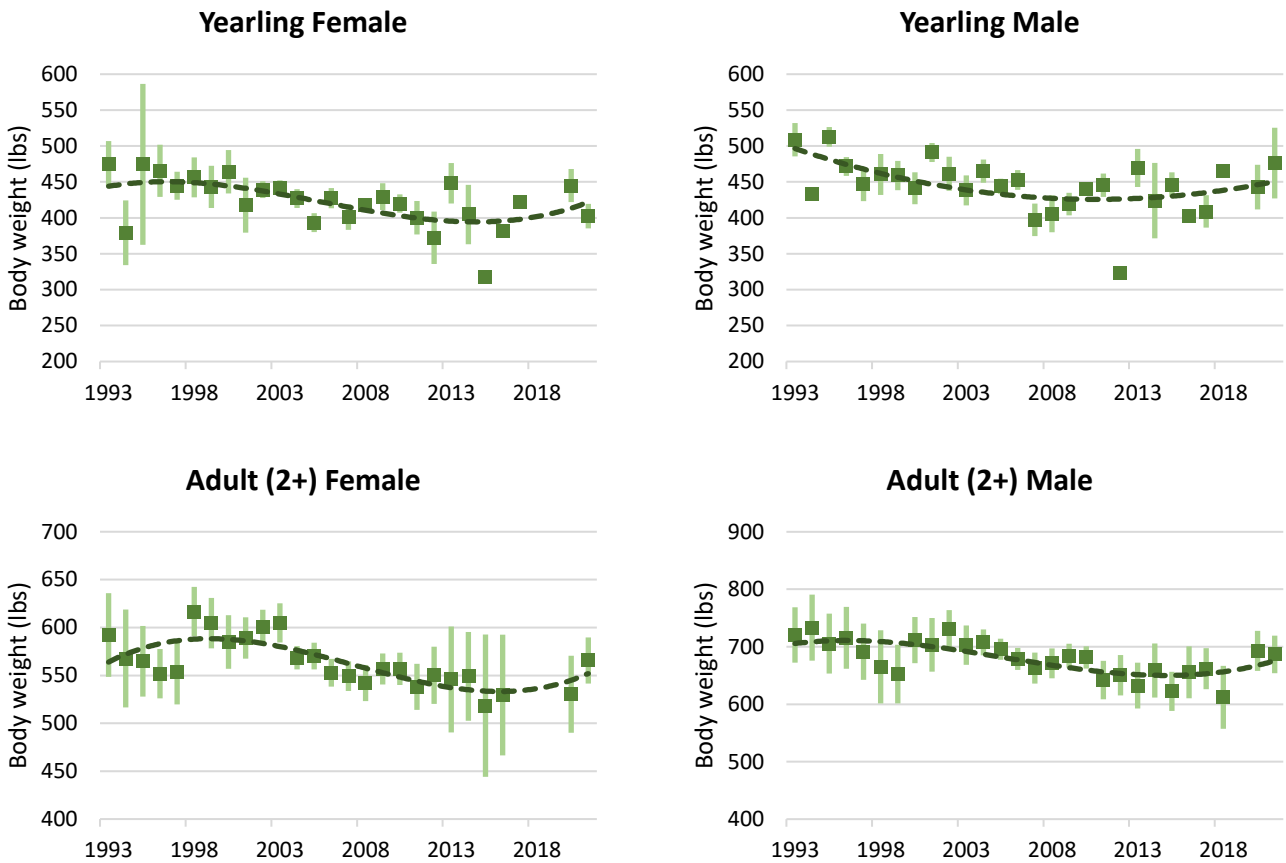


Figure 3. Field-dressed body weights of harvested moose in Wildlife Management Unit E, 1993–2021.

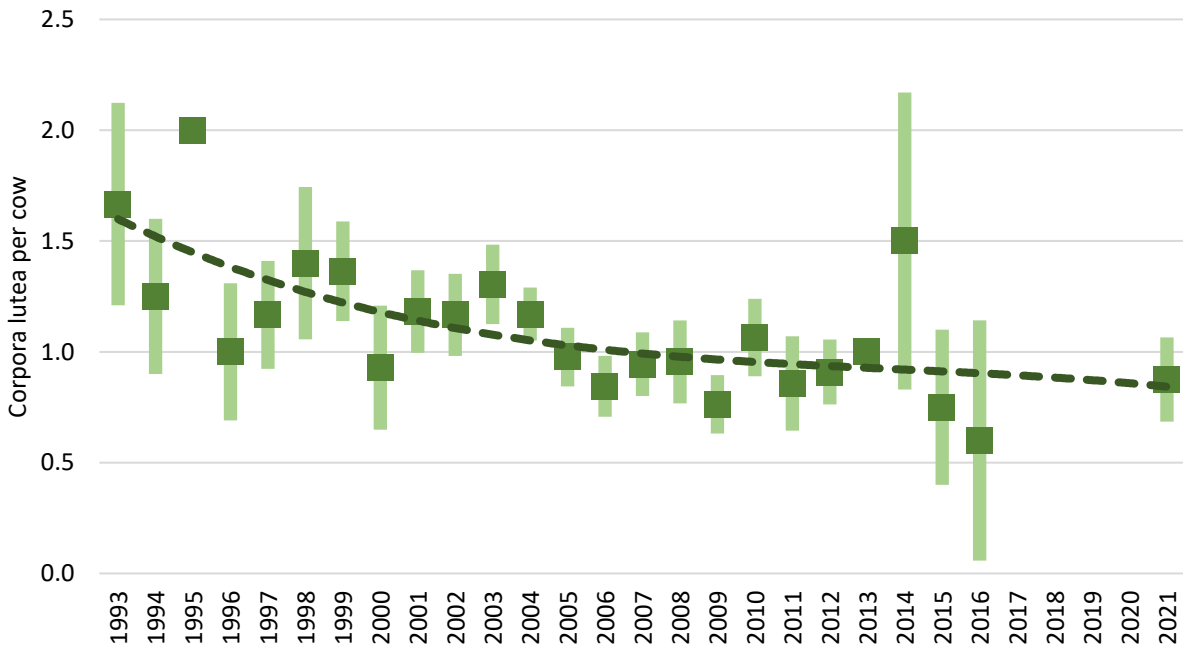


Figure 4. Ovulation rate of prime-aged (≥ 3 years old) cow moose in WMU E, 1993-2021. Data are from counts of corpora lutea in ovaries collected from hunter-harvested moose.

Recent Winter Tick Impacts

The severity of annual tick infestations is not only dependent on moose density, but also on climate, including temperature, humidity, wind, and snow. Annual variation in climate conditions results in variation in winter tick loads on moose. As long as climate conditions periodically result in reduced winter tick infestations, moose densities can remain at levels that perpetuate heavy tick loads and unhealthy moose for the foreseeable future.

Vermont has not collared moose calves since 2019. As a result, the Department relies on other sources of information to estimate winter tick impacts since that time. During 2020 and 2021, summer calf recruitment from remaining collared cow moose was better than during 2017-2019 (Figure 4). Additionally, the proportion of yearlings in the moose harvest, small improvements in body weight (Figure 3) and antler measurements of harvested moose, and anecdotal evidence (e.g., reports of dead moose, bloody beds, engorged ticks in snowmobile trails) suggest that tick impacts were lower in Vermont in 2020 and 2021.

