

Fish and Wildlife Board Meeting Minutes

Wednesday, April 7, 2021

The Vermont Fish and Wildlife Board held a meeting beginning at 5:00 p.m. on Wednesday, April 7, 2021 via video conference. The Zoom Meeting ID was: **875 7052 1876**.

Meeting Agenda:

- 1) Approval of Previous Meeting Minutes.
 - February 17th, 2021
- 2) Public Comments (Limited to 2 minutes per speaker)
- 3) Petition Acknowledgement and Discussion
 - Petition to place a moratorium on fisher trapping
 - Petition to close trapping seasons, petition to suspend
 - Petition to ban live action trail cameras during hunting
 - Petition to return the end of trapping season for river otters to February 28
- 4) Fish Regulation Simplification Proposal – Second Board Vote
- 5) 2021 Migratory Game Bird Season Preview – Final Procedural Vote
- 6) 2021 Moose Season Recommendation – Final Procedural Vote
- 7) Commissioner's Update
- 8) Roundtable Discussion

Board Members Attending: Tim Biebel (Board Chair); Brian Bailey; Michael Bancroft; Wendy Butler; Brad Ferland; David Fielding Jr.; Michael Kolsun; Bryan McCarthy; David Robillard; Nancy Matthews; Jay Sweeny; and Martin Van Buren.

Department Staff Attending: Louis Porter, Commissioner; Mark Scott, Wildlife Director; Eric Palmer, Fish Director; Col. Jason Batchelder, Law Enforcement Director; Catherine Gjessing, General Counsel; Margaret Murphy, Fish Program Manager, Maureen Lynch, Fish Program Manager; Bernie Pientka, Fisheries Biologist; David Sausville, Migratory Game Bird Project Leader; Nick Fortin, Deer and Moose Project Leader; Katy Gieder, Biometrician and Research Coordinator; Kim Royar, Furbearer Project Leader; John Hall, Outreach and Information Specialist; Lt. Carl Wedin, Northwest Warden District Supervisor; Lt. Sean Fowler, Northwest Warden District Supervisor; Warden Trevor Szymanowski; and Will Duane, Executive Assistant.

Members of the Public Attending: (Note: Zoom Webinar requests a first and last name for each meeting attendee, the following usernames joined the meeting as attendees): Caitlin Drasher; Paul F. Noel; Brenna Nicole; Ben; Matthew Deen; Ryan; Chris Owen; Molly Cook; Charles Storrow; Sarah B.; Mark Riley, Jr.; and Nick Campagna.

The meeting was called to order by the Chair at 5:00 PM

Approval of Previous Meeting Minutes (February 17, 2021)

Motion: Bryan McCarthy moved to approve the previous meeting minutes as drafted. David Fielding seconded the motion.

Discussion: A typo correction was offered for the correct spelling of a name.

Vote: 11-0 roll call vote to approve the minutes as amended. David Robillard abstained from voting.

Public Comments (Limited to 2 minutes per speaker)

Justin Lindholm, Mendon: Mr. Lindholm spoke about a new proposed firearms ordinance in Mendon that might be of interest to the Department and the sporting community. This ordinance would prohibit shooting from 8pm to 8am and within 500 feet of a roadway. There is an exception for the legal hunting seasons.

Mark Riley, Jr., Pomfret: Mr. Riley spoke about the proposed changes to the fishing regulations as related to the Battenkill River. The proposed fish regulation changes seem to limit the ability for anglers to use bait on the river. Mr. Riley also expressed concerns regarding the brook trout limit. *Note: the proposed regulations regarding the Battenkill River have been amended to reflect that catch and release fishing with live bait will still be allowed during the catch and release season.*

Petition Acknowledgement and Discussion

Board Chair Tim Biebel stated that the Board had received 4 petitions since the previous meeting including: a petition to place a moratorium on fisher trapping; a petition to close all trapping seasons, and to suspend them; a petition to ban live action trail cameras during hunting seasons; and a petition to return the end of trapping season for river otters to February 28.

The Chair requested that Department staff review the petitions, summarize their findings, and present recommendations on these petitions at the June 2021 Board meeting. The Chair asked the Board members for a straw vote on this path forward with the petitions. There was a unanimous straw vote to manage the petitions in this manner. Department staff will review the petitions submissions and report back to the Board at the June meeting. The 4 petitions are attached to these minutes.

Fish Regulation Simplification Proposal

Fish Division Director Eric Palmer described the process thus far for the 2021 fish regulation

simplification proposal. Department staff collected public comments for the Board which were received via email, mail, voicemail message, and at the virtual public hearings held on March 29th and 30th. The comments received and the regulation proposal are attached to these minutes. Director Palmer noted that there had been an error in the earlier draft of the proposal which allowed only for catch and release fishing with artificial lures on the Battenkill River. This result was not the intent of the proposal. Catch and release fishing with live bait on the Battenkill River will still be allowed in the current version of the simplification proposal. Additionally, a clarifying definition of the boundary of Chittenden Reservoir was added as “including all tributaries upstream to the first barrier impassable to upstream fish movement.”

Motion: Marty Van Buren moved to approve the simplification proposal as amended and presented at this meeting. Brian Bailey seconded the motion.

Vote: Unanimous roll call vote to approve the proposal as presented.

The next step in the administrative rulemaking process is for the proposal to be reviewed by the Legislative Committee on Administrative Rules. After a 3rd, final vote later in 2021, these regulations changes will take effect on January 1, 2022.

2021 Migratory Game Bird Season Proposal

Wildlife Division Director Mark Scott and Migratory Game Bird Project Leader David Sausville recapped the process thus far for the 2021 migratory game bird seasons. Department staff compiled public comments received via email, voicemail, and at the public hearings held on March 9th and 11th. The proposal remains unchanged from the Board’s straw vote at the February 17th Board meeting. The proposal and the summary of the comments received are attached to these minutes.

Motion: Bryan McCarthy moved to approve the 2021 migratory game bird seasons as proposed. Nancy Matthews seconded the motion.

Discussion: Jay Sweeny proposed an earlier start date for the interior zone; the proposal did not advance.

Vote: 11-1 in favor of the seasons as proposed. Jay Sweeny voted no.

2021 Moose Season Recommendation

Wildlife Director Mark Scott and Deer and Moose Project Leader Nick Fortin recapped the process thus far for the Department’s 2021 moose season permit recommendation. The Department presented the comments received via voicemail, email, and at the virtual public hearings held on March 23, 25, and 26th. The recommendation is unchanged from the Department’s presentation at the February 17, 2021 Board Meeting. The final proposal and the summary of the comments received are attached to these minutes.

The Department recommends 100 permits for the 2021 moose hunting season:

Permit Recommendation			
	E1	E2	Total
Regular Season			
Either-sex	24	15	39
Antlerless-only	24	16	40
Archery Season			
Either-sex	9	6	15
Auction		<i>choice</i>	3
Special Opportunity		<i>choice</i>	3
TOTAL			100



Motion: Marty Van Buren moved to approve the 2021 moose season permit recommendation as presented by the Department. David Fielding seconded the motion.

Vote: 12-0 rollcall vote to approve the permit recommendation as presented.

Commissioner's Update

- The Governor's Office is still working on appointing two new members to the Board. We'll update you all as soon as we hear more.
- The Department will issue press releases on the 2021 moose hunt now that permit numbers have been approved.
- In-person meetings may resume again soon. It's possible that by June we might have an in-person Board meeting.
- Bear and human conflicts are starting to pop up statewide, wardens have been responding in due course.
- The Department has just completed a land acquisition that will add over 400 acres to the Roaring Brook WMA.
- Trout season opens statewide on Saturday, April 10.
- There are several legislative initiatives that the Department is monitoring which impact hunting, fishing, trapping, and the Fish and Wildlife Board. It may be beneficial to have Board Members testify in front of some legislative committees to better understand who you are and what you do.

The meeting was adjourned at 6:50 PM.

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



February 15, 2021

Dear Members of the Vermont Fish & Wildlife Board:

Protect Our Wildlife is an all-volunteer Vermont nonprofit that represents over 2,500 VT residents from across the state as well as our social media followers of over 20k subscribers. Our team of volunteer professionals includes educators, biologists, wildlife rehabilitators, and other stakeholders who are committed to the equitable and responsible stewardship of Vermont's wildlife. Of particular interest to our group are predator species who are vital to healthy, vibrant ecosystems. Fishers, *Martes pennant*, are one of those species.

We have concerns over VT's fisher population due to a variety of reasons, including rodenticide exposure as well as other mortality factors that are not completely understood by the VT Fish & Wildlife Dept. Per VTFWD's 2020 furbearer newsletter {emphasis added}, "Thirty liver samples from fisher were sent to a Tufts University graduate student for rodenticide testing. Final results are pending, however preliminary information suggests that at least five different rodenticides are quite ubiquitous throughout the state. We had hoped to do some additional testing this year but were not able to due to budget reductions. If possible, we will continue testing next year as there are a lot of unknowns regarding how rodenticides influence carnivore survival."

Protect Our Wildlife
PO BOX 3024
Stowe, VT 05672
www.ProtectOurWildlifeVT.org

We were eager to review recent data from the VTFWD, including historical kills and trapper effort. With the consultation of our team, including a retired Ph.D. ecologist, a conservation biologist who serves on our Board, as well as a former UVM Instructor with a Ph.D. in microbiology and molecular genetics from UVM with post-doctoral research experience from Harvard Medical School, **we have concluded that a moratorium should be placed on the trapping of fisher.** We are asking that VT Fish & Wildlife Board and Department place politics aside and move this petition forward.

In the attached graphs, we have charted Catch Per Unit Effort (CPUE) data calculated using the VTFWD method and the traditional method. As you can see, the VT method introduces substantial variability into the data for most species, and it provides little help in evaluating any trends in the monitored population. To understand how CPUE (*as calculated traditionally*) has changed over time, we used the 1990-2004 period as a surrogate for a sustainable population, calculated a 95% confidence interval for that period, and compared it to data for the period from 2005 to the present. **As you can see, beginning in 2003 the CPUE dropped below the lower 95% confidence limit (LCL) or almost 2 standard errors below the mean of the baseline period. It has remained substantially below the LCL through the present.**

We believe this is important information because one of the largest contributors to failure when managing fish or wildlife populations is the phenomenon of “the shifting baseline.” A shifting baseline is a gradual change in the accepted norms for the condition of a population due to a lack of experience, memory, and/or knowledge of its past condition. In this case, since VTFWD has not taken management action to maintain a sustainable fisher population, one that is similar to that inferred from the CPUE in 1990-2004 by regulating fisher take, it appears VTFWD is experiencing this situation. We also believe that if the baseline

period were extended further back it is likely that the situation would be even worse.

In summary, this analysis of the fisher population presents evidence that supports a decision that the season for fisher should be closed. This evidence includes:

- 1) A significant decline in the number of fishers trapped over the last 15 years;
- 2) A significant decline in fisher CPUE over the last 15 years using a traditional approach to calculating CPUE;
- 3) A statistical comparison that documents that the fisher harvest since 2003 has been significantly below the lower 95% confidence limit of the mean harvest from 1990-2004, a proposed surrogate for a sustainable population.

We applaud the NH Fish & Game biologists who took the proactive measure to their Board (Commission) to place bag limits on fisher. We are asking that the VFTWD and the Board go a step further to enact a moratorium. **In 2019, 19 fishers were reported trapped in just one WMU.** This level of "harvest" is likely impacting the local population of fisher, which can have cascading effects on biodiversity and ecosystem health. **Over the last 10 years, 3,037 fishers have been trapped and killed — not for food or in defense of property, but for "sport."** This moratorium would also address the incidental take of the endangered pine marten as well as bobcat during fisher season. We also ask that the VTFWD provide the scientific basis, that includes peer review, as to why there is a trapping season on fisher with no bag limits in the first place.

We look forward to hearing from you.



Brenna Galdenzi, POW President and Co-founder

Protect Our Wildlife
PO BOX 3024
Stowe, VT 05672
www.ProtectOurWildlifeVT.org

March 30, 2021

Memo to: Tim Beibel, Chair Vermont Fish and Wildlife Board

CC: Senate President Pro Tempore Becca Balint
House Speaker Jill Krowinski
Chair, Senate Committee on Natural Resources and Energy Chris Bray
Chair, House Committee on Natural Resources, Fish and Wildlife Amy Sheldon
Lt. Governor Molly Gray

From: Michael Hass David Kelley Jennifer Lovett James White
Vincent Illuzzi Peggy Larson Walter Medwid (Contact person: wmedwid@gmail.com)

Re: Vermont's Recreational Trapping Program: A Petition to Close Seasons; a Petition to Suspend

These petitions seek to initiate urgent action on two fronts with regard to the state's recreational trapping program:

- 1) We hereby petition the Fish and Wildlife Board (FWB), consistent with its authority, to establish closed season status for the following species: red and gray fox, bobcat, fisher, weasel, coyote and otter per our findings below.
- 2) We hereby petition the Fish and Wildlife Board, consistent with its authority, to temporarily close all other recreational trapping seasons until such time as our findings can be fully examined and addressed by the FWB.

We have researched and assembled a full range of data that we believe fully supports both actions. We are also mindful of the context in which we find ourselves in this moment in time. To wit, there is pending legislation to ban recreational trapping in Vermont: a recent independent survey by UVM's Center for Rural Studies (the most definitive, independent survey on the subject) indicates majority public support for a ban on recreational trapping. Also, an increasing number of states have taken steps to either limit or ban certain types of traps.

We are including legislative leaders in this communication in order to provide additional background on the pending bill on recreational trapping and to alert them for the potential need for a legislative working group to address the controversies on trapping. Future actions also depend upon decisions of the FWB on these petitions, the fate of the legislation seeking to ban recreational trapping and pending legislation that may alter the fundamental role of the FWB (H.167, S.129).

Our petitions on the recreational trapping program and the call for a legislative examination of it are based upon the following findings starting with big picture perspectives (1-5) and concluding with more Vermont-based specifics (6-10).

It is our contention that the justification of continuing recreational trapping in Vermont as sanctioned public policy is seriously at odds with contemporary science, contemporary social-ecological conditions and contemporary expectations of wildlife governance. Vermont's wildlife governance infrastructure is not responding to the major shifts in our culture. As such, our public policy and practice must change to reflect contemporary socio-ecological conditions. Addressing recreational trapping is a most appropriate place to begin the process of change.

Thank you for bringing these petitions to the attention of full Fish and Wildlife Board.

Findings

Finding 1. Current public policy on trapping contradicts the conclusions of the Association of Fish and Wildlife Agencies (AFWA)* blue ribbon panel report on sustaining America's wildlife:

"There is a need to broaden stakeholder representation to ensure fish and wildlife conservation remains relevant and supported by people from all walks of life" (AFWA 2016 p. 9).

And while the following statement addresses agencies, we believe it applies to all wildlife conservation institutions:

"To remain relevant, state fish and wildlife agencies will need to transform their structures, operations and cultures to meet the changing expectations of their customers. If [they] fail to adapt, their ability to manage fish and wildlife will be hindered and their public and political support compromised" (AFWA 2016 p. 9).

Vermont's public policy on trapping has been codified without all public interests at the table.

*AFWA is the professional group representing the interests of fish and wildlife agencies across the country. Vermont's Fish and Wildlife Department (FWD) is a dues paying member.

Finding 2. Vermont's recreational trapping practices are at odds with the thinking of prominent leaders in the wildlife profession, in that their inception and oversight violate principles of the public trust and good governance. Specifically, they conflict with the principles and spirit espoused in Decker et al. 2016. Current practices fall short of scientifically and socially responsible wildlife conservation and are inconsistent with modern expectations for wildlife governance. There is no evidence that diverse perspectives inform current practices nor do these practices reflect the wildlife values held by most Americans or their interests in outdoor recreation involving wildlife (Kellert et al. 2017, Manfredo et al. 2018). Vermont trapping practices appeal to a narrow sector of Vermont's populace, clearly inconsistent with public trust thinking (PTT) and good governance (GG) (Decker et al. 2016).

Exclusionary practices run counter to PTT and GG, creating an environment that leads many people who care deeply about wildlife conservation to view wildlife professionals "as part of the problem, not the solution," as two agency personnel suggested (Amend and Gasson 1996, p. 169). They go on to say, "...our future does not rest on doing the same things for the same people" and "we must be willing to drop our defenses and cultivate a culture of openness." (pp. 172, 175).

Finding 3. Our concerns about current public policy on trapping as established by the FWA are buttressed by key points drawn from AFWA's annotated bibliography on agency transformation meant to guide agencies and their associated structures (FWB) toward a sustainable and credible

approach to wildlife management (Forstchen 2018). Note that we interpret “agency” to apply to all wildlife institutions including the FWB. Relevant points are:

- Wildlife professionals generally agree that public values toward wildlife changed dramatically over the latter half of the 20th century (p. 19)
- There has been a gradual shift away from traditional values that emphasize the use and management of wildlife for human benefit toward a more protection-oriented approach to wildlife (p. 19)
- This trend is one of the most influential factors shaping wildlife management today (p. 19)
- People who have interests in fish and wildlife but are not anglers, hunters and trappers increasingly ask policy makers and managers to address their interests (p. 11)
- Some observers have noted that wildlife management has been “captured” by consumptive interest groups and that the “iron triangle” between resource managers, traditional commodity users, and policy makers limits access of others in the decision-making process (p. 23)
- This conflicts with the increasing public expectation for citizen participation in management decision making (p. 11)
- Wildlife managers must avoid the temptation to use only the preferences of a limited group of stakeholders as the basis for decisions (p. 15)
- Most of us realize there is a growing disconnect between much of what our agencies do and the interests of citizens in our states (p. 28)
- Successful agencies will embrace change and help their constituents do the same (p. 16)
- The wildlife profession must develop management programs acceptable to a large and growing array of stakeholders that often have competing stakes in wildlife management (p. 17).

Finding 4. Vermont’s current public policy on recreational trapping as determined by the FWB is also at odds with Principles #1, #2 and #3 of the North American Model of Wildlife Conservation:

#1 Wildlife is a public resource managed on behalf of all people. But in Vermont, the public has no seat at the decision-making table so how does the public interest get represented? When do special interests represent public interests?

#2. Commerce in dead wildlife is eliminated. Even with a dramatic drop in fur prices caused by the global campaign to end the use of fur in fashion (see next point), the trade in pelts persists in Vermont.

#3. Wildlife is allocated according to democratic rule of law (AFWA 2021). We fully agree that wildlife should be subject to the democratic rule of law. According to the World Justice Project (2021) “the rule of law is a durable system of laws, institutions, norms and community commitment that delivers accountability, just laws, open government, and accessible justice.” Open government means the “processes by which laws are enacted, administered, and enforced are accessible, fair, and efficient” (World Justice Project 2021).

In other words, a decision is only as credible as the process that led to it.

While we do not believe that wildlife should be “allocated” (because their value does not depend solely on their utility to humans), if this was done according to the democratic rule of law, the largest allocation might reasonably belong to the largest group: non-consumptive users, such as birders, hikers, photographers, gardeners, wildlife watchers and others. At the very least, these interests (stakeholders) must be fully represented. Actions by the governor’s office and FWD leadership have used, if not abused, their authority to subvert any nomination to the FWB that has not met the political agenda criteria of FWD. The boycotting of credentialed candidates who are not trappers or hunters is an affront to open, inclusionary government and it violates the core mission of the FWD to serve all Vermonters. Lastly, Vermont statutes, Title 10, Chapter 103 state clearly that wildlife is a public resource, and further, that wildlife is a resource that must serve the citizenry. These laws beg the question: How can the FWB in the absence of full, fair representation of the citizenry make any decision that serves the citizenry?

Finding 5. The public pushback against fur trapping is shown by major fashion houses banning fur in their creations; in the collapse of fur prices; in the bankruptcy of at least one major fur trading operation; and growing public support for banning recreational trapping. The 2017 Vermonter Poll conducted by the University of Vermont found most respondents favored a ban on the use of leg-hold, drowning and body-gripping traps (Center for Rural Studies 2017). Arizona, California, Colorado, Florida, Hawaii, Massachusetts, New Jersey, Rhode Island, and Washington have severely restricted leg-hold or body-gripping traps (or both), as have over 100 countries (Law Library of Congress 2016). As of this writing, a bill to ban trapping on all public lands in New Mexico is on the governor’s desk for signature.

Finding 6. Vermont’s fish and wildlife administration and public policy markets recreational trapping as “humane, highly regulated and an important conservation tool.” These excerpted comments from Rob Mullen, chair of the Vermont Wildlife Coalition, offer a far different perspective:

“Highly regulated” included no bag limits on any species, no reporting of numbers killed of any species but three (otter, bobcat, and fisher), no reporting of any “by-catch” including domestic animals or pets and a general difficulty in enforcement that make any claim of being “highly regulated” potentially toothless.

“Humane” included using “instant-kill” traps (or as the FWD more modestly calls them, “quick-kill” traps). The official Best Management Practices (BMP) standard for these political euphemisms is not instantaneous or a few seconds as most humane people might imagine. For a beaver in a ‘Quick-Kill’ Conibear 330 the BMP requires only that 70% of trapped beavers die within 300 seconds (five minutes; and 30% taking any amount of time longer). Underwater sets killed in under nine (9) minutes. I was shocked to learn that my beloved Vermont allows drowning as a “humane” method of killing. Colony traps are designed to drown multiple animals at a time.”

“Conservation Tool” - a common refrain is that trappers help “control” populations. It requires some fanciful “biology” to believe that predators like bobcats, fishers, otters, minks, and weasels, need population control. The FWD confirmed to me that in over 30 years, only one bobcat had been trapped in Bolton, yet, we are not overrun with bobcats. Most years, otters are killed in only a few Wildlife Management Units, and yet we are not overrun by otters. Predator populations

have been naturally regulated for millions of years without any help from us (territoriality and prey density)."

One final point: trappers are mandated to report their kills annually yet there are no penalties if reports are not filed. Furthermore, non-target species caught in traps are also not required to be reported. Collectively these comments raise serious questions about Vermont's public policy on recreational trapping being "...humane, highly regulated and an important conservation tool."

Finding 7. According to existing Vermont public policy as marketed-by FWD, "Trapping helps to maintain these species (furbearers) at healthy population levels mitigating the effects of density dependent diseases such as distemper and rabies" However, Vermont's position is not supported by science. A publication on trapping from The Wildlife Society (a resource that DFW references as a reliable source) states that, "The only definitive statements that may be made on the subject of disease control at this time are that regulated trapping will not (and is not designed to) eradicate diseases; very intensive trapping may help control diseases; and the relationship of normal furbearer harvests to disease occurrence and intensity in wildlife populations is not yet well understood." *Emphasis added*

Finding 8. According to FWD's marketing materials, "Trapping is an important tool to reduce human-wildlife conflicts." This contention is not supported. White et al. 2020 found no evidence that seasonal trapping was an effective method for reducing levels of human-wildlife conflict. Obbard et al. 2014 showed that the number of human-black bear conflicts correlated most strongly with the availability of the bear's natural food sources, not their population level. Higher harvests did not reduce conflicts. In fact, the authors contended that reducing conflicts through harvest alone would require such a high harvest level it might impair survival.

Integrated wildlife damage management (IWDM), an evidence-based and ecological approach to solving human-wildlife conflicts, is based on a timely, customized, multifaceted solution that typically includes changing problematic human behavior, often calling for the removal of anthropogenic attractants (Smith et al. 2019). Interventions are targeted specifically at the individual animal(s) causing the problem—a far more selective approach than using recreational trapping to reduce the overall population level, which as Obbard et al. 2014 showed, may not reduce the number of conflicts.

Finding 9. According to FWD's marketing publication on-trapping, "Trapping plays a multi-dimensional role in the management of wildlife populations." However, the FWD's stance on this issue is at best inconsistent. When asked if FWD considers trapping an important part of controlling wildlife populations in Vermont, FWD's long tenured and point biologist for furbearers and trapping said, "Not an important part, no." If FWD's top furbearer biologist cannot justify a role for recreational trapping, why does the practice continue? The Bridge (newspaper).

Finding 10. A growing body of evidence illustrates the important role of predators in regulating ecosystems and sustaining biodiversity. Apex predators (in Vermont these include coyotes, black bear, bobcat, river otter, and to a lesser extent, fisher) are primarily known for their role as inhibitors of rodents and other small prey populations as well as smaller predators like raccoons, foxes, skunks, and weasels (mesopredators). Many apex predators, for example coyotes, bobcats, and river otters, are now recognized as keystone species (6). This is due to their profound impacts on ecosystems in which they affect the distribution, abundance, and diversity

of their prey. This regulation of lower species in the food chain creates a process known as a trophic cascade. By dispersing native seeds and nutrients from foraging, they also influence the structures and balances of ecosystems and landscapes.

Apex predators occupy the top trophic position in a community. They are often large bodied, specialized hunters. Mesopredators occupy the position below Apex and tend to be more generalist hunters. Apex Predators suppress mesopredators in two ways, by killing them and by instilling fear, which motivates changes in behavior and habitat use that can limit mesopredator distribution and abundance. (Ritchie, 2009)

The control of mesopredators by apex predators has a significant effect in moderating the intensity of predation on smaller prey species like birds and small vertebrates. Consequently, the removal or loss of apex predators from a system results in the explosions of prey and small carnivore populations. This process, known as mesopredator release, is symptomatic of fundamental ecosystem imbalance and loss of biodiversity. (Ritchie, 2009; Prugh, 2009)

Ultimately, apex predators are more effective, more efficient, and more economical at controlling mesopredators than are human hunters. Recent studies indicate that it is exceptionally difficult to replicate the full ecosystem effects of apex predation. Interactions between predators result not only in direct killing but also in avoidance behavior and defensive group formation. Thus, fear of predation can have an even stronger impact on a landscape scale than the killing itself. (Ritchie, 2009)

In addition to maintaining a balance in nature by limiting the populations of those they hunt, apex predators, who are relatively safe from predation themselves (except by humans) are able to maintain relatively constant population densities despite differences in resource availability (6). In fact, the larger the predator, the more they can self-regulate populations. Smaller predators and mesopredators are more limited by the available food supply and predation. The expression of self-regulation stems from social interactions and is therefore subject to the condition of social or pack stability. In apex carnivore populations subjected to human hunting, age at sexual maturity declines, reproductive rate increases, parental care shortens and demography skews toward juveniles. In non-exploited populations of large canids (e.g., coyotes), offspring often remain with their natal group for several years delaying breeding age, reducing litter production, and consequently slowing or stopping population growth rates. (Wallach, 2015)

More studies need to be done on how to understand and manage the conservation of apex predators in order to maintain biodiversity and conserve ecosystems. Restoration of top carnivores is imperative in order to slow down further environmental degradation and species loss through uncontrolled mesopredator release. Habitat restoration and better public understanding/education, as well as compromises by those likely to have predator confrontations, must be prioritized as wildlife management strategies (Prugh, 2009).

Vermont's apex species and the roles they play

(see Elbroch and Rinehart, 2011 for species profiles)

1. **Coyote (Canis latrans)**

Coyotes are an apex predator in Vermont. They fill the role of mesopredator in other locations where they share habitat with wolves.

Coyotes self-regulate their populations according to the available food supply in their home range. Exploitation of coyotes by hunting and trapping results in increased juvenile reproduction and larger litters. These lead to pack dispersion, resulting in more numerous alpha breeder/hunter pairs. Thus, it has been demonstrated that external population controls (hunting) have actually increased coyote numbers.

Coyotes live in territorial family packs led by a mated alpha pair who defend a home range of about 4- 8 square miles. They produce one litter per year per pack. Litter size is on average 4- 7 pups depending on the available food sources. Of these pups, only 25% will survive to adulthood. Defending their territory from intruding and transient coyotes is another way coyote populations are self-regulated.

Where coyote populations have declined, other mesopredators such as foxes and raccoons have increased significantly resulting in altered ecosystems with decreased biodiversity (plant as well as animal) and population density of smaller species, such as birds and rodents. These well-recognized effects of coyote hunting reveal without question that coyotes are important to maintaining the integrity and balance of native ecosystems. (Crabtree, 1999)

2. **North American River Otter (*Lontra canadensis*)**

Otters are not traditionally thought of as apex predators but, by preying on fish, frogs, crayfish, insects, and birds, they regulate species populations in aquatic ecosystems. Their latrines contribute to the health of riparian plant communities by distributing aquatic nutrients into soils increasing nitrogen content and growth rate of some native plant species. River otters require clean water in order to survive and are bio-indicators for healthy aquatic systems. Threatened by habitat degradation, pollution, and human exploitation, river otters do not overpopulate their ranges and have slow reproductive growth. Most females do not reproduce until they are 5-7 years old and then only give birth to one to three pups per year.

River Otters are listed as a species of greatest conservation need in VT FWD's Wildlife Action Plan.

3. **Bobcat (*Lynx rufus*)**

Bobcats are considered a keystone species for their ability to stabilize rodent populations. They are very solitary animals and rarely associate with each other except during breeding season. Mothers and their litters of 2-4 kittens are the basic social unit. Even where territories overlap, adult bobcats will avoid each other. They breed once a year, in February/March, and breeding success is directly proportional to prey availability. Breeding rates vary from 92% of adult females down to 30% or less depending on food scarcity and often female bobcats will only breed every other year. Bobcats live in varied habitats, depending on landscape connectivity and quality for availability of prey and mates, denning sites, as well as protection from predators. Loss of habitat has resulted in greater competition for prey with other predator species, coyotes in particular, and impacts bobcat conservation.

4. **Black Bear (*Ursus americanus*)**

Female bears (sows) only breed every two years and generally the first time occurs between 2-8 years of age, typically around 4 or 5. The average litter size is 2-3 cubs who stay with, and are dependent on, their mother for more than one year. Black bears mate in June-July but the process of delayed embryonic implantation postpones cub births until late winter when the female is safely in hibernation. Birth of cubs is also regulated by the condition of the sow in the

early winter---her nutritional status and age. Older and larger (fatter) sows produce larger litters. Younger bears produce fewer cubs. If in poor health, or lacking enough body fat to sustain lactation, a sow will not give birth (abort fetuses) or abandon newborns. Thus, there is a strong correlation between a female Black bear's body condition, environmental factors, and her reproductive success. Hunting bears, especially sows who may be pregnant or have dependent cubs, can have a dramatic and negative effect on population dynamics.

5. **Fisher (*Martes pennanti*)**

Fishers are generally solitary except during mating season. The rest of the year they tend to be territorial toward their own species and gender. Fishers breed in March/April but delay implantation of embryos and give birth almost a year later in February/March. Due to this process, embryonic diapause, female fishers are pregnant for all but two weeks of every year. Litters are born in late winter to early spring and range from 1-5 young with an average of 2-3 kits. When kits disperse and are on their own in late summer or fall, there is a high chance of mortality. This is especially true if the local fisher population is growing and vacant territory is challenging to find and establish. Fishers and American martens (*Martes americana*), an endangered species in VT, overlap in habitat, food sources, and behavior. Trapping of fisher can therefore negatively impact both fisher and marten populations. Fisher populations are in decline in New England and the reasons are likely complex, ranging from habitat loss and fragmentation, to the use of rodenticides, and trapping. (USDA, Forest Service, 1994).

Literature Cited:

Amend, S. R., and W. Gasson. 1996. Beyond rhetoric: facing the new realities in fish and wildlife agency management. *Transactions of North American Wildlife and Natural Resources Conference*. 61:168-176. Association of Fish and Wildlife Agencies [AFWA]. 2016. The future of America's fish and wildlife: a 21st century vision for investing in and connecting people to nature. Association of Fish and Wildlife Agencies Blue Ribbon Panel on Sustaining America's Diverse Fish and Wildlife Resources, Washington, D.C., USA. <https://www.fishwildlife.org/application/files/8215/1382/2408/Blue_Ribbon_Panel_Report2.pdf>. Accessed 11 Jan 2021.

[Association of Fish and Wildlife Agencies. \[AFWA\]. 2021. North American model of wildlife conservation. <https://www.fishwildlife.org/landing/north-american-model-wildlife-conservation>. Accessed 12 Jan 2021.](https://www.fishwildlife.org/landing/north-american-model-wildlife-conservation)

Center for Rural Studies. (2017). 2017 Vermonter poll [Unpublished raw data]. University of Vermont.

Crabtree, R.L. and Sheldon, J. W. 1999. The Ecological Role of Coyotes on Yellowstone's Northern Range. *Yellowstone Science* 7 (2): 15-23

Crooks, K.R. and Soule, M.E. 1999. Mesopredator release and avifungal extinctions in a fragmented system. *Nature* 400 (August 5, 1999): pp. 563-566.

Decker, D., C. Smith, A. Forstchen, D. Hare, E. Pomerantz, C. Doyle-Capitman, K. Schuler, and J. Organ. 2016. Governance principles for wildlife conservation in the 21st century. *Conservation Letters* 9(4):290-95. <<https://doi.org/10.1111/conl.12211>>. Accessed 11 Jan 2021.

Elbroch, M. and Rinehart, K. 2011. *Behavior of North American Mammals*. Houghton Mifflin Harcourt Publishing.

Forstchen, A. 2018. State fish and wildlife agency transformation: an annotated bibliography. Association of Fish and Wildlife Agencies, Blue Ribbon Panel Relevancy Working Group. <<https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/9/7447/files/2018/10/Transformation-literature-annotated-bibliography-July-2018-292r1ph.pdf>>. Accessed 12 Jan 2021.

Fox, C. H., and C. M. Papouchis. 2004. *Cull of the wild*. Animal Protection Institute of America [Corporate Author].

Iossa, G., C. D. Soulsbury, and S. Harris. 2007. Mammal trapping: a review of animal welfare standards of killing and restraining traps. *Animal Welfare*. 16 (3):335-352.

Kellert, S. R., D. J. Case, D. Escher, D. J. Witter, J. Mikels-Carrasco, and P. T. Seng. 2017. *The nature of Americans national report: disconnection and recommendations for reconnection*. DJ Case & Associates [Corporate Author]. <<https://natureofamericans.org>>. Accessed 12 Jan 2021.

Manfredo, M. J., L. Sullivan, A. W. Don Carlos, A. M. Dietsch, T. L. Teel, A. D. Bright, and J. Bruskotter. 2018. *America's wildlife values: the social context of wildlife management in the U.S*. Colorado State University, Department of Human Dimensions of Natural Resources. <<https://sites.warnercnr.colostate.edu/wildlifevalues>>. Accessed 11 Jan 2021.

National Wildlife Research Center. 2016. Preventing wildlife rabies saves lives and money. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (USDA-APHIS-WS), Fort Collins, CO, USA. <https://www.aphis.usda.gov/publications/wildlife_damage/2016/fsc-preventing-wildlife-rabies.pdf>. Accessed 26 Jan 2021.

Northeast Section of The Wildlife Society, July, 2015. TRAPPING AND FURBEARER MANAGEMENT In *North American Wildlife Conservation*, p.27

Obbard, M., E. Howe, L. L. Wall, B. Allison, R. Black, P. Davis, L. Dix-Gibson, M. Gatt, and M. N. Hall. 2014. Relationships among food availability, harvest, and human-bear conflict at landscape scales in Ontario, Canada. *Ursus* 25(2): 98-110. <<https://doi.org/10.2192/URSUS-D-13-00018.1>>. Accessed 11 Jan 2021.

Prugh, L.R. et al. 2009. The Rise of the Mesopredator. *BioScience*, 59 (9): pp. 779-791.

Responsive Management, 2015. *Trap Use, furbearers trapped, and trapper characteristics in the United States in 2015*. Association of Fish & Wildlife Agencies. <https://www.fishwildlife.org/application/files/3115/2106/4349/FINAL_AFWA_Trap_Use_Report_2015_ed_2016.pdf>. Accessed 11 Jan 2021.

Ritchie, E.G. and Johnson, C. N. 2009. Predator Interactions, mesopredator release and biodiversity conservation. *Ecology Letters* 12 (9): pp.982-998.

Smith, R., P. D. Curtis, and S. Hygnstrom. 2019. Developing training standards for wildlife control operators. *Proceedings of Wildlife Damage Management Conference* 18:57-61.

The Bridge, March 10, 2020. Montpelier, Vermont

The Law Library of Congress. 2016. Laws on leg-hold animal traps around the world. <<http://www.loc.gov/law/help/leghold-traps/index.php>>. Accessed 11 Jan 2021.

USDA, Forest Service. 1994 *The Scientific Basis for Conserving Forest Carnivores American Marten, Fisher, Lynx, and Wolverine in the Western United States*

Wallach, A.D. et al. 2015. What is an apex predator? *Oikos* 124: pp. 1453-1461.

White, H. B., G. Batcheller, E. K. Boggess, C. L. Brown, J. W. Butfiloski, T. A. Decker, J. D. Erb,, M. W. Fall, D. A. Hamilton, T. L. Hiller, G. F. Hubert Jr., M. J. Lovallo, J. F. Olson, and N. M. Roberts. 2020. Best management practices for trapping furbearers in the United States. *Wildlife Monographs* 207:3-59. <<https://doi.org/10.1002/wmon.1057>>. Accessed 12 Jan 2021.

World Justice Project. 2021. What is the rule of law? <<https://worldjusticeproject.org/about-us/overview/what-rule-law>>. Accessed 12 Jan 2021.

Zuardo, T. 2017. How the United States was able to dodge international reforms designed to make wildlife trapping less cruel. *Journal of International Wildlife Law and Policy*. 20:73-95. <<https://doi.org/10.1080/13880292.2017.1315278>>. Accessed 12 Jan 2021.

**State of Vermont
Fish and Wildlife Board**

Petition for Rulemaking

Now comes the Vermont Wildlife Coalition, by and through its Chair, Robert Mullen, and does hereby petition this Board to:

Return the end of the trapping season for river otters to February 28.

The Petitioner is the Vermont Wildlife Coalition. The Coalition is a non-profit 501(c)(4) Vermont corporation with approximately one thousand members representing the full diversity of Vermont's public and public opinion. Most of our members are actively engaged with wildlife as wildlife watchers, hikers, hunters, fishermen and as credentialed professionals such as biologists and therefore have an abiding interest in the subject matter. We are beneficiaries of the Public Trust created by 10 V.S.A. 4081 and Chapter II, Section 67 of the Vermont Constitution.

The Vermont Fish and Wildlife Board has jurisdiction over this matter by virtue of 10 V.S.A. 4081(b).

Cause: In 2016, this Board granted a petition by an officer of the Vermont Trappers Association to extend the otter trapping season to eliminate the ‘trigger rule’ (e.g., moving Conibear triggers to the side of the opening from the middle) necessitated by the 2007 extension of the beaver trapping season to March 31, past the end of the otter trapping season on February 28. What we see as some problematic reasoning from the Fish & Wildlife Department (hereon the “Department”) backing that decision and subsequent results of the extension, prompted this petition.