While reduced winter tick impacts are encouraging, they are likely the result of unfavorable climate conditions for winter ticks in recent years. The long winter of 2018–2019 likely helped reduce winter tick abundance during 2019, resulting in lower tick loads on moose during the winter of 2019–2020. An early snow event in mid-October 2020 likely ended or significantly reduced winter tick questing, resulting in lower tick loads on moose during the winter of 2020–2021. However, current moose densities in WMU E will allow winter tick abundance and impacts on moose to increase again when climate conditions are more favorable for ticks.

Winter tick counts on bull moose harvested in October 2021 were comparable to those observed in recent years (Figure 5). While this measure provides an indication of tick abundance on the landscape, final tick loads on individual moose will be largely determined by the length of the questing period. The questing period is typically ended by weather conditions (e.g., persistent snow or freezing conditions) that kill questing winter tick larvae. Persistent snow did not arrive in WMU E until mid-November 2021, which may result in more severe winter tick impacts in 2022.

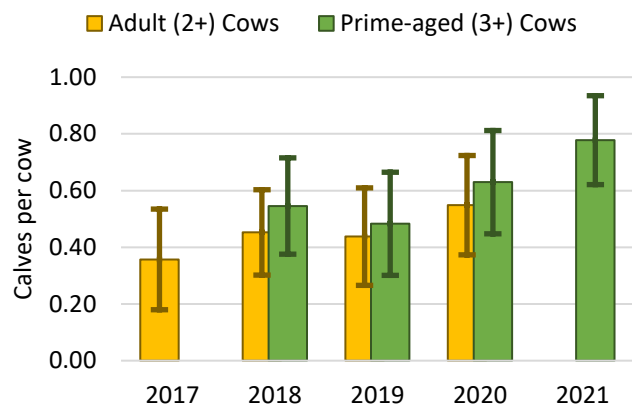


Figure 4. Summer calf recruitment of collared cow moose in Wildlife Management Unit E, 2017–2021.

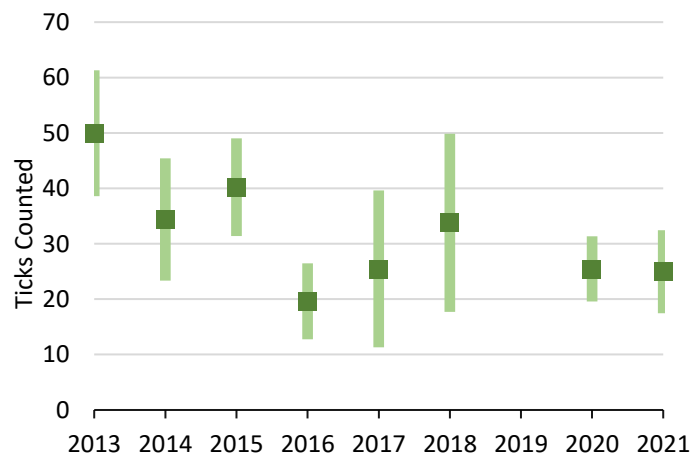


Figure 5. Winter tick counts on bull moose harvested in Wildlife Management Unit E, 2013–2021.

Population Estimates

Regional moose densities in Vermont are estimated from moose sighting rates reported by deer hunters during the November rifle season. This approach, originally developed by the New Hampshire Fish and Game Department, relates sighting rates to moose densities determined by aerial surveys (Bontaites et al. 2000). Aerial surveys conducted in Vermont allowed the Department to modify this model to better fit Vermont sighting data. Sighting rates often vary from year to year due to factors other than the number of moose (e.g., weather conditions), so a 3-year rolling average is used to smooth out some of this variation.

Using this approach, the 2021 (2019–2021 rolling average) density estimates for WMUs E1 and E2 are 1.99 and 1.49 moose/mi², respectively, which are well above the upper density objectives established in the 2020-2030 *Big Game Management Plan* (1 moose/mi²; **Table 2**). It appears that moose numbers have been relatively stable at this level in WMU E over the past 10 years (**Figure 6**).

The Department has received interest for moose hunting from foresters that have documented moose browsing impacts to forest regeneration in areas outside WMU E. They are interested in alleviating these impacts to protect forest health. While some of these local areas could sustain a limited moose harvest, the moose population density in all WMUs except E1 and E2 remain below established hunting thresholds (**Table 2**).

The uneven distribution of functional moose habitat (and therefore moose) in parts of Vermont is a challenge for management. The Department will be reevaluating moose habitat mapping, taking advantage of recent research efforts (e.g., Pearman-Gilman et al. 2020, Blouin et al. 2021a) to better reflect the area of functional habitat in each WMU. This should allow for more meaningful estimates of moose density in WMUs with less homogeneous moose habitat.

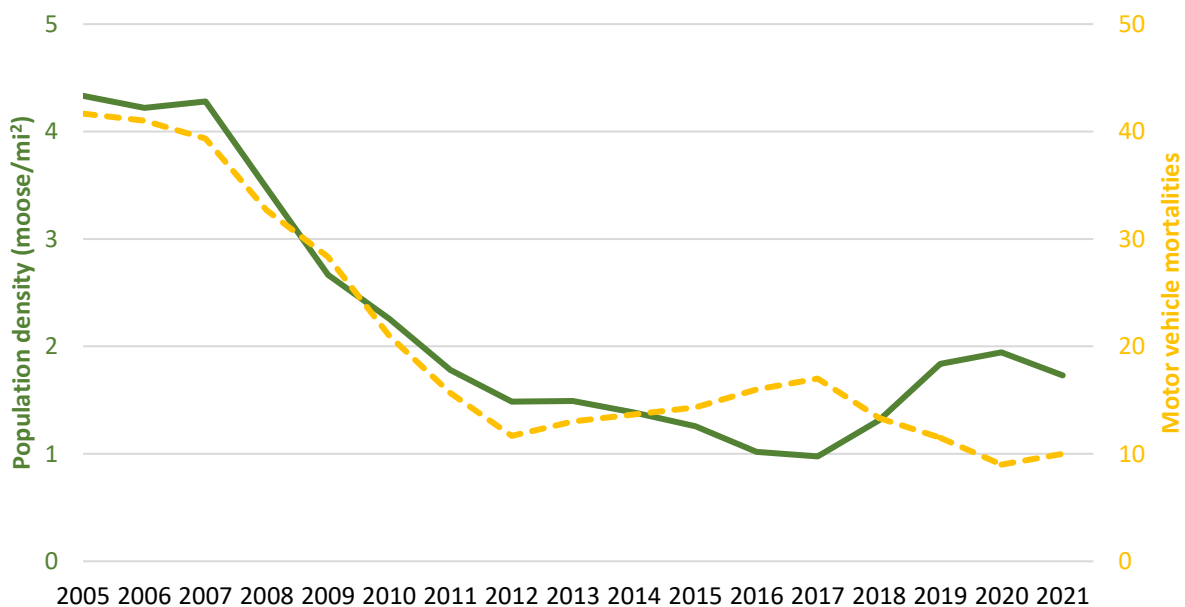


Figure 6. Rolling 3-year average moose density estimates (solid line) and motor vehicle mortalities (dashed line) in WMU E during 2005–2021. Density estimates are based on moose sighting rates reported by deer hunters.