Memorandum in Support of the Petition

Birthing: In North America, river otter births, according to a variety of respected institutions, occur variously from November or December to May, with a peak in March and April; or November to May with a peak in March and April; or “late winter and early spring;” or between February and April.

- University of Michigan: https://animaldiversity.org/accounts/Lontra_canadensis/
- University of Wisconsin: [Lontra canadensis - Vertebrate Collection | UWSP](#)
- [North American river otter | Smithsonian's National Zoo \(si.edu\)](#)

- [North American River Otter | National Wildlife Federation \(nwf.org\)](#)
- [North American river otter - Wikipedia](#)
- In Vermont, according to the current version of the Department’s website otter fact page, birthing is usually in late March – May, [River Otter | Vermont Fish & Wildlife Department \(vtfishandwildlife.com\)](#), Until last year, the otter fact page went on to note that, “*In Vermont, it is protected from over hunting with the season only lasting about four months, from the end of October through the middle of February. This time of year is chosen to protect against mothers or newborns being harvested.*” Makes sense.

Now, after the otter season extension through March, the Department’s web page has been updated. While it still gives birthing as starting in late March, it says that “*In Vermont, it is protected from over hunting with the season only lasting about **five** months, from the end of October through the **end of March**. This time of year is chosen to protect against mothers or newborns being harvested.*” Makes less sense. Note that on page six (6) of the Public Comment Responsiveness Survey on the otter season extension prepared by the Department for the Board [Final Responsiveness Summary Furbearer Rule.pdf \(civiclive.com\)](#) the Department says of their otter web page fact sheet,

“...it is important to note that this factsheet was originally prepared more than three decades ago based on the contemporary knowledge of the time.”

True, and happily, our state of knowledge has increased over thirty years, but to claim the website simply was not updated for decades is remarkable (*it only took three years to update the season extension on the otter page*). Notably, the Smithsonian Institution’s National Zoo and the ever-evolving Wikipedia among many other academic sources, still have dates consistent with Vermont’s “out-of-date” ones even though the Department now disavows their own.

Trapping through March may now, or soon, increase or create the very risk the Department website says it seeks to avoid. Whether late March is the onset of the birthing season now or not, our warming winters, thinner ice, and earlier ice-outs will, if anything, shift the birthing season to earlier dates as is often, or even typically, now the case for otter populations south of Vermont.

Mammal Species of Greatest Conservation Need (SGCN): According to the Department, river otters are among the 33 “Mammal Species of Greatest Conservation Need” in Vermont.

<https://vtfishandwildlife.com/sites/fishandwildlife/files/documents/About%20Us/Budget%20and%20Planning/WAP2015/5.-SGCN-Lists-Taxa-Summaries-%282015%29.pdf>

They were given SGCN status because they are specialized predators with relatively low population density and low reproductive rates (1-3 kits per year on average and not all females breed every year). They are difficult to study, and therefore, there is concern that they may be particularly susceptible to habitat loss, pollution, and climate change. Consequently, despite their current population being healthy, they could rapidly be negatively affected by increased mortality and/or decreased reproduction. The National Wildlife Federation makes a similar point: "... but conservation reintroduction efforts are helping populations to recover. However [habitat destruction](#) and [water pollution](#) still puts these animals at great risk, especially because they are so specialized." ([North American River Otter | National Wildlife Federation \(nwf.org\)](#)).

Despite this, the state of Vermont extended the trapping season into the birthing season, or – even granting the Department’s backtracking on their own dates – what may soon become the birthing season as winters continue to become milder. This does not seem consistent with erring on the side of caution in dealing with a Species of Greatest Conservation Need, regardless of its current population level. Moreover, the Department spent considerable time and a good portion of the furbearer project’s budget to research rationalizations to give the benefit of any doubt to the petitioning trapper and his request to ease the inconvenience of having to adjust trap triggers at the end of February.

Incidental take: The Department also argued that the otter season extension would reduce the incidental take of otters that had occurred during March (about one (1) per year) since the beaver season had been extended in 2007 by reclassifying them as in-season. This clerical solution does eliminate the wanton waste of otters taken in March by allowing them to be legally utilized, but as far as otters are concerned, it can only increase the number killed, which as stated in the Department’s summary, was not a management objective.

This bureaucratic artifice may be helpful and convenient for trappers and the Department, but it was a step, however small, in the wrong direction for otters. As it has turned out in practice, it was not such a small step. The Department estimated that the March extension of the otter season would result in an average of no more than ten extra otters killed per year (to prevent an average of one from being killed incidentally). Unfortunate for the otters, but according to the Department, sustainable population-wise. However, 2019 data, the third year of the extension, reveals nineteen (19) otters reported killed in March. That is a **90% increase over the estimate** and represents a more than a **34% increase in mortality** over the total as of the end of February 2019. It should also be noted that

a large portion (seven) were reported killed in the last week of March (Department trapping data).

A second option, reportedly considered by the Department, was eliminating the trigger rule by returning the beaver season to the end of February (as it had been prior to 2007) instead of extending the otter season through March. However, in testimony before the FWB, LCAR, and in the Final Responsiveness Summary referenced above, it was argued that the beaver season needed to be extended through March to reduce the need for out-of-season nuisance (or “conflict”) beaver trapping. That trapping tends to peak in spring and summer which in turn puts nursing otter mothers and their kits in, as the Department calls it, “serious risk” of being killed accidentally since the young venture out of and eventually leave the den during that period. In theory, increasing the in-season take of beavers would reduce the need for out-of-season beaver trapping and so would also reduce the risk of incidental killing of nursing otter mothers and young (an average of five (5) reported per year). This reasoning makes some grim sense but is undercut when one reads in the summary that the Department sought to: “...*minimize the out-of-season take when such beavers are often wasted and **unreported**. For this reason ... the Department expanded the beaver trapping season through the month of March in 2007. As a result ... the percentage of beaver taken out-of-season as nuisance animals dropped from 44% to 28% ...*” (page 16 [Final Responsiveness Summary Furbearer Rule.pdf \(civiclive.com\)](#)). Such single-digit precision seems suspiciously over-cooked since it is derived from unknown starting and ending points (conflict beavers “often wasted and unreported”). While it may be that the season extension reduced the incidence of human/beaver conflicts, the seeming faux precision possibly suggests a desire to inflate the certainty of that result and concurrently, to undermine confidence in it. The Department also states that it relies on the fact that now, conflict beavers “taken into possession” need to be reported. However, beaver pelts typically have little or no monetary value in summer, thus the motivation to “take possession” and report the animal, as opposed to disposing of it, is reduced, again, eroding the value of such data.

In any event, according to the Department’s data, the season extension would reduce the incidental take of an average of one (1) otter a year in March, and fewer than five (5) in conflict beaver trapping by allowing the killing of an extra nineteen (19) otters per year during the extended season. Again, an odd way to conservatively manage a SGCN.

Animal welfare:

Two or three Department personnel made much of the animal welfare benefits of eliminating the trigger rule in presentations to the FWB and in testimony before

LCAR. Scant mention was made of those same arguments in the Department's published "*Final Responsiveness Summary Furbearer Rule,*" yet since the Department personnel were unified and consistent in their presentations to the Board and LCAR, and these purported animal welfare improvements were possibly part of the Board's decision to grant the extension and LCAR's minority approval (two vote margin needed to overturn the rule) of the extension, we will review them.

The trigger rule stated that after the otter season closed February 28, triggers on say a Conibear 330 (a common, "quick-kill" beaver trap) had to be offset – slid from the center to the side of the trap opening – to minimize the odds of otters (slimmer than beavers) springing the trap as they passed through. The Department reported that this was very effective in selecting for beavers and resulted in no more than one otter per year trapped by mistake (page 16 [Final Responsiveness Summary Furbearer Rule.pdf \(civiclive.com\)](#)) after the beaver season was extended past the otter season in 2007. However, the Department also claimed that the trigger offset caused the Conibear "quick-kill" trap to rarely malfunction. In verbal testimony, the details of typical malfunctions were noted to be a beaver hitting the offset trigger with its side after it had passed partly through the trap rather than its head as it first entered it. The reported result was that the animal might not be caught as designed and suffer an inhumane drowning death instead of dying "humanely" in the "quick-kill" trap. This was reasonably presented as an undesired animal welfare outcome. However, for all that concern, drowning is not mentioned in the Final Responsiveness Summary, only "non-lethal" captures – page 17-- with no discussion of how they affect animal welfare.

This was a notable omission. A submerged trap closed about a beaver's torso or hips might not be able to kill a large, robust beaver directly by the force of that action (is that the basis of switching to "non-lethal capture?"), but the inescapable 'side-effect' of holding it under water certainly would. We hope that this was not the Department trying to use such a tortured, rhetorical technicality to skirt this issue and clean up trapping for public consumption, but the fact pattern fits. Even more so when one considers the inconsistency of portraying drowning as an undesirable animal welfare outcome sufficient to merit eliminating the trigger rule, when the Department allows other types of trap sets that are designed to drown captured animals. Then again, worrying about all of this presumes that there is a significant difference between being killed in a "humane, quick-kill trap" and drowning. As it turns out, according to research data compiled by the Association of Fish and Wildlife Agencies (AFWA), there is not much (document attached).

The summary by the AFWA (of which VT FWD is a member), compiled the results of many research projects on trap function and efficiency that were used in the development of the trapping Best Management Practices (BMPs). The Department lauds the BMPs as hallmarks of modern, humane trapping. The research determined times to death (or “irreversible loss of consciousness”) for various species in various types of traps (we will not detail the research procedures). The pertinent times to death or “irretrievable unconsciousness” for beaver:

1. Conibear 330 (“**quick-kill trap**) on land: up to **five (5) minutes** for 70% of trapped animals (30% could suffer indefinitely).
2. Conibear 330 (“**quick-kill trap**) underwater for beaver: up to **nine (9) minutes**.
3. Drowning sets for beaver: **five (5) to ten (10) minutes**.

What is clear from the AFWA’s own research summary is that at the allowable BMP performance times, there is only a marginal difference between a “quick-kill” trap underwater (as most winter beaver sets are) and drowning, contrary to the narrative that the Department promoted to the FWB and LCAR and continues to present to the public. Moreover, that marginal improvement is for 70% of trapped animals. For nearly a third, the difference will be negligible if any. Several minutes is the ‘accepted’ best practice. It is inhumane. The BMPs, for whatever modest improvements in animal welfare that they may have accomplished, are “greenwash” trying to present slightly less cruelty as kindness. The world can be unkind, and trapping can be necessary, but it should be conservatively employed out of pressing need, not expanded as a matter of convenience. It is far from the solution we would like, but we ask the Fish & Wildlife Board to return the end of the trapping season of otters to the middle of February. We will ask the Department to ramp up non-lethal flow control measures and education on the same.

Even in most parts of Alaska, the season ends February 28th. In some parts it ends January 31st.

<https://www.adfg.alaska.gov/static/regulations/wildliferegulations/pdfs/trapping.pdf>


In Maine the trapping season for river otters ends December 31st.

<https://www.maine.gov/ifw/hunting-trapping/trapping-laws/index.html>

In Pennsylvania the season is only one week, from February 13-20.

<https://www.pgc.pa.gov/HuntTrap/Law/Pages/SeasonsandBagLimits.aspx#.VsQRNflViko>

Dated at West Bolton, Vermont, this 25th day of March, 2021.

A handwritten signature in black ink on a light blue background. The signature reads "Rob Mullen" in a cursive script.

Rob Mullen; Board Chair for the Vermont Wildlife Coalition



“Ice Breaker” American River Otter - 7” x 12” acrylic by Rob Mullen

From: [Tim Biebel](#)
To: [VT Fish & Wildlife Board List](#); [Walter Medwid](#)
Subject: [ANR.FWBoard] Fwd: addenda to previously submitted petitions
Date: Monday, April 12, 2021 7:40:51 AM
Attachments: [VWC-ThreeTrappingMyths.pdf](#)
[Bobcat trapping video transcript.pdf](#)
[ATT00001.txt](#)

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

All, please see additional info provided by Mr. Medwid that he would like considered as part of his petition.

Thank you,
Tim

----- Forwarded message -----

From: **Walter Medwid** <wmedwid@gmail.com>
Date: Thu, Apr 8, 2021 at 10:03 AM
Subject: addenda to previously submitted petitions
To: Tim Biebel <fwboard.windsor@gmail.com>

Dear Tim,

Since I submitted the petitions on behalf of the co-signers, I found a Vermont Fish and Wildlife Department position that bears directly on our recent brief and believe it will be important for board members to be familiar with this finding (below #11). I am hoping that you will be able to include this finding along the other ten. Also attached please find a recently released fact sheet dispelling three trapping myths from the VT Wildlife Coalition and a transcript of a video depicting two Vermont trappers dealing with a trapped bobcat kitten. The transcript pdf has a link to the actual video the trappers posted if board members choose to view it. The transcript and the video speak for themselves. I hope you will share this information with the board.

Thank you for considering these addenda. Walter

Finding #11. It is the position of the VT FWD that bobcat do not need to be managed through hunting or trapping unless there are extraordinary circumstances. This position is in stark contrast to the annual seasons for bobcat that the board approves for both hunting and trapping. The Department's position appears to recognize the multiple ecological benefits predators bring to the landscape coupled with the fact that unlike deer or beaver, the success of their offspring is so tightly connected to prey availability. Our 10th finding goes into this in much greater detail. The key point is that our first petition calling for the closing of trapping seasons for the predators listed, is in alignment with the Department's position.

**State of Vermont
Fish and Wildlife Board**

Petition for Rulemaking

Now comes the Vermont Wildlife Coalition, by and through its Chair, Robert Mullen, and does hereby petition this Board to forbid the use of live action trail cams for locating and identifying for the purpose of taking wildlife during hunting season.

1. Standing: The Petitioner is the Vermont Wildlife Coalition. The Coalition is a non-profit 501(c)(4) Vermont corporation with approximately one thousand members representing a wide diversity of the Vermont's public and public opinion. Most of our members are actively engaged with wildlife as wildlife watchers, hikers, hunters, fishermen and as credentialed professionals such as biologists and therefore have an abiding interest in the subject matter. We are beneficiaries of the Public Trust created by 10 V.S.A. 4081 and Chapter II, Section 67 of the Vermont Constitution.
2. The Vermont Fish and Wildlife Board has jurisdiction over this matter by virtue of 10 V.S.A. 4081(b).

Memorandum in Support of Petition

The most respected hunting organizations in the United States have come to recognize that using advances in modern technology for hunting wild game crosses an ethical and moral line. That line should be recognized by those responsible for making the rules.

"Trail cameras can be a helpful tool in game management and selective hunting. The use of devices that transmit captured or live images or video from the field back to the hunter crosses the line of fair chase." Official position of Boone and Crocket Club regarding live action trail cameras and their use in hunting game.

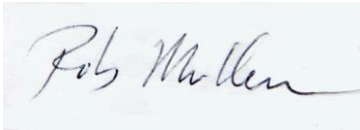
The Boone and Crockett Club will no longer accept entries that were taken with the aid of a cellular-linked trail camera, sighting ethics as the reasoning. The Arizona Game and Fish Commission voted unanimously in June to ban the use of "live-action" cameras. Nevada also banned the use of all trail cameras on public land for the purpose of hunting during certain times of the year. Nearly 90 percent of Nevada is public. Montana and New Hampshire have similar restrictions. Montana has banned the use of cellular linked live action trail cams during hunting season. New Hampshire also restricted the use of live action trail cams in 2015. Hunters can use them, but they are prohibited from hunting an animal on the same day the photos are taken.

<https://www.petersenshunting.com/editorial/cellular-linked-trail-camera-controversy/330542>

“Fair chase” has always been a part of the Vermont hunting tradition. It is the ethical pursuit of free-ranging wild game animals in a manner which does not give the hunter an improper or unfair advantage over the animal. For instance, “jacklighting” has, for years, been illegal in Vermont. With the proliferation of new technologies such as cellular connected trail cams, there is an entirely new toolbox that was never imagined even 50 years ago. The use of these technologies has nothing to do with Vermont's hunting tradition and make a mockery of any notions of fair chase.

If the Board fails to address the implications of these technologies, they will eventually cast a shadow over the integrity, the character, the soul and the reputation of Vermont hunters and the Vermont hunting tradition. Ultimately, that tradition will be the loser.

Dated at West Bolton, this 30th day of March, 2021.

A handwritten signature in cursive script, reading "Rob Mullen", written in black ink on a light-colored background.

Robert Mullen for the
Vermont Wildlife Coalition

APPENDIX 122

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

§ 122. Fish Management Regulation.

1.0 Authority

- (a) This rule is adopted pursuant to 10 V.S.A. §4081(b). In adopting this rule, the Fish and Wildlife Board is following the policy established by the General Assembly that the protection, propagation, control, management, and conservation of fish, wildlife and fur-bearing animals in this state is in the interest of the public welfare and that the safeguarding of this valuable resource for the people of the state requires a constant and continual vigilance.
- (b) In accordance with 10 V.S.A. §4082, this rule is designed to maintain the best health, population and utilization levels of Vermont's fisheries.
- (c) In accordance with 10 V.S.A. §4083, this rule establishes open seasons; establishes daily, season, possession limits and size limits; prescribes the manner and means of taking fish; and prescribes the manner of transportation and exportation of fish.

2.0 Purpose

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

3.0 Open-Water Fishing, legal methods of taking fish

3.1 Definitions

- (a) Department – Vermont Department of Fish and Wildlife.
- (b) Commissioner –Vermont Department of Fish and Wildlife Commissioner.
- (c) Open-water fishing –Fishing by means of hook and line in hand or attached to a rod or other device in open water. Fishing by casting or trolling baited hooks, artificial flies or lures is considered open-water fishing.
- (d) Baited Hook – A single shank hook with 1, 2 or 3 points which may be baited with natural or artificial bait or both.
- (e) Lure – A man-made device designed to catch only 1 fish at a time, to include a spoon, plug, spinner, bait harness, tandem hook streamer or lead head jig.

APPENDIX 122

- (f) Fly – A single pointed hook dressed with feathers, hair, thread, tinsel, or any similar material wound on or about the hook to which no hooks, spinners, spoons, or similar devices have been added.
 - (g) Handheld Spear – A manually powered spear used from above the water’s surface.
 - (h) Speargun – A pneumatic or rubber band powered device, with a line not to exceed 20 feet attached to a spear, used from below the water’s surface.
 - (i) Cull Fish – Carp, tench, rudd, shad (alewife and gizzard shad), and goldfish. Additional invasive/exotic fish species may be designated by the Commissioner as “cull fish.”
 - (j) Immediate Control – Such constant control as would enable the angler to respond forthwith to a fish taking their bait, lure or fly promptly and without any delay.
 - (k) Snagging – Snagging shall mean the intentional hooking of a fish in a place other than the inside of the fish's mouth. No person shall pull, jerk or otherwise purposefully and/or repeatedly manipulate a hook, or hooks and line to snag or hook a fish in any method other than to entice a fish into taking, by mouth, a hook, lure or fly. Repeated and/or exaggerated jerking or pulling of the fishing line and/or hooks in any attempt to snag fish, whether it results in physically snagging a fish or not, shall be prima facie evidence that snagging has taken place. This shall not apply to the use of a gaff to land a fish that has been legally hooked.
- 3.2 Whether still fishing, casting, or trolling in Vermont waters, a person may take fish only by using not more than two lines over which he or she has immediate control and to each of which lines is attached not more than two baited hooks, or more than three artificial flies, or more than two lures with or without bait, ~~except that at Seymour Lake and Little Averill Lake a person may take fish only by using not more than one line.~~
~~A person open water fishing shall not take fish through the ice, from the ice, or from an object supported by the ice.~~
- 3.3 A person shall not take any fish pursuant to subsection (3.2) unless it is hooked in the mouth. Any fish taken under subsection (3.2) that is not hooked in the mouth shall be immediately released pursuant to 10 V.S.A. § 4602. A fish hooked in any part of the body other than in the mouth shall be considered to be foul hooked, and shall be prima facie evidence of foul hooking.
- 3.4 Taking or attempting to take fish by snagging is prohibited in all Vermont Waters.
- 3.5 Catch and Release: For species with defined harvest seasons, targeted C&R angling with immediate release can occur outside of harvest season, using artificial lures and flies.

4.0 Ice Fishing

- 4.1 Definitions - The definitions of section 3 are applicable to this section.

- (a) Ice Fishing – Ice fishing is defined as fishing by means of hook and line in hand or attached to a rod, tip-up, jack or bob, where the angler is fishing through a hole in the ice, from the ice or on an object supported by the ice. Fishing by casting or trolling baited hooks, artificial flies or lures shall not be considered ice fishing.
- 4.2 Fish may be taken through the ice with not more than eight lines, except on Lake Champlain where no more than fifteen lines may be operated. Each line shall not have more than two baited hooks, or more than three artificial flies, or more than two lures with or without bait. ~~not more than two baited hooks or three artificial flies or two lures on each line. A person shall not operate more than eight lines, except on Lake Champlain where no more than fifteen lines may be operated, and except on Seymour and Little Averill Lakes, where not more than four lines may be operated.~~
- 4.3 A person ice fishing shall have at all times, ~~have~~ immediate control over all lines they operate. A person ice fishing shall be able to visually observe lines they operate. Any line that indicates a fish shall be tended within 30 minutes.
- 4.4 A person shall not take any fish pursuant to subsection (4.2) unless it is hooked in the mouth. Any fish taken under subsection (4.2) that is not hooked in the mouth shall be considered to be foul hooked and shall be immediately released pursuant to 10 V.S.A. § 4602. A fish hooked in any part of the body other than in the mouth shall be considered to be foul hooked, and shall be prima facie evidence of foul hooking.
~~The definitions of section 3 are applicable to this section.~~
- 4.5 Taking or attempting to take fish by snagging is prohibited in all Vermont Waters.
- 4.6 Catch and Release: For species with defined harvest seasons, targeted C&R angling with immediate release can occur outside of harvest season, using artificial lures and flies.

5.0 Lake Champlain Boundaries

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

- Dead Creek to Panton Road bridge in Panton;
- East Creek to the falls in Orwell (downstream of Mount Independence Road);
- Lamoille River to the top of first dam (Peterson Dam) in Milton;
- LaPlatte River to the falls in Shelburne (under Falls Road bridge);
- Lewis Creek to falls in North Ferrisburgh (just upstream of Old Hollow Road);
- Little Otter Creek to falls in Ferrisburgh Center (downstream of Little Chicago Road);

APPENDIX 122

Malletts Creek to the first falls upstream of Roosevelt Highway (US 2 and US 7) in Colchester;
Mill River in Georgia to the falls in Georgia (just upstream of Georgia Shore Road bridge);
Missisquoi River to the top of Swanton Dam in the Village of Swanton;
Mud Creek to the dam in Alburg (just upstream of Route 78 bridge);
Otter Creek to the top of the dam in the city of Vergennes;
Poultney River to Central Vermont Power Dam at Carver Falls in West Haven.
Rock River to first Canadian border crossing;
Winooski River to the Winooski One hydropower dam west of Main Street (US 7) in Winooski and Burlington;

~~6.0 Clyde River: Catch and Release~~

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

6.0 Seasonally Closed Waters

- 6.1 Lakes and Ponds – The following lakes and ponds or portions thereof are hereby designated seasonally closed waters and shall be closed to all fishing except between Second Saturday in April through October 31 as provided in section ~~8~~ 7 of these regulations:

~~Adams Reservoir, Woodford~~
~~Ansel Pond, Bethel~~
~~Baker Pond, Barton~~
Bald Hill Pond, Westmore
~~Bean Pond, Sutton~~
Beaver Pond, Holland
Beck Pond, Newark
Beebe Pond, Sunderland
~~Big Averill Lake, Norton and Averill~~
Big Mud Pond, Mt. Tabor
~~Blake Pond, Sutton~~
Bourn Pond, Sunderland
Branch Pond, Sunderland
~~Brown Pond, Westmore~~
~~Caspian Lake, Greensboro~~
~~Center Pond, Newark~~
~~Colby Pond, Plymouth~~
Cary Pond, Walden
Cow Mountain Pond, Granby

APPENDIX 122

~~Crystal Lake, Barton~~
~~Duck Pond, Sutton~~
~~Dufresne Pond, Manchester~~
~~East Long Pond, Woodbury~~
~~Echo Lake, Charleston~~
~~Ewell Pond, Peacham~~
~~Forest Lake, Averill~~
~~Goshen Dam (Sugar Hill Reservoir), Goshen~~
~~Griffith Lake, Mt. Tabor~~
~~Hapgood Pond, Peru~~
~~Hartwell Pond, Albany~~
~~Holland Pond, Holland~~
~~Jobs Pond, Westmore~~
~~Knapp Brook Pond No. 1, Reading and Cavendish~~
~~Knapp Brook Pond No. 2, Reading and Cavendish~~
~~Lake Dunmore Salisbury and Leicester—Except from Sucker Brook
to the island south, which shall be open.~~
Lake Pleiad, Hancock
~~Levi Pond, Groton~~
~~Lewis Pond, Lewis~~
~~Little Averill Lake, Averill~~
~~Little Elmore Pond, Elmore~~
~~Little Rocky Rock Pond, Wallingford~~
~~Long Pond, Newbury~~
~~Long Pond, Westmore~~
~~Maidstone Lake, Maidstone~~
~~Marl Pond, Sutton~~
~~Martins Pond, Peacham~~
~~May Pond, Barton~~
~~McIntosh Pond, Royalton~~
~~Mud Pond, Hyde Park~~
~~Nelson Pond (Forest Lake), Calais and Woodbury~~
~~Nichols Pond, Woodbury~~
~~North Pond, Chittenden~~
~~Norton Pond, Norton~~
~~Notch Pond, Ferdinand~~
~~Noyes (Seyon) Pond, Groton~~
~~Peacham Pond, Peacham~~
~~Perch Pond (Zack Woods Pond), Hyde Park~~
~~Pigeon Pond, Groton~~
~~Red Mill Pond, Woodford~~
~~Seymour Lake, Morgan~~
~~Shadow Lake, Glover~~
~~Silver Lake, Leicester~~
~~South America Pond, Ferdinand~~
~~South Pond, Marlboro~~

APPENDIX 122

Spring Lake, Shrewsbury
 Stannard Pond, Stannard
 Sterling Pond, Cambridge
 Stoughton Pond, Weathersfield
 Stratton Pond, Stratton
~~Sunset Lake, Benson~~
 Unknown Pond, Averys Gore
 Unknown Pond, Ferdinand
 Vail Pond, Sutton
 Vernon Hatchery Pond, Vernon
 West Mountain Pond, Maidstone
 Wheeler Pond, Barton and Sutton
~~Willoughby Lake, Westmore~~
 Zack Woods (Perch Pond), Hyde Park

6.2 Rivers and Streams - All rivers and streams are hereby designated seasonally closed waters except as listed in all the sections below. For species with defined harvest seasons, targeted C&R angling with immediate release can occur outside of harvest season, using artificial lures and flies, and shall be closed to all fishing ~~except during the open season for trout as provided in section 8 of these regulations; and~~

~~7.2.1~~ ~~except that the following streams shall be open to trout fishing only, and no fishing for other species shall be allowed, from November 1 to the Friday before the second Saturday in April, as set forth in Table 7.2.2.~~

~~7.2.2: STREAMS OPEN TO FISHING FOR TROUT ONLY FROM NOVEMBER 1 TO THE FRIDAY BEFORE THE SECOND WEEK IN APRIL~~

1. Waters	2. Methods	3. Season	Size Restrictions	5. Daily Bag Limit
Listed Below	Artificial fly or lure only	November 1 to the Friday before the 2nd Saturday in April:	Catch and release only	Zero-All trout must be immediately released to the water where taken:
<p>Black River—From the top of the Lovejoy Dam in Springfield upstream to the Howard Hill Road Bridge in Cavendish. Deerfield River—From the Woods Road (Medburyville) bridge in Wilmington upstream approximately 2 miles to the VT Route 9W bridge in Searsburg. East Creek (Rutland City)—From the confluence with Otter Creek upstream (approximately 2.7 miles) to the top of the Patch Dam in Rutland City.</p>				

<p>Hoosic River—From the Vermont/New York border upstream to the Vermont/Massachusetts border.</p> <p>Lamoille River—From the top of the hydroelectric dam at Fairfax Falls upstream to the top of the Cady’s Falls Dam in Morristown.</p> <p>Moose River—From the confluence with Passumpsic River upstream to the downstream edge of the Concord Avenue bridge in St. Johnsbury.</p> <p>Otter Creek—From the top of the Center Rutland Falls in Rutland upstream to the Danby Mt. Tabor Forest Road Bridge (Forest Road #10) in Mt. Tabor.</p> <p>Passumpsic River—From the Connecticut River boundary upstream to the top of Arnolds Falls Dam in St. Johnsbury.</p> <p>Walloomsac River—From the Vermont/New York border in Bennington upstream to the top of the former Vermont Tissue Plant Dam (downstream of Murphy Road) in Bennington.</p> <p>Winooski River—From the top of the Bolton Dam in Waterbury and Duxbury upstream to the VT Route 2/100 in Duxbury and Waterbury.</p>
--

7.0 Fish – Open Seasons, Size Restrictions and Daily Bag Limits.

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

- (a) In the waters specified in column 1, by the method specified in column 2, during the open season specified in column 3.
- (b) Provided they meet any size restrictions specified in column 4., and only in numbers listed under daily bag limits specified in column 5., under no circumstances may a person take in one day, more than the daily bag or weight limit from a listed body of water. No person may take in aggregate more than the daily State-wide aggregate limit for any species listed.
- (c) Businesses may buy lawfully taken fish, with the approval of Commissioner, pursuant to the Commercial angling rules set forth in 10 V.S.A. App 123.

7.2 Possession limits are equal to twice the daily bag limits. Fish species with limit restrictions may not be possessed in excess of the possession limits at any time.

- (a) No person shall have live fish in their possession that are transported in a manner which attempts to keep them alive when leaving waters of the state (10 V.S.A. §1251(13)), except as follows:
 - (1) ~~the a person may transport approved baitfish species pursuant to the baitfish rules set forth in 10 V.S.A App. §141. has been issued a Commercial Bait Dealers Permit by the Commissioner,~~
 - (2) the person has been issued a scientific collection permit by the Commissioner which specifically approves of the activity,

APPENDIX 122

- (3) the person has been issued a fish transportation permit by the Commissioner which specifically approves of the activity,
 - (4) the person has been issued a fish breeders permit or fish importation permit by the Commissioner which specifically approves of the activity.
- 7.3 The daily bag limit for a fish species on a water body with a closed season for that fish species is zero during the closed season.
- 7.4 "General waters" restrictions are the provisions applicable to all waters of the state, except the waters specifically named or described.
- 7.5 Unless otherwise specifically provided, fish not listed in this regulation may be taken at any time and without size or catch limit, in waters not listed as seasonally closed waters in Section 7 6 of these regulations.
- 7.6 Open Seasons, Size Restrictions and Daily Bag Limits Tables
- (a) STATEWIDE AGGREGATE DAILY BAG LIMITS (*Maximum number of a fish species that may be taken in one day*)

FISH SPECIES	DAILY AGGREGATE LIMITS
Brook Trout	12 fish
<u>Brook and Brown and Rainbow Trout - Streams/Rivers</u>	Maximum Combination of <u>6-8 fish</u>
<u>Brook and Brown and Rainbow Trout – lakes and ponds</u>	<u>Maximum Combination of 6 fish</u>
Lake Trout	2 fish, (3 if taken from Lake Champlain)
Salmon	2 fish
Largemouth and Smallmouth Bass	Maximum combination of 5 fish
Northern Pike	5 fish
Chain Pickerel	10 fish
Muskellunge	0 fish
Walleye	3 fish
Black and White Crappie	25 fish
American Shad	0 fish
Yellow Perch	50 fish
Yellow Perch exception	Lake Champlain – no daily limit
Sauger	0 fish
<u>Sturgeon</u>	<u>0 fish</u>

APPENDIX 122

(b) BROOK, BROWN AND RAINBOW TROUT

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag Limit
General waters. <i>(except as listed below)</i> Lakes and Ponds	<u>Open-water and ice</u> fishing	Second Saturday in April through October 31 <u>January 1 through March 15</u>	No restriction	6 trout
Lake Champlain	Open-water and ice fishing	No closed season	Minimum length of 12 inches	3 trout
Rivers and Streams	Open-water fishing	Second Saturday in April through October 31	No restriction	12 8 trout, of which not more than 6 can be brown and/or rainbow
<u>Sherman Reservoir, Whitingham</u>	<u>Open-water fishing</u>	<u>Second Saturday in April through October 31</u>	<u>No restriction</u>	<u>6 trout</u>

APPENDIX 122

(c) TROPHY TROUT STREAMS

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag Limit
Listed Below:	Open-water fishing	Second Saturday in April through October 31	No restriction	2 trout in aggregate
<p>Black River along Rt. 131 in Weathersfield and Cavendish, - from Downers covered bridge upstream (approximately 4 miles) to the next bridge across the river, the Howard Hill Bridge.</p> <p>East Creek in Rutland City -- From the confluence with Otter Creek upstream (approximately 2.7 miles) to the top of the Patch Dam in Rutland City</p> <p>Lamoille River – From the downstream edge of the bridge on Route 104 in the Village of Fairfax upstream (approximately 1.6 miles) to the top of the Fairfax Falls Dam in Fairfax.</p> <p>Little River – From the confluence with Winooski River in Waterbury upstream to the top of the Waterbury Reservoir Dam in Waterbury.</p> <p>Missisquoi River in Enosburg and Sheldon -- From the downstream edge of Kane Road (TH-3) bridge upstream (approximately 5.7 miles) to the top of the Enosburg Falls Dam in Enosburg Falls.</p> <p>Otter Creek in Danby and Mt. Tabor - From the Vermont Railway Bridge north of the fishing access upstream (approximately 2 miles) to the Danby- Mt. Tabor Forest Rd. Bridge (Forest Road # 10).</p> <p>Passumpsic River in the Village of St. Johnsbury – From the top of the Gage Dam in St., Johnsbury upstream (approximately 2.4 miles) to the top of the Arnold Falls Dam.</p> <p>Moose River-- From the confluence with the Passumpsic River upstream (approximately 350 feet) to the downstream edge of the Concord Avenue bridge in the Village of St. Johnsbury</p> <p>Walloomsac River in Shaftsbury and Bennington – From the Vermont/New York border in Shaftsbury upstream to the top of the former Vermont Tissue Plant Dam (downstream of Murphy Road) in Bennington.</p> <p>Winooski River in Duxbury and Waterbury, - From the top of the Bolton Dam in Duxbury and Waterbury upstream to the Route 2 Bridge (east side of Waterbury Village).</p>				

APPENDIX 122

(d) RAINBOW TROUT (Including STEELHEAD) / BROWN TROUT

1. WATERS	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag Limit
Listed Below:	Open-water fishing	Second Saturday in April through October 31	Minimum length of 10 inches	2 trout
<p>All Lakes and Ponds: Caspian Lake, Greensboro Echo Lake, Charleston Lake Memphremagog (including South Bay), Coventry, Derby, Newport City and Newport; Willoughby Lake, Westmore</p> <p>Rivers and Streams: Orleans County: Barton River - From Lake Memphremagog upstream to the downstream side of the US Route 5 bridge southernmost and closest to the Village of Barton in Barton. Black River - From Lake Memphremagog upstream to the downstream side of the VT Route 14 / 58 bridge in Irasburg. <u>Brownington Branch of the Willoughby River - From its confluence at the Willoughby River extending upstream to the second road crossing on Brownington Chilafoux Road (TH #15). Crossing is located approximately 2.4 miles from Brownington Center on Chilafoux Road (TH #15).</u> Johns River - From the downstream edge of the first bridge (culvert) upstream of Lake Memphremagog on North Derby Road (TH #6) upstream to U.S. 5, in Derby. Willoughby River - The entire Willoughby River, from confluence with Barton River in Barton upstream to the Willoughby Lake outlet in Westmore.</p>				

APPENDIX 122

(e) BROOK, BROWN, RAINBOW, LAKE TROUT AND SALMON – 2 FISH AGGREGATE LIMITS

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag Limit
Listed below:	Open-water <u>and</u> <u>Ice</u> fishing	Second Saturday in April through October 31 <u>January 1 through March 15</u>	See regulations for specific bodies of water	Two fish in aggregate
<p>Big Averill Lake, Norton and Averill Caspian Lake, Greensboro Center Pond, Newark Crystal Lake, Barton East Long Pond, Woodbury Echo Lake, Charleston Elligo Lake, Craftsbury and Greensboro Forest Lake (Nelson Pond), Calais and Woodbury Harveys Lake, Barnet Jobs Pond, Westmore (<u>Seasonally Closed</u>) Lake Dunmore, Salisbury Lake Memphremagog (including South Bay and the connecting waters), Coventry, Derby, Newport City and Newport; Little Averill Lake, Averill Long Pond, Westmore Maidstone Lake, Maidstone Martins Pond, Peacham (<u>Seasonally Closed</u>) Nelson Pond (Forest Lake), Calais and Woodbury Nichols Pond, Woodbury Seymour Lake, Morgan Shadow Lake, Glover Spring Lake, Shrewsbury Sunset Lake, Benson Willoughby Lake, Westmore</p>				

APPENDIX 122

8.5.6 STREAMS OPEN TO YEAR ROUND TROUT FISHING

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag Limit
<p>The following portions of the specified rivers shall be open to fishing for trout year-round: <i>(Listed below)</i></p>	<p>Artificial fly or lure only, except during the open season for trout.</p>	<p>No closed season for catch and release only</p> <p>Open season; from the 2nd Saturday in April through October 31</p>	<p>Catch and release only</p> <p>During the open season follow any species restrictions for the selected river</p>	<p>Zero—All trout must be immediately returned to the waters where taken, except during the open season, limits apply in accordance with the river selected.</p>
<p>Black River—From the Connecticut River boundary upstream to the top of the Lovejoy Dam in Springfield.</p> <p>Lamoille River—From the Lake Champlain boundary (top of Peterson Dam in Milton) upstream to the top of the hydroelectric Dam at Fairfax Falls.</p> <p>Lewis Creek—From the Lake Champlain boundary upstream to the State Prison Hollow Road (TH #3) bridge in Starksboro.</p> <p>Missisquoi River—From Lake Champlain boundary upstream to the top of the Enosburg Falls Dam in Enosburg Falls.</p> <p>Ompompanoosuc River—From the Connecticut River boundary upstream to the Union Village Dam in Thetford.</p> <p>Otter Creek—From the Lake Champlain boundary upstream to top of Center Rutland Falls in Rutland.</p> <p>Waits River—From the Connecticut River boundary upstream to the top of the Central Vermont Power Dam in Bradford.</p> <p>West River—From the Connecticut River boundary upstream to the Townshend Dam in Townshend.</p> <p>White River—From the Connecticut River boundary upstream to the bridge on Route 107 in Bethel.</p> <p>Williams River—From the Connecticut River boundary upstream to the top of the dam at Brockway Mills Falls in Rockingham.</p> <p>Winooski River—From the Lake Champlain boundary upstream to the Bolton Dam in Duxbury and Waterbury.</p>				