Table 2. Moose density estimates based on sighting rates by deer hunters and density objectives and hunting thresholds established in the [2020-2030 Big Game Management Plan](#), by WMU. Density estimates are based on average sighting rates during 2019–2021.

WMU	Habitat (mi ²)	Density (moose/mi ²)			Population Estimate	
		Objective	Hunting Threshold	Current Estimate	N	(80% CI)
A	35	n/a	n/a	0.03	1	(1–1)
B	420	n/a	n/a	0.04	18	(15–21)
C	351	0.5	0.38	0.33	115	(94–136)
D1	449	0.5	0.38	0.22	99	(80–119)
D2	346	0.75-1	0.56	0.37	129	(107–151)
E1	306	0.75-1	0.56	1.99	608	(546–670)
E2	326	0.75-1	0.56	1.49	486	(425–548)
F1	108	n/a	n/a	0.04	4	(3–5)
F2	158	n/a	n/a	0.02	3	(3–3)
G	363	0.5	0.38	0.06	22	(15–29)
H	466	0.5	0.38	0.29	135	(114–156)
I	407	0.5	0.38	0.11	43	(33–54)
J1	464	0.5	0.38	0.07	33	(24–42)
J2	633	0.5	0.38	0.22	140	(117–163)
K	359	n/a	n/a	0.04	15	(10–19)
L	346	0.5	0.38	0.15	53	(41–66)
M	424	0.5	0.38	0.29	122	(95–149)
N	275	n/a	n/a	0.04	10	(6–15)
O	478	n/a	n/a	0.03	17	(13–20)
P	447	0.5	0.38	0.13	59	(41–77)
Q	219	n/a	n/a	0.04	10	(6–14)
STATE	7380				2123	(1789–2458)

Harvest Recommendation

The results of the moose study clearly show that the current density of moose in WMU E has been sufficient to sustain winter ticks at high levels that are negatively affecting moose health and survival. Research has shown that winter tick abundance is directly related to moose population density. Reducing the density of moose decreases the number of available hosts which in turn decreases the number of winter ticks on the landscape. Moose population reduction will be necessary to break the winter tick cycle and improve the health of moose in this region.

Without management action to reduce the moose population, high tick loads will continue to impact the health of moose in WMU E for the next decade and beyond. The resulting chronic stress, low birth rates, and high calf mortality may prevent the population from growing. However, it will be less resilient to

diseases, parasites, and environmental variation, which could cause the population to destabilize. Maintaining a healthy, stable, and sustainable moose population requires action to improve moose health.

Reducing winter tick numbers directly, either by treating moose or the landscape with some form of acaricide or fungal pathogen, is not currently a viable option. Research in this area is ongoing, but the realities of treating an entire landscape or a sufficient portion of the moose population make it unlikely that this will be a practical option soon.

The Department recommends harvesting at least 25 adult cow moose (5% of the cow population) in WMU E during the 2022 moose hunting seasons. The Department further recommends that this be accomplished through the issuance of 60 either-sex hunting permits and 40 antlerless-only hunting permits. Given historical success rates and sex-age composition of the harvest for each permit type, this allocation is expected to result in the harvest of approximately 60 moose (range: 51–65) with an expected breakdown of 31 bulls (range: 27–34), 25 cows (20–30), and 4 calves (3–5). Approximately 60% of permits are recommended to be allocated to WMU E1 due to higher moose densities in that WMU. Approximately 25% of either-sex permits are allocated to the archery season, based on the percentage of total applications that were for this season in recent years and the need to obtain sufficient biological data during the regular season. Allocations to the auction, special opportunity, and veterans are set by statute. Permit breakdown by season, type, WMU, and special allocation is provided in **Table 1**.

Population Projections

Based on survival rates and calf recruitment observed from collared moose during 2017–2021, the moose population in WMU E would be expected to increase in the absence of any moose harvest (**Figure 6**). If winter tick impacts are relatively severe each year (as observed during 2017–2019), the population would not increase. However, severe tick impacts do not occur every year due to variation in climate conditions that affect winter tick abundance. Thus, this represents an unrealistic, worst-case scenario, and the moose population should be expected to increase without some additional mortality from hunting. This is consistent with the observed population trend over the past decade, when the average annual moose harvest in WMU E has been 40 moose (range: 0-75).

Importantly, detrimental effects on moose health will continue as long as moose densities remain at levels that support high winter tick loads. Even under a worst-case scenario, taking no management action would perpetuate the current, unhealthy state of the moose population in WMU E for many years and would be inconsistent with the Department’s established objective of managing for a healthy moose population. Importantly, 65% of Vermont residents support maintaining a smaller moose population through hunting if it reduces the number of moose that die each year from winter ticks. Only 15% oppose this approach (*Responsive Management 2019*).

Starting with a population of 1,000 moose in WMU E (E1 and E2 combined) in the fall of 2022, the harvest of 25 adult female moose annually is expected to reduce the population slowly, assuming tick impacts similar to the previous 5 years, and no change in birth rates or survival rates (**Figure 6**). If tick impacts are relatively severe each year, it would take approximately 5 years at this harvest level to reach 1 moose/mi². Conversely, if tick impacts are reduced, as in 2020 and 2021, the population would be expected to increase over time.