APPENDIX 122

(f) LAKE TROUT AND SALMON

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

APPENDIX 122

	Open water fishing; Clyde River from Lake Memphremagog to Charleston dam— Artificial flies and lures only	September 1 through October 31	Lake Trout Minimum length of 18 inches	2 Lake Trout, 0 Salmon (all salmon must be immediately released.)
Lake Memphremagog (including South Bay)	Open-water and ice fishing	Second Saturday in April through October 31 January 1 through March 15	Lake Trout- Minimum length of 18 inches Salmon- Minimum length of 17 inches	2 Lake Trout or 2 Salmon or 1 of each
	Ice fishing	Third Saturday in January through March 15		
Listed Below:	Open-water fishing	Second Saturday in April through October 31	Lake Trout- Minimum length of 18 inches Salmon- Minimum length of 17 inches	2 Lake Trout or 2 Salmon or 1 of each
<p>Orleans County:</p> <p>Barton River - From Lake Memphremagog upstream to the downstream side of the US Route 5 bridge southernmost and closest to the Village of Barton in Barton.</p> <p>Black River - From Lake Memphremagog upstream to the downstream side of the VT Route 14 / 58 bridge in Irasburg.</p> <p>Johns River-From the downstream edge of the first bridge (culvert) upstream of Lake Memphremagog on North Derby Road (TH #6) upstream to U.S. 5, in Derby.</p> <p>Willoughby River - The entire Willoughby River, from confluence with Barton River in Barton upstream to the Willoughby Lake outlet in Westmore.</p>				

APPENDIX 122

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

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag Limit
Listed below:	Ice fishing	Third Saturday in January 1 through March 15	See species restriction for individual body of water	See species restriction for individual body of water
<p>Big Averill Lake, Norton and Averill; Big Salem Lake, Derby Caspian Lake, Greensboro; Chittenden Dam, Chittenden. Crystal Lake, Barton; Echo Lake, Charleston; Echo Lake, Plymouth; Eden Lake, Eden; Elligo Lake, Craftsbury and Greensboro Glen Lake, Castleton, Fair Haven, and Benson; Harriman Reservoir, Whitingham and Wilmington; Harveys Lake, Barnet; Island Pond, Brighton; Joes Pond, Cabot, Danville; Lake Bomoseen, Castleton and Hubbardton; Lake Dunmore, Leicester and, Salisbury; Lake Fairlee, Thetford, West Fairlee, Fairlee; Lake Hortonia, Sudbury, Hubbardton; Lake Memphremagog (including South Bay), Coventry, Derby, Newport City and Newport; Lake Morey, Fairlee; Lake Rescue, Ludlow; Lake St. Catherine, Wells, Poultney; Little Averill Lake, Averill; Little Salem Lake Derby; Maidstone Lake, Maidstone; Marshfield Dam (Mollys Falls Reservoir), Cabot; Miles Pond, Concord; Nelson Pond (Forest Lake), Calais and Woodbury; Newark Pond, Newark; Norton Pond, Norton; Parker Pond, Glover; Peacham Pond, Peacham; Pensioner Pond, Charleston; Seymour Lake, Morgan; Shadow Lake, Glover; Somerset Reservoir, Somerset; Sunset Lake, Benson; Wallace Pond, Canaan; Waterbury Reservoir, Waterbury; Willoughby Lake, Westmore; Woodbury Lake (Sabin Pond), Calais and Woodbury</p>				

APPENDIX 122

(g) SPECIAL REGULATION TROUT STREAMS

1. Waters	2. Method	3. Season	4. Size Restrictions	5. Daily Bag Limit
<p>White River From the confluence with Lilliesville Brook in Stockbridge downstream 3.3 miles to 220 ft. downstream of the confluence with Cleveland Brook in Bethel.</p>	<p>Open-water fishing, with artificial lures and flies only.</p>	<p>Second Saturday in April through October 31.</p>	<p>Minimum length of 18 inches</p>	<p>1 trout</p>
<p>Mettawee River From the downstream edge of the Route 153 bridge in Pawlet upstream (approximately 16 miles) to the downstream edge of first bridge on Dorset Hollow Road and including tributary: Flower Brook upstream (approximately 1000ft) to the downstream edge of the Route 30 bridge in Pawlet.</p>	<p>Open-water fishing</p>	<p>Second Saturday in April through October 31</p>	<p>10 to 14 inches protected slot: (all trout 10 to 14 inches must be released)</p>	<p>2 trout, only 1 greater than 14 inches</p>
<p>Winooski River Tributaries – Listed Below</p>	<p>Open-water fishing</p>	<p>June 1 through October 31</p>	<p>10 to 16 inches protected slot: (all fish 10 to 16 inches must be released)</p>	<p>2 trout, only 1 greater than 16 inches</p>
<p>Winooski River Tributaries: Joiner Brook, Bolton - From the confluence of the Winooski River upstream approximately 1900 feet to the first falls. Pinneo Brook, Bolton – From the confluence of the Winooski River upstream approximately 100 feet to the railroad crossing. Preston Brook, Bolton - From the confluence of the Winooski River upstream approximately 2600 feet to the first falls. Ridley Brook, Duxbury – From the confluence of the Winooski River upstream approximately 1700 feet to the first falls.</p>				
<p>Listed Below:</p>	<p>Open-water fishing</p>	<p>Second Saturday in April through October 31</p>	<p>10 to 16 inches protected slot: (all fish 10 to 16 inches must be released)</p>	<p>2 trout, only 1 greater than 16 inches</p>
<p>New Haven River – From Munger Street Bridge in New Haven upstream (approximately 4.1 miles) to the South Street bridge in Bristol.</p>				

APPENDIX 122

<p>Mettawee River – From the downstream edge of the Route 153 bridge in Pawlet upstream (approximately 16 miles) to the downstream edge of first bridge on Dorset Hollow Road and including tributary: Flower Brook upstream (approximately 1000ft) to the downstream edge of the Route 30 bridge in Pawlet.</p> <p>Winooski River – From Preston Brook mouth upstream (approximately 4.4 miles) to the Ridley Brook mouth.</p>				
<p>Batten Kill – From the New York State line upstream (approximately 20.6 miles) to downstream side of Depot Street Bridge (Route 11/30) in Manchester.</p>	<p>Open-water fishing</p>	<p>Second Saturday in April through October 31</p>	<p>All trout must be immediately released.</p>	<p>Zero, all trout must be immediately released.</p>
<p>Dog River – From the downstream edge of the Junction Road Bridge in Berlin/Montpelier upstream to the top of the Northfield Falls Dam in Northfield.</p>	<p>Open-water fishing with artificial lures and flies only for anglers 15 years of age and older</p>	<p>Second Saturday in April through October 31</p>	<p>All trout must be immediately released.</p>	<p>Zero, all trout must be immediately released.</p>
<p>Listed below:</p>	<p>Open-water fishing</p>	<p>Second Saturday in April through September 30</p>	<p>No size restriction.</p>	<p>8 trout ±2 trout of which not more than 6 can be brown and/or rainbow trout in aggregate.</p>
	<p>Open-water fishing</p>	<p>October 1 through October 31</p>	<p>All trout must be immediately released.</p>	<p>Zero, all trout must be immediately released.</p>
<p>Batten Kill (East Branch) – In towns of Manchester and Dorset from the downstream side of Depot Street Bridge (Route 11/30) in Manchester upstream (approximately 5.0 miles) to the downstream side of the US Route 7 Bridge south of East Dorset.</p> <p>Green River – In the towns of Arlington and Sandgate from its confluence with Batten Kill upstream (approximately 8.5 miles) to the confluence with Moffitt Hollow Brook in Beartown.</p> <p>Roaring Branch – In the towns of Arlington and Sunderland from its confluence with the Batten Kill upstream (approximately 3.0 miles) to the downstream side of the Bridge #14 on Sunderland TH# 3 in East Kansas.</p>				

APPENDIX 122

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

(h) ANADROMOUS ATLANTIC SALMON

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

(i) AMERICAN SHAD

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

APPENDIX 122

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

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

APPENDIX 122

(k) SUCKER (LONGNOSE AND WHITE), and CULL FISH

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

(l) BULLHEAD

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

APPENDIX 122

(m) NORTHERN PIKE

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

(n) CHAIN AND REDFIN PICKEREL

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

(o) MUSKELLUNGE

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag limits
General Waters <i>(except as listed below)</i>	Open-water and ice fishing; Catch and release with artificial lures and flies only	No closed season	All muskellunge must be released	Zero - All muskellunge must be immediately released
Lake Champlain	Open-water and ice fishing; Catch and release with artificial lures and flies only	No closed season	All muskellunge must be released	Zero - All muskellunge must be immediately released

APPENDIX 122

	Shooting and handheld spearing	March 25 through May 25, 10 VSA 4606)		Zero Fish
--	--------------------------------	---------------------------------------	--	-----------

(p) SMELT

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

(q) BLACK AND WHITE CRAPPIE

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

(r) YELLOW PERCH

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag Limit
General Waters <i>(except as listed below)</i>	Open-water and ice fishing	No closed season	No restriction	50 fish,
Lake Champlain	Open-water and ice fishing	No closed season	No restriction	No Limit
Businesses may buy lawfully taken fish, with the approval of the Commissioner, pursuant to the Commercial angling rule set forth in 10 V.S.A. APP § 123.				

APPENDIX 122

(s) LARGEMOUTH AND SMALLMOUTH BASS

1. Waters	2. Methods	3. Season	4. Size Restrictions	5. Daily Bag limits
General Waters <i>(except as listed below)</i>	Open-water <u>and</u> <u>ice</u> fishing	No closed season Second Saturday in June through March 15.	No restriction <u>Minimum length of 10 inches</u>	5 fish
<u>Lake Champlain</u>	Open-water fishing	Second Saturday in June through Nov. 30.	Minimum length of 10 <u>12</u> inches	5 fish
Lakes, Ponds and reservoirs	Open-water fishing (Ice fishing—see special provisions)	Second Saturday in June through Nov. 30 th	Minimum length of 10 inches	5 Fish
<u>Lakes, Ponds and reservoirs (seasonally closed)</u>	<u>Open-water fishing</u>	<u>Second Saturday in June through October 31.</u>	<u>Minimum length of 10 inches</u>	<u>5 fish</u>
Lakes, Ponds and reservoirs (seasonally closed)	Open-water fishing: Catch and release with artificial lures and flies only	Second Saturday in April through the Friday before the Second Saturday in June, both dates inclusive.	All bass must be released	Zero - All bass must be immediately released
Lakes, Ponds and reservoirs (not seasonally closed)	Open-water fishing: Catch and release with artificial lures and flies only	Dec. 1 through the Friday before the Second Saturday in June, both dates inclusive.	All bass must be released	Zero—All bass must be immediately released
Seasonally Closed Waters—streams	Open-water fishing	Only when such rivers and streams are open to trout fishing except as prohibited by Section 9.2	No restriction	5 fish

APPENDIX 122

Lake Morey, Fairlee	Open-water <u>and ice fishing</u> (see fishing—see special provisions)	Second Saturday in June through Nov. 30 <u>March 15</u>	Largemouth bass— Minimum length of 14 inches	5 Fish
Lake Morey, Fairlee	Open-water fishing: <u>Catch and release with artificial lures and flies only</u>	Dec. 1 through the Friday before the Second Saturday in June, both dates inclusive.	All bass must be released	Zero—All bass must be immediately released
Kent Pond, Killington And Baker Pond, Brookfield	Open-water fishing	Second Saturday in June through Nov. 30.	Largemouth Bass—protected slot: 10–12 inches (all fish between 10 & 12 inches must be released)	10 fish, only 1 fish greater than 12 inches.
Kent Pond, Killington And Baker Pond, Brookfield	Open-water fishing: <u>Catch and release with artificial lures and flies only</u>	Dec. 1 through the Friday before the Second Saturday in June, both dates inclusive.	All bass must be released	Zero—All bass must be immediately released
Listed below:	<u>Open-water fishing</u>	<u>Second Saturday in June through Nov. 30.</u>	<u>Minimum length of 10 inches</u>	<u>5 fish</u>
	<u>Catch and release with artificial lures and flies only</u>	<u>Dec. 1 through the Friday before the second Saturday in June, both dates inclusive</u>	<u>All bass must be released</u>	<u>Zero – All bass must be immediately released.</u>
<u>Austin Pond, Hubberton</u> <u>Black Pond, Hubberton</u> <u>Blueberry Lake (Warren Lake), Warren</u> <u>Breese Pond, Hubberton</u> <u>Bullhead Pond, Manchester</u> <u>Gale Meadows, Londonderry</u> <u>Half Moon Pond, Hubberton</u>				

APPENDIX 122

Lily Pond, Vernon
Lowell Lake, Londonderry
Mill Pond, Windsor
Raponda Lake, Wilmington
Retreat Meadows, Brattleboro
Roach Pond, Hubberton
Runnemedede Lake, Windsor
Sadawga, Whitingham
Weatherhead Hollow, Guilford

APPENDIX 122

(t) WALLEYE

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

(u) SAUGER

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

7.7 Spawning grounds for game fish generally

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

Chittenden County

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

Orleans County

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

APPENDIX 122

~~Country Club Brook – From its confluence with the Willoughby River extending upstream to Hollow Road (TH #14) in Barton.~~

Porter Brook, Greensboro – From Caspian Lake upstream to its headwaters. (1987, Fish and Wildlife Commissioner's Reg. No. 970, eff. April 1, 1987.)

~~Johns River, Derby – From the downstream edge of the bridge on Beebe Road (TH #3) upstream approximately two tenths of a mile to the downstream edge of bridge on Elm Street (TH #2) in Derby.~~

~~Outlet Brook – From the highway bridge near Echo Lake in Charleston upstream to the top of dam at outlet of Seymour Lake~~

Washington County

Chase Brook, Berlin – From its confluence with the Dog River upstream approximately ½ mile to the top of the natural falls in Berlin.

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

Windsor County

~~Lilliesville Brook, in the Town of Stockbridge – from~~ From its confluence with the White River upstream to the 2nd bridge on the Lilliesville Brook Road.

~~Locust Creek, Bethel - in Bethel - f~~ From its confluence with the White River upstream to the 2nd bridge on Rt. 12.

(b) The below named waters are closed from March 16 through May 31.

Chittenden County

Lamoille River, Milton - From the downstream edge of the bridge on Bear Trap Road in Milton (referred to as the West Milton Bridge upstream to the top of first dam (Peterson Dam) in Milton.

Winooski River, Winooski and Burlington - From the Winooski One Hydro dam west of Main Street (US 7) in Winooski and Burlington and extending downstream to the downstream side of the first railroad bridge.

Franklin County

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

APPENDIX 122

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

Franklin County

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

- (d) The below named waters are closed to fishing year-round:

Orleans County

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

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

~~Orleans County~~

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

- (e) The below named water is only open to fishing using artificial flies and lures from September 1 to October 31. All salmon caught must be released. Lake Trout may be harvest during this period. The daily limit is 2 lake trout with a minimum length of 18 inches

Clyde River - From Lake Memphremagog upstream to Charleston Dam (Lubber Lake), West Charleston

- (f) The below named water is catch and release for trout from Second Saturday in April to October 31. All trout must be immediately released.

Batten Kill River - From the New York State line upstream (approximately 20.6 miles) to downstream side of Depot Street Bridge (Route 11/30) in Manchester

- (g) The below named water is catch and release for trout with artificial lures and flies only, anglers less than 15 years old may use live bait from Second Saturday in April to October 31. All trout must be immediately released.

APPENDIX 122

Dog River - From the downstream edge of the Junction Road Bridge in Berlin/Montpelier upstream to the top of the Northfield Falls Dam in Northfield.

- (h) The below named waters are closed to fishing from November 1 to the Friday before the second Saturday in April.

Batten Kill River – From the New York State line upstream (approximately 20.6 miles) to downstream side of Depot Street Bridge (Route 11/30) in Manchester.

Clyde River - From Lake Memphremagog upstream to Charleston Dam (Lubber Lake), West Charleston

Dog River – From the downstream edge of the Junction Road Bridge in Berlin/Montpelier upstream to the top of the Northfield Falls Dam in Northfield.

Fish Regulation Simplification Proposal

Public Comments before the second vote

Fish Regulations Simplification – Public Hearing

29 March 2021 Public Hearing – Zoom – Started at 6:30pm

Questions/Answers Portion (3/29/2021)

1Question:

Chris Jackson, Shelbourne Falls MA (guide in VT) - Fully support opening season up to C/R .
Concerned about what tackle could be used. Have you considered limiting to one hook point rather than treble hooks?

1Answer:

Bernie Pientka – have looked at that. Literature finds similar mortality between flies and lures (vs bait)

Eric Palmer – there is a big difference between bait worms or other bait and artificial lures and flies. Low and similar hooking mortality for a variety of artificial lures

2Question:

Frank Nelson, Pawlet - Mettawee River: special regs slot limit has been expanded? More conservative? Same special reg area exists, but the slot limit is expanded. Winter time fishing – issues of survival with cold temps and C/R fish. Will Mettawee be open to C/R in the winter? Look into lactic acid and metabolism impacts in winter-caught fish

2Answer:

Bernie Pientka – Yes, slot limit has been expanded. Mettawee would be open to catch and release year around, harvest only during part of the year.

3Question:

Tim McNair?/Metair?, Fairfax - What is reason for changing BKT from 12 to 8? Is it for simplicity of rules? He specifically fishes for small stream trout and 8 will not be enough. He catches 12 with no problem and makes two meals and 8 is not enough. Streams are loaded with trout, no fish population problem.

3Answer:

Bernie Pientka – it was for simplicity

Eric Palmer – it is simplification and not for biological reasons.

4Question:

David Wein, MA but has a place in Woodford - Concerned about size structure of populations in some rivers. If there is no biological impact to C/R in the winter, why will some remain closed to fishing in the winter? (e.g. Dog River). Needs more transparency on quality of the populations. A stream like the Mettawee River he is concerned about the size structure, and Furnace brook. Recruitment of rainbow trout in those streams concerned him. Why consider some streams and not others. Why not put special regulations put in place for Mettawee or other populations.

4Answer:

Eric Palmer – in the Dog and Battenkill angling pressure is not the cause of the decline, other factors did, but to eliminate any fishing pressure effects kept to catch and release

5Question:

Luke Holland, Piermont NH. What is happening on Clyde River change? Are you eliminating catch and release?

5Answer:

Bernie Pientka – Clyde is just moving the location in the regs. No change

6Question:

Keith Meyers, East Montpelier. There's a lot of confusion on baitfish harvest. Will new rivers and streams be open to baitfish harvest during the time of year that is opening? Was there any consideration for changing? Ponds that are now open to year-round, will those be under regular bait regs? What about ponds now opened to fishing like Nelson Pond?

6Answer:

Bernie Pientka – bait fish reg on those rivers will stay the same. As part of maintaining those regs, there were considerations of gear for bait harvest. For ponds, once a pond is removed from the seasonal closed water it would be open to bait harvest

7Question:

Corey Stark, Newfane. Lakes and ponds & ice fishing (e.g. retreat meadows) Setbacks on CT River get pretty heavy pressure in the winter, are there any changes to those? Fully support wild brook trout so like reduction in bag limit.

7Answer:

Bernie Pientka – Retreat meadows would still not allow winter harvest of bass. Would be catch and release but not a harvest.

8Question:

Vladimir Theron, Williston - Will there be a restriction on carp? Still considered a trash fish in the United States? Still allowing arrows and other shooting? Will there be increases on length limit on other fish like bass and pike?

8Answer:

Bernie Pientka – no changes to the carp regulation as they now stand. For length limit changes – the bass length limit will increase on Lake Champlain and salmon length limit will increase 17 inches statewide. No other length changes.

9Question:

David Wein, Massachusetts (again). Harriman reservoir stocked salmon is really enjoyed (lower Deerfield, etc). Suggest open-mindedness on judging the population based on size distribution there. . There are small salmon, 14-16 inch maybe 17 inch fish. Rarely get to 17 inches but it is still a popular fishery. Lots fish where the Deerfield comes in and are enjoying the fishery there. Keep an open mind b/c popular fishery.

9Answer:

Eric Palmer – we know salmon don't grow that well in some inland waters. If there is good fishing we will take that into account when we raise the length limit

Formal Comment (3/29/2021):

Brad Nadeau, Cornwall – Thank you for hard work you have done, collecting data etc. Know you have the best interest of the fish in mind which is important to me as an angler. Appreciate the time.

Frank Nelson, Pawlet – Mettawee - the slot limit is good but C/R could be entertained there in the future as it attracts anglers and attention to area. Look up study on lactic acid build up in fish released into cold water. Since [Irene], Flower Brook and Mettawee are at lower trout pops overall after heavy equipment in the streams. Put effort into habitat restoration, seeing decreased insects hatches, like hendricks in the river which affects the fish populations.

Michael Bard, Waterbury – active in many groups (TU, LCWA, LCI, etc) active in conservation so appreciation for multiple species. Thank dept for hard work on this, regulations need to be simplified. Have gone from a little book to a bigger book, but even with a college education it can be overwhelming. Simplification is good, even more simplification would be even better. Like the idea of reducing BKT and increasing number of BNT and RBT to create a uniform number. Some people don't know the difference so it will help to have a uniform number of trout. Ice fishing most liberal amount of tip ups in US on LC. 15 is too many, and can be crowded, and causes high mortality for people actually fishing 15 tip ups. Fish need some more protection. Like the idea of opening up more opportunities with C/R. Concerned about enforcement b/c bad actors will harvest during the C/R season. Some will violate laws. Thank dept for hard work and thank board for volunteer efforts.

Chris Owen, Worcester – chair of VT chapter of Native Fish Coalition, chapters in 7 states, founded in 2017. They focus on BKT, concerned about habitat stress for BKT in the state, e.g. high water temp, invasions by warm water sport fish, changes in land use patterns with compromised riparian zones (residential, agricultural, and timber). Wants a conservation theme when reviewing these populations. NFCs comment - Supports reduction in BKT harvest limit. 8 is good, 6 would be better. Status quo of 12 BKT is the highest in all of the 22 states in the native BKT range. Eight would put us on par with MA and GA but above most other states in Eastern BKT range. Most of those other states have daily limits of 2-6 fish for BKT. Merit from a social perspective and for easing pressure on BKT. Six would be consistent with the department's pronounced goal of simplifying the regs. Simple to understand, simple to enforce. In listening sessions after last year, 26 comments were submitted and 22 supported reduced levels and most of those supported even more reduction [numbers on this should be verified]. Encourage FWD to begin discussion with stakeholders to establish a long-range management plan for wild native BKT for future populations to ID areas for conservation. Lots of credit to department, especially Bernie for attention to detail, Eric for being a good diplomat for fish and to commissioner Porter for being plain spoken. Thank you to the Board.

Keith Myers, East Montpelier – Thank you for work that you have done on this, it will be a big and welcome change. Excited to see the expansion of lakes and ponds moving to general regs. Would like to see an expansion of bait harvest into rivers and streams with those that are opened up year-round. Expanding ability to get own bait rather than from Hog Island would open up a lot of opportunities.

Paul Messier, Burlington – For walleye C/R, maybe move buoys back in the river to keep people from pre-fishing walleye.

Clark Amadon, Moretown – Thank dept for all the work and appreciate all of the work. Opening up rivers and streams in the fall, concerned about anglers not being aware of redds, think about some sort of outreach to help ID redds in the streams, maybe in the digest. Do some education on this. Endorse the reduction of the BKT harvest and would encourage to reduce it to 6 trout harvest. Consider some outreach and awareness on identifying redds in rivers and streams. NFC and TU Vermont council supports going to 6 brook trout.

Vladimir Theron, Williston – Consider more educational classes online for angling. Sees lots of people from different countries may not know how to handle the fish, etc. So think about options for providing education. Sometimes see people using multiple rods at the same time, etc. How will we enforce that? Just putting it in the book is not always enough to.

30 March 2021 Public Hearing – Zoom – Started at 6:30pm

Questions/Answers Portion (3/30/2021):

1Questions:

Linwood Mixer, Maidstone Lake – what your saying is that we can fish 365 days/yr but only keep trout during seasons mentioned? If you are fishing for sunfish, etc outside of that season with lures and flies only

1Answer:

Bernie Pientka: It's about the targeting. If you fish sunfish you can use bait, if you are targeting fish outside of their harvest season, such as trout, you'd have to use artificial flies and lures

Formal Comment (3/30/2021):

Ron Rhodes, Pomfret – Thank you to Bernie and Will and Eric and all the staff that have been working on this, know that it has been several years in the making and we appreciate the work you do. Overall generally speaking it's a good proposal.

Robert Hynes, Montpelier – Noticed a lot of talk about biological issues. It seems that a lot of fish that are harvested outside of small brook trout streams are stocked fish. What percentage of harvested fish in lakes and streams are stocked vs wild? Don't see the need to be encouraging people to take 8 fish that we are stocking and spending money to be growing. Sends the wrong message. At certain times of the year it's fairly easy to catch limit for most anybody. Certain people are there all the time and they are there to catch their limit, they keep a lot of fish. So increasing the limit from 6 to 8 sends the wrong message.

Kate Riley, Pomfret – fish the Batten Kill a lot, The fishery means a lot to her, her husband and father and her son fish it. There are not many fishing bait because it is catch and release and it was voted down last time because not warranted. Seems exclusive to simplify it to fly fishing. Many Vermonters who are middle class or lower class may not be able to afford to fly fish.

During covid when people are wanting that opportunity. Biologists do not have a reason for it, it is just a rule.

Eric Palmer response – same comment was sent it. It was not our intent to change the Batten Kill. We will look at it and see if we can maintain Batten Kill as it currently exists, that was our intention, we lumped it in with catch and release, artificials only. We will propose to keep it as it is. There is a long history there.

Mark Riley – Pomfret – couldn't unmute

Voicemail comments on Fish Rule (received by 5pm on 4/7/21)

Voice 1:

3.15.21 - Hi, this is Charlie Boy. I'm from Colchester Vermont and I have a camp on Big Averill Lake up in Northern Vermont and I my comment is this, I think that the rules for the length limit between Big Averill Lake and Little Averill Lake should be the same currently. It is 18 inches on Big Averill and twenty inches on Little and I met an older gentleman up there last year who had caught a fish on Big Averill, but didn't want to go to Little Averill because he was afraid that a game warden would stop him, and he'd have to explain everything, but I just think it would be fair to have them both the same. Thank you. Bye.

Voice 2:

3.30.21 - Hi, my name is Joseph Steakhouse and I reside in Rutland Vermont and I was calling to voice my concerns about proposed fishing regulations being changed the upcoming Thursday. From my interpretation of it, it just seems to be needlessly bureaucratic and really eliminates access to fishing holes is which is my concern. There's plenty of people that enjoy being able to come out for a weekend or you know, we get passes to go out for everyone for the season and I'm not happy that the restrictions would be based on the type of equipment that we have. This seems pretty, just, I don't know. I don't know how to how to say it. But I think we should be doing all we can to promote activities and promote access instead of trying to restrict only the user people that are in the know for that specialty or are able to access it off. I mean, we want people to come to Vermont to experience everything. Thank you.

Voice 3:

3.30.21 - Hi, my name is Michael McDonald and I live here in Rutland Vermont. I just want to let you know that I do disagree with the proposed changes that you guys have buried in the, in the what you could be voting on shortly on the game and Batten Kill River. So as far as the proposed changes are concerned. I want to leave the bag limit on Brook Trout at 12. So basically I just want to let you know I disagree with the proposed changes on the Batten Kill River and leave the bag limit on Brook Trout at 12 and I thank you very much.

Voice 4:

4.7.21 - Dan Wood, Arlington – Calling to say I oppose the state fishing regulations for the Batten Kill river. People like my father have fished it all his life and can no longer cast very well. Shouldn't be told they can never fish it ever again because they can't toss lures or anything like that. Enjoyed fishing the Batten Kill for 60 years, don't think the state has right to tell them no now. Can't keep fish there anyways I don't see the problem. Wonder where some of this stuff comes from. It is not fair to native Vermonters. (voice mail audio difficult to follow every word. Did the best we could to capturing it).

Email Comments (received by 5pm on 4/7/21).

Email 1:

From: Fwinformation@vermont.gov on behalf of Todd [REDACTED]
Sent: Sunday, January 3, 2021 12:08 PM
To: ANR - FW Public Comment
Subject: Contact Us Webform Fishing Regulations Comments
Do you think the proposed changes would make fishing regulations easier to understand? YES/easier
Do you support the idea of VFWD making fishing regulations easier to understand? YES Would these changes make you more likely to go fishing or more excited to go fishing? : MORE
Comments: So glad this might actually happen! Way too confusing First Name:
Todd Last Name: Ambroz Email: [REDACTED]

Email 2:

From: Fwinformation@vermont.gov on behalf of Jeff [REDACTED]
Sent: Sunday, January 3, 2021 10:33 AM
To: ANR - FW Public Comment
Subject: Contact Us Webform Fishing Regulations Comments
Do you think the proposed changes would make fishing regulations easier to understand? YES/easier
Do you support the idea of VFWD making fishing regulations easier to understand? YES
Would these changes make you more likely to go fishing or more excited to go fishing? MORE

Comments: I appreciate and support your ongoing efforts to simplify fishing regulations in VT. The recent baitfish changes were a good start although I would like to see those further lessened to reduce the amount of money/baitfish that we all waste when we don't fish one body of water all of the time.

First Name: Jeff
Last Name: Kramer
Email: [REDACTED]

Email 3:

Sent: Sunday, January 3, 2021 10:31 AM
To: ANR - FW Public Comment
Subject: Proposed Fishing Changes
Hello,
First of all I'd like to say a big thank you for working on this project; it was very much needed.
My question pertains to the proposed changes and fishing at, say for example, Sunset lake in Benson, VT. Currently, your total Lake Trout and Rainbow Trout limit is 2; it appears that under the proposed guidelines you could harvest 2 Lakers and 6 Rainbows, correct?
Thank you for your assistance and your continued work with regard to simplifying our regulations.
Jeff Kramer

Email 4:

From: Fwinformation@vermont.gov on behalf of Peter [REDACTED]
Sent: Tuesday, January 5, 2021 2:53 PM
To: ANR - FW Public Comment
Subject: Contact Us Webform Fishing Regulations Comments
Do you think the proposed changes would make fishing regulations easier to understand? YES/easier
Do you support the idea of VFWD making fishing regulations easier to understand? YES
Would these changes make you more likely to go fishing or more excited to go fishing? : MORE
Comments: Love the change to year-round catch and release fishing!
First Name: Peter
Last Name: Brooks
Email: [REDACTED]

Email 5:

From: Fwinformation@vermont.gov on behalf of jay [REDACTED]
Sent: Friday, January 15, 2021 11:29 AM
To: ANR - FW Public Comment
Subject: Contact Us Webform Fishing Regulations Comments
EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.
Do you think the proposed changes would make fishing regulations easier to understand? YES/easier
Do you support the idea of VFWD making fishing regulations easier to understand? YES
Would these changes make you more likely to go fishing or more excited to go fishing? : MORE
Comments: I think the increased fishing opportunities are a huge plus. For example, I live right on Caspian Lake, but usually make a late season trip or two to Champlain to fly fish for lake trout. With the new regulation, it looks like I could save a bunch of miles and fish for late season lakers in Caspian
First Name: jay Last Name: modry
Email: [REDACTED]

Email 6:

Sent: Tuesday, January 19, 2021 2:45 PM
To: ANR - FW Public Comment
Subject: Contact Us Webform Fishing Regulations Comments
Do you think the proposed changes would make fishing regulations easier to understand? YES/easier
Do you support the idea of VFWD making fishing regulations easier to understand? YES
Would these changes make you more likely to go fishing or more excited to go fishing? : MORE
Comments: I love these changes. A 1/1 trout ice fishing date, year round catch and release, rules simplification, and expanded ice fishing opportunities for trout all are outstanding improvements- I am excited! I grew up in Maine which created an excellent fall trout stocking program that lead to an awesome ice fishing season- there are so many opportunities for this in Vermont. I can't wait- I hope VFW takes full advantage.
First Name: Jason
Last Name: Parker
Email: [REDACTED]

Email 7:

From: Fwinformation@vermont.gov on behalf of Stephens [REDACTED]
Sent: Saturday, January 30, 2021 11:17 AM
To: ANR - FW Public Comment
Subject: Contact Us Webform Fishing Regulations Comments
Do you think the proposed changes would make fishing regulations easier to understand? YES/easier
Do you support the idea of VFWD making fishing regulations easier to understand? YES
Would these changes make you more likely to go fishing or more excited to go fishing? : MORE
Comments: Definitely
First Name: Stephens
Last Name: Handfield
Email: [REDACTED]

Email 8:

From: The WildFisherWoman [REDACTED]
Sent: Thursday, February 11, 2021 10:16 AM
To: ANR - FW Public Comment
Subject: Public Comment - Simplifying Fishing Rules
Dear VTF&W - Like what you did with the trout. Keep up the great work you all do. Please consider simplifying those baitfish regulations (again). Thanks. - CFS
Cheryl Frank Sullivan
Underhill, VT

Email 9:

From: Meg Clough [REDACTED]
Sent: Friday, February 12, 2021 7:19 AM
To: ANR - FW Public Comment
Subject: Fish Management Rule Comments
I feel that if you change a lot of these size and line restrictions there will be no large fish left to catch. The rules were not that hard to look up. If you can't read, don't fish. I'm especially worried about the changes on Seymour, and the Averills.
Margaret Clough

Email 10:

From: Yep Blaze [REDACTED]
Sent: Saturday, February 13, 2021 4:32 AM
To: ANR - FW Public Comment
Subject: from the everywhere it's different dept
I am 67 bought and used 5 minutes my last licence coming from california an avid daily fisherman and familiar with their booklet and rules updates, locations, and species I came here about 10 years ago college educated in tech and IT skills and found vermont unique and not an easy read tried to get with the VT fishing rules and pamphlets Too many heartwarming filler stories baits and gear sections we need species photo ID sections we need to have available and banned species by location limits and dates the wording that lead sinkers are not illegal only not to be sold I do not carry a smart device but it would seem that location specific could be instantaneous otherwise a directory or map to locate name of body to differentiate calendar of dates by locations number to call for realtime answers there's a few rambled
Craig Grover

Email 11:

From: Fwinformation@vermont.gov on behalf of John [REDACTED]

Sent: Wednesday, February 17, 2021 9:26 PM

To: ANR - FW Public Comment

Subject: Contact Us Webform Fishing Regulations Comments

Comments: I'm happy to hear the regs are going to be simplified. The regs as currently written have scared me off of fishing anywhere but Champlain. I want to be able to take my kid fishing without worrying about tickets.

First Name: John

Last Name: Bourbon

Email: [REDACTED]

Email 12:

From: Fwinformation@vermont.gov on behalf of Raymond [REDACTED]

Sent: Wednesday, February 17, 2021 4:17 PM

To: ANR - FW Public Comment

Subject: Contact Us Webform Fishing Regulations Comments

Comments:

In response to the proposed changes or should I say the simplification of. There have been some suggested changes to limits that I agree with. There are ,however , suggestions I very much disagree with. I feel that what I have to say is worth as much as the paper I drafted this on. I am old school and learned to fish in the 50's and do remember what good fishing was.

Here are my thoughts :

The regulations on lakes Seymour and the Averill's which for ice fishing have had a 4 line limit. I think that is great and wished that all trout lakes had a 4 line limit. This would take some pressure off an already stressed fishery. This does not apply to Lake Champlain!

Appendix 122 6.1

Leave these water bodies as seasonally closed especially the ones I shall list.

Bean pond

Blake pond

Brown pond

Center pond

May pond (Barton)

These ponds are way to small to open year round !

Appendix122. 7.6

Smelt need and deserve a creek limit and has been needed for years. 100 smelt a day limit.

Appendix. 122. 7.6e

Leave center pond (Newark) and long pond (Westmore) at a 2 fish limit. These ponds have lake trout in them!

Appendix 122. 3.0

The definition of immediate control for lines in ice fishing is way to liberal. It should be something like within sight by naked eye and 5 to 10 minute tend time. (not allowing the use of binoculars and a 30 minute tend time.). I have seen tip ups go unattended for way over an hour after it has fired.

Enough said, thank you!

First Name: Raymond

Last Name: Wells

Email: [REDACTED]

Email 13:

From: Susan Czerepak [REDACTED]
Sent: Wednesday, February 24, 2021 8:30 AM
To: ANR - FW Public Comment
Subject: Fishing Rule Comments

Hi

I'm looking at the proposed "simplified" fishing rules They don't seem so simple to me
What about fishing in the Connecting Stream between Lake Seymour and Echo Lake
What about the Pherrins River?

Thanks

Susan

Email 14:

From: [REDACTED]
Sent: Thursday, February 25, 2021 6:21 PM
To: ANR - FW Public Comment
Subject: Proposed Reg. Changes

I am glad to see that the department is simplifying the regulations, which sometimes takes a Philadelphia lawyer to understand. I do believe you have an error concerning American shad in appendix 122. I believe you meant to state that there is no open season for shad. It currently reads that there is no closed season.

I also see that you have NOT opened up Spring Lake in Shrewsbury, Vermont to Ice fishing. The lake is over 100 feet deep and is very underutilized for fishing, even in the spring and summer, because of its location. Allowing winter Ice fishing would be a wonderful addition to winter fishing opportunities in the Shrewsbury area. Please give this consideration as you revise these regs.

It also would be nice if the Department finally secured easy public boat access to Sunset Lake in the Benson area. It has been a "private" lake for far too long, while L. Bomoseen continues to get ever increasing pressure from fishers and boaters, which Sunset access could help temper. Access has been debated since the last century and it is finally time to find a way for boat access to Sunset.

Lars Lundeen

Email 15:

From: andrewglover [REDACTED]
Sent: Monday, March 29, 2021 5:44 PM
To: ANR - FW Public Comment
Subject: Fishing regulations.

Please remove the no live bait restrictions on the Lamoille River. I fished for years with worms on a section that was changed for no logical reason to artificial bait only.