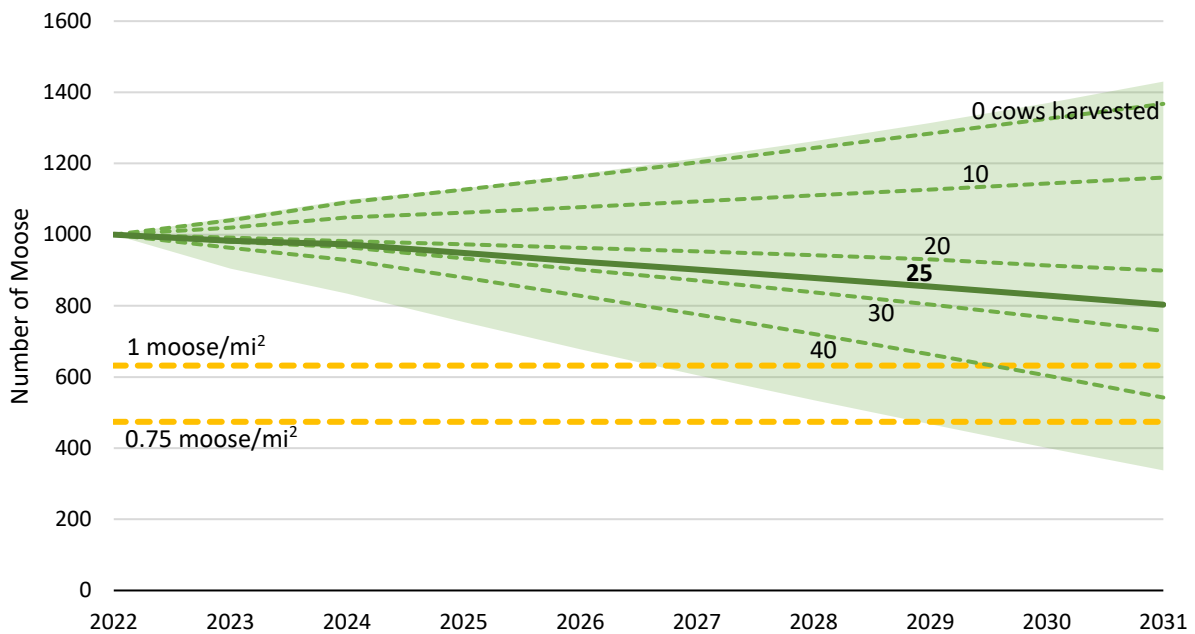


Figure 6. Moose population projections in WMU E at varying annual cow harvests and winter tick impacts, based on a population of 1,000 in fall 2022 and survival and birth rates from radio-marked moose. Projections assume consistent harvest each year and no change in survival or birth rates. Green shaded area represents the potential range of variation due to varying winter tick impacts at the recommended harvest of 25 cows.

Given the poor health of the moose population and a clearly identified cause, action to address this issue is warranted. The harvest of 29 cow moose in 2021 was an important step toward reducing the number of moose in WMU E, and thereby reducing winter tick abundance and impacts on moose health. Permit allocations and harvest in 2019 and 2020 have been conservative due to uncertainty around population estimates, lower survival and birth rates observed from collared moose during the first 3 years of monitoring, and very low permit numbers in previous years.

The 2022 harvest recommendation remains conservative. It is sufficient to prevent the moose population in WMU E from growing, and, if winter tick impacts are severe, it will facilitate population reduction toward the target of 1 moose/mi².

Ideally, moose health should be improved as quickly as possible. However, low survival and birth rates observed from Vermont moose, uncertainty around apparent improvements in calf recruitment in the past two years that result in higher population projections, and broader, regional declines in moose populations justify a continued cautious approach at this time. Management of moose in WMU E and throughout Vermont must continue to be adaptive and respond to new information as it becomes available. If continued monitoring indicates that health, survival, and birth rates remain poor, and the moose population in WMU E remains above the objective, a more aggressive approach will be necessary to improve the health of the region’s moose.

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Appendix A: Summary of comments, questions, and department responses from 2022 moose public hearings

Note: comments are arranged from most common to least common. A total of 86 members of the public attended these four hearings.

Support the plan/OK with moose season proposal/leave it to the science

Similar comments were received from the majority of focus groups

Are permit numbers having an effect on the moose population?

In favor of being more aggressive. Why don't we issue more permits?

Similar comments or questions were received from multiple focus groups

Fish and Wildlife Response: It's too early to tell if recent harvests have had the intended effect of reducing the moose population in WMU E. It may take 2-3 years to detect a change in the population, if there is any.

Ideally, we would like to improve moose health as quickly as possible, which would require reducing the density of moose more quickly. However, there are several concerns that support a more conservative approach to reducing the population. In addition to biological concerns related to genetics and population stability, there is also the practical management concern of being able to reliably estimate the size of a rapidly changing population. Our current methods of estimating moose population size and trends are not well suited for this, which would make it difficult to know when the population had reached the target of 1 moose per square mile. This is further complicated by uncertainty about the severity of winter tick impacts each year and the effect they would have on population trajectory.

That said, it is important that we reduce moose numbers in WMU E within a reasonable timeframe and make actual progress improving the health of the moose population there. That may require issuing more moose hunting permits in future years if the current permit allocation and harvest is insufficient.

Is there something we can do to kill the ticks?

Similar comments or questions were received from multiple focus groups

Fish and Wildlife Response: The short answer is no, not at this time.

This is a logical question that usually stems from us treating our pets for ticks. Moose are not pets or livestock, they are wild animals.

Reducing winter tick numbers directly, either by treating moose or the landscape with some form of acaricide (a pesticide specifically for ticks) or fungal pathogen (there are some naturally occurring fungi that can kill ticks), is not currently a viable option. The Department has supported research at UVM looking at using naturally occurring fungi to control winter ticks. While it shows promise in the lab, it has not been tested in a natural setting and so its true effectiveness and potential side effects are unknown. Research in this area is ongoing, but the

realities of treating an entire landscape or a sufficient portion of the moose population make it unlikely that this will be a practical option in the near future.

Further, treating ticks does not kill all of them and provides them an opportunity to adapt to the treatment and develop resistance. As long as there is a high density of moose on the landscape, tick numbers will simply increase again when treatments stop or when the ticks become immune to them.

Introducing animals that consume ticks (e.g., guinea fowl) is also not a viable option. Aside from the potential consequences from introducing a new animal into an area, and the fact that they could not survive the winter in that part of Vermont, they simply would not be effective at reducing winter tick numbers. The life cycle of winter ticks results in minimal opportunity for them to be predated. Adult ticks essentially only occur on the host, not on vegetation, and larval ticks are very small and either in the leaf litter or relatively high up on vegetation.

Lastly, we may dislike ticks because we find them unsightly or are concerned about diseases they may carry (remember, winter ticks do not carry those diseases), but we must remember that they are a native species just like moose. We just need to find the appropriate balance between winter ticks and moose.

Lots of moose in WMU E/Island Pond.

Similar comments were received from multiple focus groups

Seeing fewer moose/low moose population.

Similar comments were received from multiple focus groups, primarily in reference to central or southern VT

Seen more moose in southern VT (where logging is going on).

Similar comments were received from multiple focus groups

Should D2 be opened up for moose? Seems like a high population of both deer and moose.

Fish and Wildlife Response: Current moose population estimates in WMU D2 remain below the hunting threshold established in the 2020-2030 Big Game Management Plan. As long as that is the case, the Department will not recommend moose hunting permits in that area.

Recognize difficulty of trying to manage for deer and moose in same area.

Can we do a bonus point system? Can we do a rule similar to Maine where you automatically get a permit after so many points?

Fish and Wildlife Response: Vermont currently has a bonus point system in place for the moose hunt lotteries. Hunters earn a bonus point (one additional entry in the lottery) for each consecutive year that they apply and do not win a permit.

Current Maine law guarantees a moose hunting permit for Maine residents who are 65+ years of age and have accrued at least 30 bonus points. Maine issues several thousand moose hunting permits each year, so a resident is unlikely to go that long without winning a permit. At current

permit allocations in Vermont, it would take more than 50 years for all applicants to receive a permit. So, a system like Maine's wouldn't work. Our moose permit lottery is a chance drawing, and, unfortunately, some people will never win. There is no practical way around that given the small number of permits issued in Vermont.

We have the best archery moose hunt in the country – also the cheapest.

Could we look into having both moose hunts during the rut (9/15-10/15)?

Fish and Wildlife Response: This will be considered when moose hunting regulations are reviewed.

How do you keep the moose study going? Why not keep capturing them?

Fish and Wildlife Response: Capturing and collaring moose is expensive. At this point, the value of information from new collared animals would not justify the cost.