Thank you

Andrew Glover

Jeffersonville VT

Email 16:

Sent: Tuesday, March 30, 2021 8:10 PM

To: ANR - FW Public Comment

Subject: Contact Us Webform Fishing Regulations Comments

Comments: I think that this is a great idea for many reasons. First and foremost, I do a lot of winter fishing in other places and fish seem to do better caught and released during the colder months as oxygen in cold water is abundant. Secondly environmental officers are spread thin to say the least as it is. In my opinion their efforts would be best directed to the more dangerous and legally bound activities. Like snowmobiling. Thank you very much for allowing the public a voice.

Brian Lynch —Guide/Owner Pheasant Tail Tours Guide Service

First Name: Brian

Last Name: Lynch

Email: [REDACTED]

Email 17:

Sent: Tuesday, March 30, 2021 8:45 AM

To: ANR - FW Public Comment

Subject: Contact Us Webform Fishing Regulations Comments

Comments: Hello, as an avid fly fisherman in VT, we should have a year-round open all season rule for all streams that are mandatory catch and release, barbless hooks only. Winter (and even through April 10th) is such a variability in weather that having the opportunity to fish year round would be incredibly useful. Additionally, several of the smaller, unmarked streams and tributaries of major waterways are productive fisheries that would be great for anglers seeking to continue the sport in the winter. Given this, as well, there would not be a large contingency of fishing pressure as those who want to fish when snow is out are far and few. However, on days like today (where it is 70 degrees in late March) fishing should be allowed and on every other day with strict catch and release, barbless regulations on all rivers/streams. The existing year round waterway opportunities are sparse and not nearly accessible enough for anglers.

First Name: Brandon

Last Name: Dale

Email: [REDACTED]

Email 18:

From: Mason [REDACTED]

Sent: Tuesday, March 30, 2021 6:57 PM

To: ANR - FW Public Comment

Subject: Proposed changes

I, Mason Wardwell disagree with the proposed changes on the Battenkill. Please leave the bag limit on brook trout at 12.

Sincerely,

Mason Wardwell

Email 19:

From: Cheryl Treworgy [REDACTED]

Sent: Wednesday, March 31, 2021 2:02 PM

To: ANR - FW Public Comment

Subject: Battenkill changes

I am strongly opposed to the proposed changes to fly fishing only on the Battenkill. Please don't make fishing an elite sport that only tourists at Orvis can afford. Please keep the Battenkill fishing as it is for our future generations of Vermonters. Keep the bag limit on trout to 12.

Sincerely,

A Vermont tax payer, Cheryl

Email 20:

From: Gary Bannister [REDACTED]
Sent: Thursday, April 1, 2021 3:45 PM
To: ANR - FW Public Comment
Subject: Gary letter.docx
Attachments: Gary letter.docx
Please note my public comment enclosed
Gary

Note from Gary Bannister (Email 20).

As a lifelong Vermonter, and avid hunter and fisherman, I have spent my entire life in the woods and along the brooks and streams of this great state! The memories of fishing with my father and friends, from upland mountain streams to trolling on Lake Champlain, are priceless (to say the least) and have had a tremendous influence on my appreciation of my natural surroundings. My dad got me going when I was 5 years old, on a brook trout stream, and my intensity for fishing has extended into my 69th year - thoroughly enjoying retirement!

This week, in fact, I purchased fly fishing outfits for my three grandchildren, and I have high hopes that their busy lives will include exciting time spent on a Vermont lake or stream!

However, their introduction to the sport was either sitting on a dock, or streamside rock, fishing bait! I'm hoping they learn the skills of presenting a fly to a rising trout, as well as the skills of drifting a garden worm to a wary Brown, in an alder lined run! "Catch and release" is successfully accomplished using both angling methods!

Thus, I want to express my strong opposition to the new fishing "simplification" which is attempting to prohibit the use of bait within the Battenkill River! I can't imagine that hooking mortality, using a garden worm, is so significant as to affect the trout population within the river.

The family bonds developed, for a century or more, along the famous Battenkill and other Vermont streams, need to be strengthened, not weakened by needless regulation!

Also, it is my hope the 12 fish limit for brook trout will be retained in its current form!

Many thanks to the Vermont Fish and Wildlife Board and State Biologists for their efforts in protecting our natural resources!

Email 21:

From: Shanna Treworgy [REDACTED]
Sent: Thursday, April 1, 2021 4:47 PM
To: ANR - FW Public Comment
Subject: Objection to proposed changes
Hello,
I understand changes are being proposed for the Battenkill river fishing. I would like to respectfully advocate for the bag limit on brook trout to remain at 12. This is important to me and my family, all of us being Vermonters.
Sincerely,
Shanna Treworgy

Email 22:

From: Mark Riley Sr. [REDACTED]

Sent: Thursday, April 1, 2021 4:27 PM

To: ANR - FW Public Comment

Subject: Battenkill Bait Fishing

Attachments: Battenkill Bait Fishing opinion.docx

Attached you will find my letter of opinion concerning the proposed elimination of bait fishing in the Battenkill River!

Thank you to the Vermont Fish and Wildlife Board and to the Biologists of the Vermont Fish and Wildlife Department for the

opportunity to convey my opinion!

Mark D. Riley Sr.

April 1st, 2021

To: Vermont Fish and Wildlife Board

Vermont Fish and Wildlife Department- Fisheries

From : Mark D. Riley Sr.

1434 North Pawlet Road

Wells, Vermont 05774

[REDACTED]

RE: Proposed changes in Bait Fishing- Battenkill River

I am writing to express my opposition to the proposed "Fishing Simplification" regarding the elimination of bait fishing from the Battenkill River. As we all know this is not simplification, but a significant change in regulation!

If there is documented biological data which confirms significant hooking mortality on the Battenkill, then I am willing to change my opinion. However, the possible problems affecting trout populations are many and include:

- over recreational use of the river by tubers, kayakers, canoes, and beer cooler floats during periods of extreme low water.
- significant development of the Battenkill Valley causing increases in impervious surfaces and road gravel sedimentation
- loss of woody debris and stream structure. (Kudos to the Battenkill Alliance and others for addressing this situation!!)

It is difficult to believe that garden worm fishermen can be placed on this list!

This issue was debated in 2017, and the Board unanimously voted to maintain bait fishing in the Battenkill! Have conditions changed significantly since this time?

My family have treasured their 80+ years of living on and carefully fishing the river, both with bait and fly rod alike! Please allow the "common man" to begin or maintain family traditions, rather than limiting the use of Vermont's most famous trout stream!

Also, I remain strongly in favor of maintaining the 12 daily limit for the taking of brook trout!

Email 23:

From: ANR - FW Information <ANR.FWInformation@vermont.gov> On Behalf Of Timothy

Sent: Monday, April 5, 2021 7:34 PM

To: ANR - FW Public Comment <ANR.FWPublicComment@vermont.gov>

Subject: Contact Us Webform Fishing Regulations Comments

Comments: Fishing Vermont's streams for some healthy and tasty brook trout is a favorite pastime for many of us. Brook trout are plentiful in our woodland streams. It seems unfortunate that we would reduce the daily limit to eight for simplicities sake. I am not for reducing the brook trout limit.

A big thank you to the VT Fish and Wildlife Dept. and board members for your work, dedication and expertise.

First Name: Timothy

Last Name: Metayer

Email: [REDACTED]

2021-2022 WATERFOWL SEASONS RECOMMENDATIONS

APRIL 7, 2021



**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 initially approved by straw vote on February 17, 2021. 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 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 Heavily Discussed through Public Input Sources

Recommendation 1 - 2021 Lake Champlain Zone Duck, Merganser and Coot Seasons: That the 2021-2022 duck, mergansers, and coot seasons of the Lake Champlain zone run from October 13 to October 17 and October 30 to December 23, 2021.

- 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.

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.

- Hybrid season is proposed to provide maximum opportunity to hunt a species that requires blinds or specialized boats and large layouts of decoys.
- Hunters have worked with hybrid seasons in the past and are used to annual adjustments in species bag limits.
- This will complicate law enforcement slightly. Hunters must know dates and seasons for all activities. Wardens always have field discretion.
- Population and harvest estimates allow for the hybrid season and maintains a viable scaup population.

In review, these are the actions the Department requests that the Board takes tonight for the 2021-2022 migratory game bird seasons: Setting the 2021 duck, goose, merganser, coot, brant, woodcock and snipe seasons dates and daily bag limits, setting the 2021 youth waterfowl hunting weekend dates, and setting the 2021 falconry regulations.

Recommendations (Note: the following text is the same provided to the Board on Feb. 17.)

Recommendation 1 - 2021 Lake Champlain Zone Duck, Merganser and Coot Seasons: That the 2021-2022 duck, mergansers, and coot seasons of the Lake Champlain zone run from October 13 to October 17 and October 30 to December 23, 2021. Within the chosen dates, we recommend the 60-day season with a daily bag limit of no more than 6 ducks (with species restrictions), 5 mergansers, and 15 coots.

Recommendation 2 – 2021 Interior Vermont Zone Duck, Merganser and Coot Seasons: That the 2021-2022 duck, mergansers, and coot seasons of the Interior Vermont zone run from October 13 to December 11, 2021. Within the chosen dates, we recommend the 60-day season with a daily bag limit of no more than 6 -ducks (with species restrictions), 5 mergansers, and 15 coots.

Recommendation 3 – 2021 September Resident Canada Goose Season: That the September resident Canada goose season run from September 1-25, 2021, 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 – 2021 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 13 to November 11, 2021, with a daily bag limit of 1 bird per day and a possession limit of 3 birds.

Recommendation 5 – 2021 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, 2021 and February 24 to March 10, 2022, with a daily bag limit of 25 birds per day and no possession limit.

Recommendation 6 – 2021 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 13 to December 1, 2021, with a daily bag limit of 2 birds per day and a possession limit of 6 birds.

Recommendation 7 - 2021 Youth Waterfowl Hunting Days: That the youth waterfowl hunting weekend occur on Saturday and Sunday, September 25 & 26, 2021, within all Vermont zones.

Recommendation 8- 2021 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 – 2021 Woodcock Season: That the woodcock season run from September 25 to November 8, 2021, with a daily bag limit of 3 birds per day and a possession limit of 9 birds, statewide.

Recommendation 10 – 2021 Snipe Season: That the snipe season run from September 25 to November 8, 2021, 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.

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.

2021 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.

2021 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.

2021 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, 2021. A three-bird daily bag limit was in effect.

Public Input and Outreach: The Department, in conjunction with the Board, held two virtual public meetings in 2021. Meetings occurred on the evenings of March 9 and 11 and began at 6:30 pm on a Zoom 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 results 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 2021 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 20 emails containing comments on the proposed migratory game bird seasons. Fifty-nine citizens attended the two virtual 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. Biggest concern in last 8-10 years—October opening limits opportunity for access to BWT. Wants an opportunity to open on the 1st Wed. in October for Lake Champlain Zone.
2. Would like and early teal season.
3. Concerned about climate change and whether we are accommodating the changing phenology. How can he encourage us to factor climate change into our considerations?
4. Consider not banding hen mallards because many younger hunters participate in “band hunting”.
5. Earlier season would be better for Interior Zone. (3)
6. Open interior zone later—especially down in southwest corner of state.
7. Would like more days in October in the Interior zone.
8. Struggle to accommodate the north end of the Lake Champlain in the early season with the Goldeneye push at the end of the season—need to extend the season.
9. Would like to split the state west to east and move zones from north to south. (2)
10. Is the 1 bird goose limit cast in stone? It sets up hunters for failure and there is a potential for leaving wounded birds behind.
11. With resident goose season, would we consider a maximum number of hunters by field? Too many hunters could ruin the hunt.
12. If our goal is to reduce the resident goose would we ever allow unplugged shotguns?
13. Encourage youth day but should add a mentor day as well (could be the same day as youth day).
14. Days and bag limits appropriate. (4)
15. Happy with the proposal for woodcock season. (3)
16. Is there consideration of boundary adjustment in Panton to realign with Interior Zone? We could also adjust the blind removal dates. Lake Champlain Zone.
17. Not having access during late season due to ice. Happy about new timing. Glad to see season changes in season structure to old framework. Diver season should be shifted from Dec. 24th to 30th. Like having season open through the holidays. Go as long as we can. (2)
18. Really like the proposal.
19. Supports cutting 10 days off Resident and move the 30-day migrant season into November. Don't shoot any of the AP geese so they rebound faster. Tons of geese around in November and December.
20. Likes idea of having a reciprocal hunting license with NY.

21. Why give so many days in the November part of the season? Hunting better in December.
22. One goose?? Still 2 mallards?? I guess VT doesn't want us to hunt here anymore. It gets worse every year.
23. Thanks for sending.... very disappointed in the goose season limit of 1, but understand the reasoning behind it. Is there a possibility of going to a season limit , like 10 ? Or whatever the right number is. A huge effort to go out for 1.
24. Why again are we front loading the two scaup limit at a time when the majority of the scaup are not here? The two-bird limit should really be at the end of the season for those of us that continue to hunt duck.
25. I thought last year's dates were just about perfect for the Champlain zone. Oct 10 to Nov 1 gave us a great opportunity to hunt a variety of species. The three weeks of closure gave local birds time to recover and time for new flights to come in. The second part of the season provided great opportunities for mallards and golden eyes.
26. To open the Inland Zone on October 13, 2021, is likely to be disastrous. If early cold weather arrives, the birds leave quickly. Inland Zone hunters (which includes the very popular Missisquoi Bay and Missisquoi River Delta) largely target Wood Ducks, Green Wing Teal and Mallards. I urge you to change your recommendation to the Board and ask instead that the Inland Zone open on October 6, 2021 and run straight.
27. I would like to see the split for the Lake Champlain season open the weekend before deer season. The marshes are usually frozen by the second weekend of deer season meaning that puddle duck hunters have basically the one week of hunting before the split.
28. Has the state of VT completely lost their minds? One bird a day? Keep it up. Wetlands preservation wouldn't exist without the funds from hunters and this state is doing it's level best to completely eliminate the interest for the next generation.
29. I oppose all killing of waterfowl in this agreement between NY and Vermont to kill and find it outrageous to kill in this massive way.
30. I like the framework for the seasons, but after tonight, hearing the thought of having a week longer split and finishing a week later.

Figure 1.

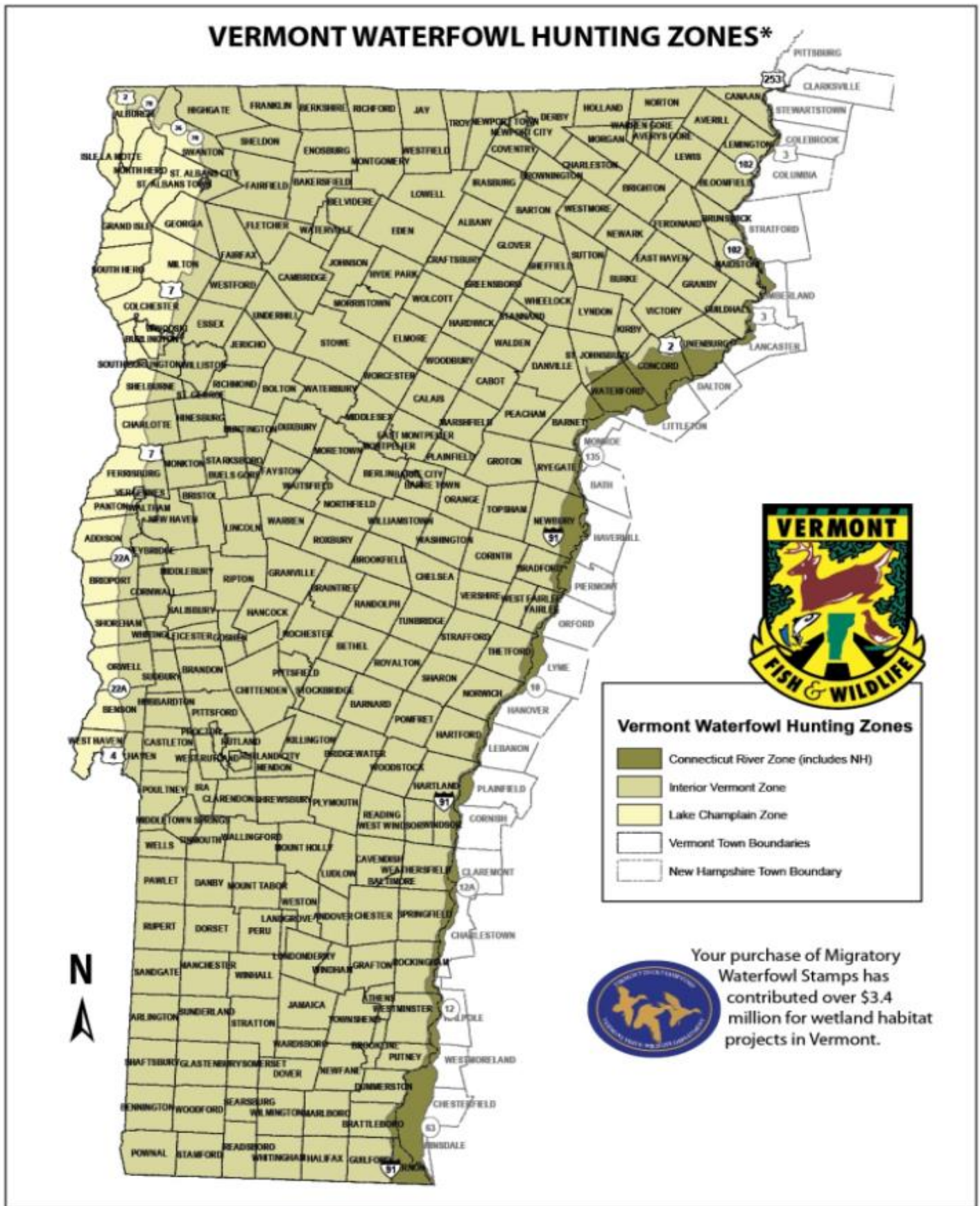


Table 1.

2021 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. 13 - Oct. 17</u> & <u>Oct. 30 - Dec. 23</u>	6	18
MERGANSERS *	Split	60 Days	<u>Oct. 13 – Oct. 17</u> & <u>Oct. 30 - Dec. 23</u>	5	15
Scaup*	Split	20 Days	Oct. 13 – Oct. 17 & Oct.30-Nov. 13	2	6
	Hybrid	40 Days	Nov. 14 – Dec. 23	1	3
COOTS	Split	60 Days	<u>Oct. 13 – Oct. 17</u> & <u>Oct. 30 - Dec. 23</u>	15	45
GEESE					
Canada Geese	Straight	25 Days	<u>Sept. 1 - Sept. 25</u>	8	24
	Straight	30 Days	<u>Oct. 13 – Nov. 11</u>	1	3
Snow Geese **	Straight	107 Days	<u>Oct. 1 - Dec.31, 2021</u>	25	NONE
			<u>Feb. 24 – Mar. 10, 2022</u>	25	NONE
			(CO) <u>Mar. 11 - Apr. 23, 2022</u>	15	NONE
Brant	Straight	50 Days	<u>Oct. 13 – Dec. 1</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.