The Department is now partnering with the University of Vermont, University of Massachusetts, and state agencies from Maine, New Hampshire, Massachusetts, and New York on a regional research effort focused on non-invasive methods of monitoring moose populations in the region. This effort includes deployment more than 400 camera monitoring stations (trail cameras) across the region, track surveys, collection of scat and urine, and winter tick surveys. Collectively, this will provide information on moose abundance and population trends, reproductive rates, health status, and impacts of winter ticks, among other useful information. The hope is that this will provide some new and more cost-effective tools for monitoring moose populations across the region.

Appendix B: Moose Public Comment Emails

Appendix C: Moose Public Comment Voicemail Transcripts

Note: these are automated transcriptions of voicemails left on the Department's public comment phone line. The accuracy and quality of transcripts varies. Please review the associated audio file if there are any questions about the content of a message.

3/19/2022

Hi, my name is Deborah voltolina. I live in Troy Vermont. I think your moose hunting proposal is the most ridiculous thing. I have ever heard of them has to be other options that will help the population. I was hoping that someday my grandchildren can come here and see moose, and it doesn't look like it's ever going to happen because God Vermont's doing a good job wiping them out. Please reconsider the 100 moose permits because it's the dumbest idea I've ever heard of you. Say the Moose. I'm telling them. Yeah not going to happen. Thank you. Bye.

3/21/2022

Yes, my name is Karen Neilson. I live in Morrisville Vermont. I want to put in my comment that I do not support a 2022 moose hunt song. I am a wildlife biologist with a master's degree in Psychology and I can tell you that this is not the solution to the problem fish and wildlife keeps trying to make this seem like you can solve everything with moose hunt. I am sick and tired of Fish and Wildlife not using good sound science for a lot of their decisions the fish and wildlife board is made up of mostly hunters and Trappers not good sound wildlife biology biologist Fisheries biologists environmental biologist, and you should be ashamed of yourself for that month. I think fish and wildlife should spend the moose hunt due to the numerous threats that we face and will continue to face and refocus its resources on Thursday. Lethal methods of addressing the winter tick issue. There are many other states and lots of very qualified biologist that you could consult with to look at possible solutions. And at least actions to take to try to mitigate this situation suspend the moose hunt you haven't done the science do the science. Thank you very much.

3/22/2022

I wanted to McDonald's in Middlebury Vermont. I'm calling to make an emphatic no to the proposed moose hunt on home situation. I was hoping you might be able to provide maybe food stations in the woods, which would also include some kind of anti tick off for the moose instead of killing them. I hope we can find a more humane way to settle. This filling them is really not too many, and it's not going to settle down situation for the foremost. Let's think of another way. Thank you so much, bye-bye.

My name is Jane Horner. I lived in Burlington Vermont for 30 years. I'm now in North Carolina. I am heartbroken to see this page currently three generations of killers wandering around in Vermont killing a beautiful animal. I hope we can do everything possible to stop this and to bring the world to a level of awareness of the value of the Wild and the value of precious animals dead.

3/23/2022

Hi, my name is Doctor Kenneth Karo. I live in Waterbury Center. And I would just like to say that I'm totally opposed to the moose hunt Moose are dying naturally Thursday. And the population is down. I don't see why you want to go out and kill even more of them. There has to be a better way of handling this unbelievably I can't believe the fish and wildlife where their brains are. Anyway, thank you very much by now.

3/24/2022

My name is Barbara salucci. I lived in Huntington Vermont. I my comment is about the moose hunt to say no to the hunt. I think it is important for the fish and wildlife department to explore other options for dealing with ticks and helping to save most and to keep them from suffering. Thank you.

3/28/2022:

This is Marilyn Magnus and I'm speaking for my husband David Magnus and we're residents of peach in Vermont. And we say no to the 2022 moose hunt Moose experiencing a variety of threats from brain worms to heat stress to Winter ticks killing moose to kill ticks is not the answer. Thank you. Bye.

Hello, this is Mary Brown of East Hardwick Vermont calling to say no to the 2022 moose hunt. I think the moose population is under terrific stress and shooting off on top of me take situation and the other stressors on their health just makes no sense. If we want to have any proof population. My number is _____. Thank you for taking my comment.

Hi and good afternoon. My name is Eric cycle. I am a resident of Stowe Vermont for some Thirty Years Sterling Valley specifically, and I'd like to express my disagreement with the current moose hunting proposal for a variety of reasons. Not not the least of which is that as a zoologist and a former. So ology major in the former Wildlife enthusiasts and currently a wildlife conservation enthusiastic along with Steward for a stolen trust. I have a problem with that with the moose hunt that's proposed for twenty twenty two years. There are much better ways to try to control ticks and that this is most ineffective and harmful to the wildlife which I among others thoroughly. Enjoy. Thank you very much for your consideration.

Good afternoon. My name is Allison Cutler. I am calling from Middlebury Vermont and I am calling to State my opposition to talk to the 2022 moose hunt. I do not believe that an accurate assessment can be made by the organization that off apparently likes to hunt them. I don't think they are a unbiased group to receive information about how many moves them are. So I live in the state and quite honestly have never seen a moose. So there can't be that many bottom line is I am against hunting and I would like to State again. I am pleased. I am say no I'm saying no to the 2022 moose hunt. Thank you so much, bye-bye.

Hello, we would like to express our opposition to the Moose killing that is proposed for this year. We realized the Mossad experiencing threats of the various things from ticks, and we don't see the value of killing the Moose to extermination to deal with this problem. If you kill the Moose, we can't see how you're going to solve the problem of the infection disease, whatever you want to call it off. We do not support in the end killing moose. Thank you very much. My name is McDermott from dummerston. Thanks. Bye. (second call)

Hi, this is Stuart and Kristen McDermott calling from dummerston. And we wanted to leave a comment on the proposed moose killing them is due for this year. And our, is we realized that this is supposed to be addressing killing a number of moose will hopefully cut down on the tip population. This is at best. I guess we would recommend that you work more with science and finding and nature and try to find a way to address this population then annihilating some of the most population. Thank you very much. Bye. (Called on 3/21/2022)

3/29/2022

Hi, my name is Kerry Squires. I live in Lamoille County more still and I'm calling to say no to the moose hunt to control ticks off. That just doesn't seem like an adequate way to control ticks and my mind also, I haven't seen a moose in eight years. I feel like their numbers are dwindling. I could be off on that but killing moose to kill ticks and to control the population of moose. It just doesn't make sense. So please no. Thank you very much.

Good morning. My name is Jim Hornikel h a r n a g e l i live in Pasadena, California, but I'm a very frequent visitor to Vermont and all that offers and I'm urging you to please please please place a moratorium on the a pending moose hunt and and direct your energies towards better and more comprehensive research rather than killing moose to save moose. My phone number is _____. Again, my name is Jim Little in Pasadena, California.

Hi, my name is Aimee Carrero Carretto. I live in Burlington Vermont, and I am calling to share my life my opinion of very strongly opposing the 2022 moose hunt and I also oppose very strongly the 2022 proposed migratory bird hunt. Thank you very much, bye-bye.

Hi, my name is Emerson Gail of Strafford Vermont in Orange County here calling to get a public comment about the moose hunt in particular game and really concerned that this decision is being rushed through without looking at alternative strategies other than thinning already troubled most population in a Mont and I'm also concerned about the involvement of special interests and having this hunt and taking some of the bull moose that we need to keep a list populations healthy in Vermont. So please consider for Stallings decision until more research can be done about the best ways to take care of the tick issue. Thanks so much.

3/30/2022

Good morning. My name is Star Wolf and I'm from Windham County Brattleboro Vermont and I am calling to cast off my comment as know to the 2022 moose hunt because of tick infestation off. It seems that the Vermont fish and wildlife is all about destroying Vermont's Wildlife. I feel that you are all to blame for the trapping and the hounding and now you're just trying to justify killing more animals, which to all of you is just a v sport. It is not necessary for for eating consumption in no way. I'm appalled at the Vermont fish and wildlife to suck. That organization that you have and I am claiming my comment as know to the Vermont moose hunt of 2026. I think all of you need to really rethink your strategies and come up with healthier ways of maintaining balance in the forests and the private parcels and tracts of land here in Vermont. Thank you.

Hello, my rolled on my phone is not to the moose hunt 2022. That is outrageous. It's dead killing those poor animals. My name is Courtney.

My name is Janice Nadworny. I live in Hinesburg and I'm leaving him a message about the moose hunt 2022 moose and I'm opposed to it off not only are are moose populations declining but this is a untested and radical proposal to help them lose by killing them. There are other methods and I believe that the fish and wildlife service should follow science tested science and also with mine in mind that there's a month climate change events are depleting our populations as it stands and this is something that we cannot afford to do. I think you should listen to South and include the majority of Vermonters who do not want to see more moose killed. Thank you.

Hi, my name is Brenna Galdenzi and I'm calling from Stowe Vermont and I am calling as an individual citizen to oppose the 2026 moose hunt for a number of reasons namely because there's not enough

proof out there that killing moose to kill pigs to save moose is actually going to result in healthier moose in the future and I also urge Department to put a pause on all future moose hunts and refocus your energies on non-lethal solutions to the problem. Also consider the variety of other threats that are out there from brain worm to heat stress. to Habitat really mortality caused by humans is the only control that we have so allowing hunting is something that we can control and it's a I think in the best interest to put hunting on pause until we know a bit more about what's going on with the heard. Thank you, bye-bye.

Hello, my name is Sophia Parker and I live in Charlotte Vermont, and I was calling to give my input on the flu season and migratory game bird season for the moose season, please vote. No. We do not want to move hunting season here in Vermont or to give out-of-staters permits to hunt booth and for the migratory gamebird proposed. So, um, please reduce the number of permits and definitely do not have an open season for any of those words. Thank you so much. If you have any further questions, you can call me at _____. Have a good day.

Hello, my name is Jeffrey Perez. I live in Charlotte Vermont and I want to comment on vote to reduce the permits for migratory game bird and absolutely no open season for them and I will also like to vote against know to the moose hunting proposal. Thank you very much.

Hello, this is Linda Huebner calling from West Halifax Vermont to note that I oppose moose hunting in Vermont. It seems that we've climate change and all of the other threats to the moose population that having Hunters go out and kill them doesn't make any sense. I've heard the arguments for the winter tick control, but it seems to me that there are other strategies that ought to be tried before that, especially like those that have been used on deer to control black-legged ticks and it just seems that something meant to be non-lethal to the Moose. But lethal to the text would make a lot more sense than killing moose to try to control ticks. So that's my two cents. Again, it's Linda Huebner West Palm. Vermont 802-368-7269. Thank you. Bye.

Hello, my name is Lindsay Waldman. I live in Jeffersonville Vermont. I opposed the 2022 moose hunt. Thank you.

This is Joyce Littlefield from Lyndonville, and I oppose both especially vehement Lee the moose hunt. I think it's absolutely absurd and against good science to confirm hunt against the Moose, which in most areas is declining. Thank you.

Hi, my name is Sharon. I live in Williston. Thanks for taking comments. I would very much appreciate a know to the moose hunt down into the migratory bird hunting for the Moose. I haven't seen a movie. I used to see a lot of books. I just don't and there's just other Solutions if it's about ticks off shooting an animals and not the answer your phone gets like there's treatments anyways, and then birds mate for life, and that's just cruel and there's enough cruelty in the world, and there's not enough birds in the world. So that's an easy one no to both. Thank you.

Hi, my name is Claire pain. I live in Georgia Vermont and I opposed the 2022 moose hunt for one number two two. I think the migratory bird hunting season. I think from what I see. I'm a photographer about Thursday. It's unsafe for me to go in many places, and I've gotten used to that deer hunting, but now it's gone to a place where anywhere there's a bird. There's a bunch of em, I think that there's too many licenses going out, and I think it should be more limited. So again, my name is Claire Payne and I live in Georgia Vermont, and if you need it, my phone number is _____. Thank you.

Hey Mark, Putney, Vermont. Don't kill anything. What's the matter with you? What would you like it? If someone hurt anyone? You looked don't even think about hurting a moose. Do not hurt any food or Home Alone? What's the matter with you? You can't think of anything else to do?

3/31/2022

This is Anne Smith from Westminster Vermont, and I do not support the moose hunt climate change is changed the Dynamics of the tick population, and that's a human problem. We created it. We need to create a better Humane solution for the textured not hunting. Thank you.

Hi, my name is Kimberly D'Onofrio and I live in Morristown or Morrisville. If you will Vermont and I oppose the 2022 moose hunt. I do not believe killing is conservation and being the owner of a very popular. It's up and Stowe Vermont wage. I am asked by many people where can I see a moose? I tell them they're probably not going to see a moose. So let's try to get most populated back populated in areas where we don't have them instead of killing the ones we have again. I pose the Moose 2022. Thank you.

Hi, my name is Marilyn Dupree do u p r e n? I live in Underhill, Vermont on this comment is for the moose hunt and I'm not going to go into a lot of detail. I am strongly opposed to this, but let's just say that I think we need to really step back and think about what we're doing and why we're doing it and I think there's been plenty of comment on why it's a really really bad idea. So I don't think you need me to go through the whole Litany of reasons just suffice to say that. I am really on the side of saying no to this year's moose hunt. Thanks a lot. Take care. Bye.

Commissioner Herrick and members of the Fish and Wildlife Board,

The Vermont Trappers Association (VTA) encourages that specific criteria be adopted for the design of foothold traps when trapping terrestrial furbearers in Vermont. All of the research partners chosen in Vermont to test the different restraining devices used as part of the Northeast Best Management Practices (BMP) program were members of the VTA, so we are very familiar with the devices tested and the process of testing them. These suggestions are an amalgam of both experience developing the BMPs and several decades (perhaps centuries) of collective experience in the field, and we are confident that these are the best features to ensure the welfare of trapped animals.

A wide variety of devices were tested in this thirty-year research project, however, not every device in current use was available at that time. For that reason, the VTA cannot endorse one brand of trap over another just because it was tested, but we can reliably endorse certain features that are proven to improve animal welfare. It is the position of the VTA that any device from any manufacturer should be approved for use so long as it has been manufactured with, or modified to include, the following features.

On behalf of the Vermont Trappers Association, I would like to submit a petition to the Fish and Wildlife Board that foothold traps set on land require the following:

- 1) Jaws are padded, off-set, laminated, or have jaws with a minimum thickness of 5/16".
- 2) Base plates feature a center chain attachment.
- 3) The trap can be adjusted for pan tension.
- 4) There are at least two swiveling devices in the chain.
- 5) An anchored trap has a minimum of 12" and a maximum of 18" of chain from the point where it exits the ground once an animal is caught.
- 6) No foothold trap shall be set on land with a spread of more than 6-1/4 inches as measured inside the jaws.

If you have any questions or would like to discuss this further, please feel free to contact me via email or at (914) 610-0650.

Thank you for your consideration.



Bruce Martin
VTA Vice-President
Montpelier, VT

Morse, Joshua

From: Tim Biebel <fwboard.windsor@gmail.com>
Sent: Wednesday, March 23, 2022 4:29 PM
To: Vermont Coyote Coalition
Cc: fwboard.orleans; Kevin Lawrence; Wendy Butler; Theresa Elmer; David Fielding; Cheryl Frank Sullivan; Mike Kolsun; Bryan McCarthy; Dennis Mewes; Bill Pickens; Brian Wiles; Peter Allard; Johanna Laggis; Herrick, Christopher; Amy Sheldon; plefebvre@leg.state.vt.us; sbongartz@leg.state.vt.us; kdolan@leg.state.vt.us; jmccullough@leg.state.vt.us; lmorgan@leg.state.vt.us; nbrownell@leg.state.vt.us; hsmith@leg.state.vt.us; kmorris2@leg.state.vt.us; Isatcowitz@leg.state.vt.us; Christopher Bray; rawestman@gmail.com; mmacdonald@leg.state.vt.us; Richard McCormack; bcampion@leg.state.vt.us; Scott, Mark; Gjessing, Catherine
Subject: Re: Petition for a coyote season

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Dear Ms. Fitzwilliam,

Thank you for submitting this petition. We will be in touch in the future about the next steps.

Best,
Tim

On Tue, Mar 22, 2022 at 1:29 PM Vermont Coyote Coalition <vccc.inquiries@gmail.com> wrote:



March 22, 2022

Re: Petition for a regulated coyote hunting season

Dear Chairman Biebel,

This petition and supporting data will serve as follow up on testimony on January 19, 2022 before the House Committee on Natural Resources, Fish and Wildlife from VT Fish & Wildlife Department (FWD), Commissioner Herrick and Furbearer Biologist Kim Royar regarding H.411, a bill seeking to address wanton waste of wildlife in Vermont. The bill was written in part to address the concerns of a retired game warden with 25 years of experience. In 2018, he submitted a petition in the form of an email to the Fish & Wildlife Board (FWB) asking for a ban on wanton waste, but the Board failed to act. The warden showed graphic evidence of wanton waste,

specifically involving coyotes and also referenced the wanton waste he witnessed of deer, bear and turkey. Since the FWB took no action, the issue was brought to the legislature and after three years of efforts by multiple parties, a wanton waste bill was voted out of committee and has since been passed by the full House.

The current bill language includes a carve out exempting coyotes that are hunted, at the behest of Commissioner Herrick and a minority of members in the committee who felt that including coyotes would be creating a de facto season. Commissioner Herrick, along with Ms. Royar, spoke very specifically that the committee was not the appropriate venue to address a season on coyotes. Chair Sheldon agreed and indicated that such authority was indeed granted to the FWB. **Commissioner Herrick stated that any discussion around a season needed due deliberation, and that such a discussion would merit our time and**

effort. His comment about a coyote season, "Let's have that discussion," couldn't have been any clearer. Biologist Royar indicated that she, too, supported a robust and respectful conversation around the establishment of a coyote season.

Therefore, this letter will serve as a direct follow up of Commissioner Herrick's and Ms. Royar's support for that discussion to begin. And in order to formally expedite that discussion, we have prepared this petition on behalf of our 5,500 + followers from across the state to establish

a regulated season on coyotes that takes pup rearing into consideration. I am copying members of the House Natural Resources, Fish and Wildlife Committee and the Senate Committee on Natural Resources because of their interest in this issue, as expressed during this legislative session. Because of the substantive legislative interest in this issue we would respectfully ask that the FWB reply to the petition and include a written commentary in support of whatever position it takes that addresses each of the points we raise. This commentary will serve to update legislators and guide future steps and decision-making if necessary.

FWD would likely agree with this statement:

Lethal attempts at coyote control don't work.

Approximately 2/3 of coyotes live in packs. 1/3 roam, waiting for an opportunity to join a pack. A stable pack consists of a monogamous

breeding pair that only mates once a year. Other pack members do not breed. The self-regulated pack requires about 4-8 miles, which it guards against other coyotes. Left to their own, coyotes self-regulate. The majority of females don't ever breed!

Indiscriminate killing of a breeding male or female, forces the mate to leave to find a new mate. A roamer (or disperser) comes in and breeds with as many females as he can causing a 'burst' in the local population. This means MORE coyotes on the landscape.

Without the leadership of the alpha pack members, the other pack members are likely unskilled at hunting and may cause problems with humans where there weren't any before.

The current open season is not rooted in sound science.

VCC's Petition: We request that Vermont establish a regulated coyote hunting season from October 1st – December 31st. This season would allow for a recreational hunting opportunity and optimizes utilization of the animals killed.

We believe there is more than ample data and reason to establish a season at this time as follows:

1. FWD supports the initiation of a coyote season discussion

Commissioner Herrick and Biologist Royar have testified that we should begin the conversation about establishing a season on coyotes and the **FWD is the venue for this process.**

2. Long Standing Evidence of Wanton Waste

A retired Vermont state game warden's 25 years of experience and first-hand account of the wanton waste of coyotes objectively establishes that Vermont has a long-standing problem that has not been addressed by FWD or FWB. The longer we fail to address this situation, the greater spread of the subculture of hunters who kill solely for the sake of killing, often by using bait piles. Not only is this antithetical to sound science, but it also violates all standards of ethical hunting practices and damages the overall image of hunting. We believe further that the FWB, as the arbiters of Vermont's public policy on game, have a duty to address and correct this wasteful behavior that is not rooted in sound science and fundamentally is contrary to ecological principles.

3. Damage to the Standing of Vermont 's Wildlife Governance Infrastructure

The failure to address this long-standing issue undermines the credibility of Vermont's wildlife governance infrastructure and erodes public confidence in our conservation stewards. Further, the state- sanctioned wanton killing of a public "resource" simply for the sake of killing, is at odds with Fish & Wildlife's duty to protect and conserve wildlife—to include coyotes—under title 10 §4081.

4. Contradictory and Confusing Public Policy

Vermont's public policy towards coyotes is at best confusing and clearly paradoxical. On the one hand, FWD states the following on their website, "We believe, however, that coyotes are important members of the ecosystem and have evolved together with many of nature's existing prey species; Conservation of the coyote is important to maintaining ecosystem integrity because of the vital role they play as predators; Coyotes fill the role of a natural predator, a role that is important for maintaining the dynamics and health of our ecosystems." These statements reflect an ecological and scientific understanding of the species. However, at the same time, FWD references the ecological benefits of coyotes, they and the FWB have established a public policy of treating coyotes as vermin in that they may be killed year-round, day and night, with or without dogs, with the use of bait, and with the use of high-tech weaponry, including thermal scopes for night hunting and game- calling devices.

It is ecologically and intellectually impossible to hold those opposing views at the same time, yet this tortured logic serves as the public policy FWD has endorsed. The FWB now has an opportunity to address FWD's "split personality" public policy muddle by establishing a season consistent with how we manage other game species. It's time for the double standard to end.

5. State Sanctioned Violations of the North American Model Wildlife Conservation as Public Policy

The FWB's current policy on coyotes is a clear violation of at least one principle of the North American Model of Wildlife Conservation (NAM), which establishes the following value: ***Wildlife can only be killed for a legitimate purpose***. It should be noted that FWD's report to the legislature on coyotes in January, 2018, stated that current public policy

treating coyotes as vermin, did not violate NAM, yet the Department offered no data on what legitimate purpose was served in the public policy of sanctioning the wanton waste of coyotes. Digging deeper into this issue, we find that the Department has an extreme institutional bias favoring ungulates (89%) over carnivores (11%) as documented in an internal survey (<https://content.warnercnr.colostate.edu/AWV/VT-AgencyCultureMemo.pdf>) This extreme institutional bias is reflected in the Department's support for the wanton waste of Vermont's apex predator, a position that cannot be supported by science yet is fully supported by the documented political agenda of FWD. We find the FWB and FWD's support of this gross disrespect for the coyote an abject failure of our wildlife governance standards in putting politics above science.

6. Board Policy that Chooses Wildlife Winners and Losers

Establishing a season would serve to change the message that coyotes are a "bad" species while deer are a "good" species. This emotional basis for establishing attitudes towards wildlife has no place in sound ecological science. An established season would help defuse the emotional and irrational basis for considering coyotes "bad." Along with the notion that coyotes are a bad species, is a belief out there that coyotes are an invasive species. This notion, too, is not based on an understanding of ecology, natural systems, or species range expansions and contractions. If coyotes are invasive, then so too are cardinals, Carolina wrens, opossums, and black vultures, to name a few. Public policy solely established on the basis of emotions is bad public policy. The FWB can serve to reinforce rational and science-based understanding of species like the coyote. Shouldn't that be one of your important jobs to take steps to undermine the mythology held by the subculture within the hunting community?

7. The Other Big Lie: Coyotes impact Deer Populations

Establishing a season would also address the other big myth around coyote impacts on deer populations. FWD states the following on their website, "We are not aware of any scientific evidence from studies done in the Northeast that indicate coyotes either control or limit the numbers of deer. Although coyotes and people, both predators, do vie for deer and other prey, in almost all cases, study results suggest that coyotes have no long term negative impact on these populations." Changing public policy is the most effective step we can take. All the education programs won't impact attitudes when public policy condones the idea of coyotes as vermin.

8. The Folly of Too Many Coyotes

It should also be noted that the Department states, "...coyotes are density dependent breeder. As the number of coyotes in an area decreases, their reproductive rates increase. Coyote control efforts are therefore often unsuccessful because they tend to stimulate reproduction."

(<https://vtfishandwildlife.com/learn-more/vermont-critters/mammals/coyote>). If our concern is too many coyotes, establishing a season would actually help to reduce the disruption of packs, dampen reproduction and stabilize or reduce the population. Establishing a season on coyotes would impact the notion that actively seeking out and killing coyotes is somehow a good deed. Obviously science does not support that subculture mythology. You can read more from Project Coyote's carnivore biologist [here](#).

9. Perceived Threats to Humans

One of the justifications for the current public policy is that a 365/day/night season is that such a season creates a wariness in coyotes thus helping to reduce negative interactions with humans. This is not supported by any independent peer review science. Randomly killing coyotes does nothing to instill fear. As well- respected coyote expert, and former sheep farmer, Chris Schadler has said, "A dead coyote learns nothing."

If there is a specific coyote that is causing problems, then the law already allows the public to kill coyotes under title 10 §4828. Prevention — not killing — is the best method for minimizing conflicts with wildlife in both urban and rural settings. Eliminating access to easy food sources, such as bird seed and garbage, supervising pets while outside, and keeping cats indoors reduces conflicts with pets and humans. Practicing good animal husbandry and using strategic, nonlethal methods to protect livestock (such as electric fences, guard animals, fladry, and removing dead livestock) are more effective than lethal control at preventing conflicts and reducing associated costs over time.

And to play devil's advocate, even *if* FWD's position was accurate, a limited hunting season would still accomplish the purpose of "keeping coyotes wary of people." In short, coyotes may become problematic when they are

habituated to people and that can be solved by prevention and also by killing problem coyotes under title 10 §4828.

10. A Very, Very Low Bar Justifying An Open Season

FWD's justification for the 365 day/night season is that the population is not at risk so allowing an open season will not impact population. Is that the standard of wildlife professionals at FWD for managing wildlife now?

11. Coyote Killing Contests

FWD's report to the legislature stated this, "Unlike its counterparts in some states, Vermont's Fish and Wildlife Department does not sponsor or promote or encourage coyote hunting tournaments and we do not believe that such short-term hunts will have any measurable impact on prey such as deer." Vermont now has a law prohibiting coyote killing contests, yet FWD took no position on the bill when actually standing up for its beliefs would have mattered. We find FWD's documented inconsistency a distinct revelation that its political agenda is always paramount.

12. Wildlife Congress-Building Bridges

FWD's coyote report to the legislature stated the following, "Therefore, bringing disparate groups together to work on common threats is critical to our future. To that end, the Department has sponsored two "Wildlife Congresses" in an attempt to find and agree on common issues that can be tackled together to maintain wildlife populations into the future." We applaud the FWD for sponsoring this attempt at building bridges between groups that see wildlife in starkly different ways. The second Wildlife Congress resulted in the establishment of a working group to wrestle with the issues of finding common ground. Regretfully, FWD failed to nominate a representative from staff to serve on the working group causing the group to dissolve having never met even once.

13. Valuing the role of Predators

The following statement is in FWD's coyote report to the legislature, "Regardless, the Department values the role predators play in maintaining healthy and dynamic ecosystems and endeavors to promote management strategies for these species, including coyotes, that foster a broad public understanding of, and appreciation for, their intrinsic values while ensuring

the sustainability and health of their populations.” We applaud this clear ecologically based statement very much, on the mark. But once again, it is impossible to embrace that statement while embracing public policy that treats Vermont’s apex predator as vermin. No one can square that circle.

Thank you for your consideration of this petition and the background in support of it.

Jane Fitzwilliam

Coalition Lead

<http://vermontcoyote.org>

Putney VT 802.376.9449

Link to DFW Coyote Report to legislature

<https://vtfishandwildlife.com/sites/fishandwildlife/files/documents/Hunt/trapping/Vermont%20Coyote%20Population%20Report%20to%20Legislature-2018.pdf>