2021 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.13 - Dec.11</u>	6	18
MERGANSERS *	Straight	60 Days	<u>Oct.13 - Dec.11</u>	5	15
SCAUP*	Split	20 Days	Oct. 13 – Nov. 1	2	6
	Hybrid	40 Days	Nov. 2 – Dec. 11	1	3
COOTS	Split	60 Days	<u>Oct.13 - Dec.11</u>	15	45
GEESE					
Canada Geese	Straight	25 Days	<u>Sept. 1 - Sept. 25</u>	8	24
	Straight	30 Days	<u>Oct. 13 – Nov. 11</u>	1	3
Snow Geese **	Straight	107 Days	<u>Oct. 1 - Dec.31, 2021</u>	25	NONE
			<u>Feb. 24 – Mar. 10, 2022</u>	25	NONE
			(CO) <u>Mar. 11 - Apr. 23, 2022</u>	15	NONE
Brant	Straight	50 Days	<u>Oct. 13 – Dec. 1</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 2021 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

2021 Public Comments – Waterfowl Season Recommendations
 (Received via Email or during public meetings)

2/18/2021 – Peter Valente

One goose??

Still 2 mallards??

I guess VT doesn't want us to hunt here anymore.

It gets worse every year.

2/18/2021 - William Genier

Waterfowl season Like the new proposed season a lot better last season

2/19/2021 – Seth Powers

Hi David,

Thanks for the info on the waterfowl meetings for VT. I mostly hunt the CT River Zone and so I am curious about when the NH meetings are and who I can contact about that.

Why do you think the numbers of mallards are declining?

Thanks a bunch!

Seth Powers

2/19/2021- Robert Frohock

Thanks for the email Dave

All proposals look good to me.

2/19/2021 – Tom McKeown

Hi Dave,

Thanks for sending.... very disappointed in the goose season limit of 1, but understand the reasoning behind it.

Is there a possibility of going to a season limit , like 10 ? Or whatever the right number is.

A huge effort to go out for 1.

....I think there is a typo and end date should be Nov and not Feb

Thanks / Tom

2/19/2021 – Tim Bombardier

David, Thanks for the info. But why again are we front loading the two scaup limit at a time when the majority of the scaup are not here? The two bird limit should really be at the end of the season for those of us that continue to hunt duck and are not out in the woods chasing deer, at least that is why some want the two bird limit so early

2/19/2021 – Jim Bellinghri

Thanks for the info on the zoom meeting etc. Look forward to listening. Are the public comments available to be read from last years meetings. I'm interested in what folks were saying about hunting dates.

I thought last years dates were just about perfect for the Champlain zone. Oct 10 to Nov 1 gave us a great opportunity to hunt a variety of species. The three weeks of closure gave local birds time to recover and time for new flights to come in. The second part of the season provided great opportunities for mallards and golden eyes.....my two cents.

Thanks for all you do.

2/19/2021 – Sam Leone

Hello,

I was reading the recommendations concerning goose hunting for 2021 season. As a hunter I have thoughts on way this doesn't make sense. Can you explain why the state does not want to keep the season limits the same as 2020 resident Canada goose season at eight geese per person from September 1st to 25th and the migration season at two geese and extended the season from October 10th to December 20th?

Thank you,

Sam Leone

2/24/2021 – George Spear

David,

I plan to try and attend the 3/11/21 virtual hearing but wanted to memorialize my concerns ahead of time.

As a long time waterfowl hunter in the Inland Zone (I took my first duck in 1949), I've experienced many early freezes. To open the Inland Zone on October 13, 2021, is likely to be disastrous. If early cold weather arrives, the birds leave quickly. Inland Zone hunters (which includes the very popular Missisquoi Bay and Missisquoi River Delta) largely target Wood Ducks, Green Wing Teal and Mallards. Wood Ducks, as you know, are a fairly early migrant, and make up the most common duck in the Vermont waterfowlers bag. To reduce the opportunity to successfully hunt them will reduce that bag and adversely affect hunter expectations and participation – all to no good effect as we need more, not fewer, hunters. By opening the Inland Zone on October 13th, the inland hunter is likely to have only about 3 weeks opportunity before the marshes freeze and the Woodies leave.

I urge you to change your recommendation to the Board and ask instead that the Inland Zone open on October 6, 2021, and run straight.

Sincerely,

George Spear

3/3/2021 Robert Mazza

I would like to see the split for the lake champlain season open the weekend before deer season. the marshes are usually frozen by the the second weekend of deer season meaning that puddle duck hunters have basically the one week of hunting before the split. This is causing hunters to leave the sport or choose between duck or deer hunting. Opening the weekend before deer season would satisfy slot of puddle duck hunters and still allow the diver hunters to hunt far into Dec.

Thanks. Bob Mazza

3/3/2021 Jeff V

Has the state of VT completely lost their minds. One bird a day? Keep it up. Wetlands preservation wouldn't exist without the funds from hunters and this state is doing it's level best to completely eliminate the interest for the next generation. When you restrict something to the degree you are trying to, it promotes total disregard for any of the rules or regulations.

3/5/21 Eric Nuse

I hope to attend the upcoming waterfowl season hearing, but wanted to let the Board know my opinion on the proposed regulation.

I do all my duck and goose hunting in the inland zone, so for me, the earlier it can open the better. As you know, the later in the season the greater the odds that our beaver dams and shallow water will be frozen and all birds will be winging south. So for me the earlier the opener and a straight season for the inland zone the better.

I suspect you don't have any choice but the one goose limit for the regular migratory season makes going to the effort to target them not seem worth the work. Not that I mind only taking one bird or even none, but the hope of getting two geese. It certainly helps you get up and out before the sun comes up!

I do like the earlier opening of woodcock season. My new Britt also votes in favor of this!

Thanks for the good work all of you on the Board members do.

A hunter's cheer,

Eric

3/8/2021 – Don R.

David

Season ok as presented. However it is time the feds give us the option for Two lake zone splits. They have been giving us the b/s it is because of the interior zone. It's time to change it. Go get em.

Thanks for all your efforts.

Don R

3/8/21 – Jean Public

From: Jean Public <jeanpublic1@yahoo.com>

Sent: Monday, March 8, 2021 9:07 PM

To: seasonwaterfowl@dec.ny.gov; ANR - FW Public Comment; letters@nytimes.com; info@peta.org

Cc: humanesociety@hsus.org; foa@foa.org; info@nyclass.org; westchesterhumane@gmail.com;

madraven@gmail.com; letters@nytimes.com

Subject: Fw: Hunting and Trapping Newsletter public comment on waterfowl killing between ny and vermont - where they sew is allup so that public trusts is violated

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

i oppose all killing of waterfowl in this agreemeten between ny and vermont to kill and find it outrageous to kill in this massive way. i oppose all dates to be set for this killing. this killing is deplorable and atrocious and needs to be shut down and let the animals live. respect animals and stop letting the small number of hunters control all wildlife. that is not govt by the people for hte people. that is govt by a group that took over and refuse to give the entire population a chance to stop this assault annihilartion of animals. this comment is for the public record. Please receipt., jean publiee jeanpublic1@gmail.com

3/9/2021 – Jack Pelkey

Comments on the focus questions...

1. Lake Champlain Zone proposal looks good.

2. Can we move the interior dates up a week to start on October 7th vice Lake.

Champlain October 13th start. Gives us more days in October and we never get days in December due to freeze up so we give.

away hunting days.

3. Scaup proposal...sounds good.

4. Love the change. So many woodcock in September when I'm chasing grouse. Rarely any in November.

5. Could we get an update on what's going with Mallards? I hear they are struggling but all I see are Mallards.

3/9/2021 – Jim Larrow

David,

Thanks for returning my email. I was hoping to listen to the meeting to hear what the public had to say about the proposed Lake Champlain zone dates. I'm disappointed we will be missing out on the last eight days in December. As proposed we aren't even getting the last weekend of the month. It would be nice to open the season back up November 6th and have the last eight days of December to hunt.

I'm trying to get the work meetings that showed up in my emails this morning for tonight and Thursday night changed. Hopefully that will be possible.

Thanks again for everything you do for the waterfowl hunters in VT.

Jim Larrow

3/10/2021 – Rich Swinyer

Commenting on the proposed duck seasons. I watched the webinar on Tuesday night but didn't have a speaker to comment.

I think the Lake Champlain proposed season is perfect as well as the interior proposed season. As far as scaup is concerned, I think you do what's best for the species. As for the proposed bag limits, we all want more but I think we've had more than liberal shooting for a long time so we need to do what is necessary in order to be able to continue our 60 day season. If Vermont is ever given the opportunity, I believe we should have an early teal season in September in addition to the regular duck season. I also remember the 30 day seasons as well as the zero goose limit so I would rather see you act on the conservative side than have to close & shorten seasons.

Thanks for all you do.

Rich Swinyer
Benson, VT

3/11/2021 – Tim Bombardier (second comment)

David, I am no sure that I will be able to tune into the meeting tonight but I would like to makes sure that comments and suggestions from the late season hunters on the lake are heard. I know you and I have already spoken about the blue bill season and that the reports indicate that the majority of the BB are going through in October and early November.

While I respect your view point on this I have to concerns based on what we have seen the last several years on the broad lake. Early on the number of scaup we see prior to the end of November has been insignificant until right after Thanksgiving and then they start building, Roosting on the broad lake and feeding up in Venice PQ or the reef.

The numbers continue to build, and a flock of 300 to 500 are a common sight but at nose bleed heights a lot of the time.

For the last several years we have seen groups of scaup on the water in the thousands (5K to 6K), right up until the last day of the season. This make me wonder if the hunters reporting heavy numbers of scaup in October know the difference between a ring-neck (swamp blue bill) and a scaup.

Since the ring-neck pattern is more in line with what seems to be reported. In addition to this the goldeneyes seem to be coming down later and later This last year it was two weeks after the season closed when the decided to show up.

Just some things to consider and it would be my suggestion to push the lake zone season out as close to the end of the year as possible if not further.

Thanks and my offer to have you join us on the lake in December still stands. Take care

3/11/2021 – Hank Fish

Thank you for that and please keep us updated about it. BTW I like the framework for the seasons, but after tonight, hearing the thought of having a week longer split and finishing a week later, I like that even better.

Hank

3/16/2021 – Paul Healy

Dear sirs, I really hope we are done with this experiment with a longer first season and a longer split. I have heard complaints that it was done to placate hunters at the Southern end of Lake Champlain. For the record, I have been hunting the same small section of marsh on the same small bay in North Hero for roughly 50 years. My experience has been that as long as there's water in that marsh, there'll be ducks in it. This has held true for years, even when we have a freeze-up and then a thaw. The ducks come back. Many years I am frozen out of the marsh by Thanksgiving, and in some years frozen out in the entire bay by then. Under the old arrangement of a very short opener and a 10-13 day closing before the rest of the season, I could still have 30-35 days available for hunting even with a Thanksgiving freeze-up. Under the schedule in place the last few years, I'm lucky to have 20 days of hunting for ducks. I don't have a big-water boat and I can't tolerate the cold like I used to, so I want my old season back! BTW I don't see just less mallards, I see less of ALL ducks. I typically take mallards, blacks, woodies, teal, ringneck, and goldeneye, but variety has been shrinking the last few years. The water quality of this particular bay has something to do with it, I'm sure. Thanks for listening. Regards, Paul
From the desk of *Paul Healy*

March 2021 Migratory Game Bird Electronic Hearings

March 9, 2021

Board Members Present: Tim Biebel, Bryan McCarthy, Jay Sweeny, and Martin VanBuren

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the Lake Champlain Zone?*

Name	Town	Comment
Keith Dolbeck	Fort Ti, NY	In 1976 there was no Lake Champlain Zone—worked with legislature to open the zone. Biggest concern in last 8-10 years—Oct opening limits opportunity for access to BWT. Wants an opportunity to open on the 1 st Wed. in Oct. Believes it would benefit mallards by limiting the harvest on them. Concerned that the season is already cast in stone.

		Fine with second season.
Michael Gardner	Shaftsbury	Been involved in the waterfowl world for a long time. Concerned about climate change and whether we are accommodating the changing phenology. How can he encourage us to factor climate change into our considerations?
Keith Dolbeck	Fort Ti, NY	Could we provide a list of our Board members so they can respond directly to them. Go to VT Fish and Wildlife.com and scroll to the bottom for Board Members.
Ken Sturm	Missisquoi NWR	Missisquoi has been running a waterfowl program solely dedicated to jr. waterfowl hunters and mentors for years. Contact Ken if you are interested. They have talked about an adult mentor day and may consider it.
Matt Farnam	Grand Isle	Mallard—consider not banding hen mallards because many younger hunters participate in “band hunting”. Might save younger hens. How would it affect the overall data that is collected?

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the Interior Vermont Zone?*

Name	Town	Comment
Eric Nuse	Johnson	Earlier season would be better
Scott Hackett-Dalgliesh	Bennington	Open interior zone later—especially down in southwest corner of state. Agrees with Michael Gardner. Hopes we incorporate telemetry results into our decision-making. How are local populations factored into the seasons?
Jack Dunkey		Would like more days in October in the Interior zone. Struggle to accommodate the north end of the lake in the early season with the Goldeneye push the end of the season—need to extend the season. Would like to split the state west to east and move zones from north to south.
Dr. Patrick Bliss	Morrisville	Is the 1 bird goose limit cast in stone? It sets up hunters for failure and there is a potential for leaving wounded birds behind. With resident goose season, would we consider a maximum amount of hunters by field? Too many hunters could ruin the hunt. Appreciate the clarification on the 1-goose limit. If our goal is to reduce the resident goose would we ever allow unplugged shotguns?
Bryan McCarthy	Board Member	Has received emails that the interior duck season opening too late. Great presentation and organized, inclusive meeting.

Michael Bard	Waterbury	Recognizes that there are biophysical differences in the state. Can't realign zones until 2025—thinks they should be aligned east to west rather than north to south due to seasonal differences. Encourage youth day but should add a mentor day as well (could be the same day as youth day). Days and bag limits appropriate.
Eric Nuse	Johnson	Earlier is better for them and would like an early teal season.

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the scaup hybrid season of 20/2 and 40/1.*

Name	Town	Comment
None		

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the woodcock season?*

Name	Town	Comment
Eric Nuse	Johnson	Happy with the proposal.

Any other comments you wish to share on proposed bag limits?

Name	Town	Comment
None		

Dave's Responses:

- (1) **Blue-winged teal early October season:** NY has not heard from too many people requesting an earlier season. Currently it is not allowed. Always trying to find the balance within the 60 days allotted. Set in the 2nd week of October to accommodate both the northern and southern differences. Used to have more BWT—tend to head south early. Have not heard a lot of interest in an early season in Vermont either.
- (2) **Climate Change:** Have been watching the effects for years. Hard to balance as things bounce around on an annual basis. Hoping to tag geese on their wintering grounds to look at migration phenology. At the same time tag Canadian birds in their breeding grounds

and track them the other way. May ultimately adjust the seasons based on results. Band returns are currently driving the timing of the season.

- (3) **Eric Nuse:** Early woodcock season—no change in the population status, just a framework expansion. Population levels stable or slightly decreasing. Will put migration study on website.
- (4) **Realign zones:** Consider changing zones so they bisect the state east to west. Dave has looked at this but the Green Mountains create a problem. If we wanted to go to 4 zones we could but we couldn't split the season dates it will have to be all straight seasons. Social survey (2,741 NYers and Vermonters (1,385 of the total): Majority of hunters in Interior zone wanted a straight season beginning in Oct. In Lake Champlain wanted a split season.
- (5) **Migrating versus local birds:** We sample 76 plots statewide and combine with other states to estimate the population. We manage and set seasons based on regional population approach. Goldeneyes did come down a little later this year. Depends on where the birds are and where you are scouting. Very weather dependent.
- (6) **Mallards and black ducks:** Looking at migration and survival rates for mallards and black ducks by banding in January/February (150 birds in the states and 150 in Canada). In Vermont we will GPS radio tag 5 birds, each year for the next 3-years.
- (7) **Migrant Goose season:** 1 bird limit –no lee way. Numbers and trends suggest the need for this. Understand the concern about wounded birds. Go for trailing birds. Call local warden and report it if you wound the bird.
- (8) Resident Goose season was set up to reduce the population so we encourage taking as many birds as possible.
- (9) **Mentor day:** Usually recommend people mentor during the season. Probably would suggest if we move forward with a mentor day, that it be a different day than youth day. We do not have the option right now with the federal framework.
- (10) **Stop banding:** Banding is really critical to accurate modeling of the population. We have found that most hunters are not too particular on what they take. Hard to see the bands unless really close. It is not as common as people think. We need data from the hens for good population modeling.
- (11) Photos from the Arctic suggest that some areas are losing snow pack but this is not the case where our birds are coming from. It has been colder and the snow has been staying longer, even past the June 15th critical dates.
- (12) **FYI:** looking at expanding opportunity for Canada Geese to a late season for resident birds—stay tuned.

March 2021 Migratory Game Bird Electronic Hearings

March 11, 2021

Board Members Present: Martin Van Buren and Jay Sweeny

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the Lake Champlain Zone?*

<i>Name</i>	<i>Town</i>	<i>Comment</i>
<i>Sean Sullivan</i>	<i>Vergennes</i>	<i>He hunts marshes where season is shorter due to earlier freeze-up. Is there consideration of boundary adjustment in Panton to realign with Interior Zone? We could also adjust the blind removal dates.</i>
<i>Read Kennedy</i>	<i>Manchester</i>	<i>Not having access during late season due to ice. Happy about new timing. Also question on mallard limits – why us only 2 while down south limit is 6. In late season all we have is mallards to shoot and opportunity is very limited.</i>
<i>Steven Gagne</i>	<i>Queensbury NY</i>	<i>Glad to see season changes in season structure to old framework. Diver season should be shifted to Dec. 24th to 30th. Like having season open through the holidays. Go as long as we can.</i>
<i>Jim Larrow</i>	<i>Addison</i>	<i>Agrees with Steven. Why isn't the Lake Champlain zone the Lake Champlain zone.(?) Season mostly good except we need the last 6-days in December.</i>
<i>Larry Fusco</i>	<i>Rutland</i>	<i>Really like the proposal. Seems like black ducks paying price for mallard mismanagement. Supports cutting 10 days off Resident and move the 30-day migrant season into November. Don't shoot any of the AP geese so they rebound faster. Tons of geese around in November and December.</i>
<i>Read Kennedy</i>	<i>Manchester</i>	<i>Likes idea of having a reciprocal hunting license with NY.</i>
<i>Stephen Gagne</i>	<i>Queensbury NY</i>	<i>Are you getting band returns from AP birds in the September early season.</i>
<i>Jim Larrow</i>	<i>Addison</i>	<i>Why give so many days in the November part of the season? Hunting better in December.</i>

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the Interior Vermont Zone?*

<i>Name</i>	<i>Town</i>	<i>Comment</i>

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the scaup hybrid season of 20/2 and 40/1.*

Name	Town	Comment

Migratory Game Bird: *What are your comments on the proposed hunting season dates for the woodcock season?*

Name	Town	Comment

Any other comments you wish to share on proposed bag limits?

Name	Town	Comment

2021 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 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 a combination of either-sex and antlerless-only moose hunting permits in WMUs E1 and E2 to reduce the moose population and thereby reduce winter tick abundance.

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.

Summary of Key Points

- The moose population is stable in most of Vermont and may be increasing in WMU E (E1 & E2).
- Moose density in WMU E remains above 1 moose/square mile.
 - 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.
 - About half of moose calves die each winter, primarily due to heavy winter tick loads.
- 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 51-66 moose, or about 5% of the current estimated population in WMU E.
- No permits are recommended for the remaining 19 WMUs, which cover 93% of Vermont.

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 are 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. This ensures that the other values of moose are maximized at these lower densities.

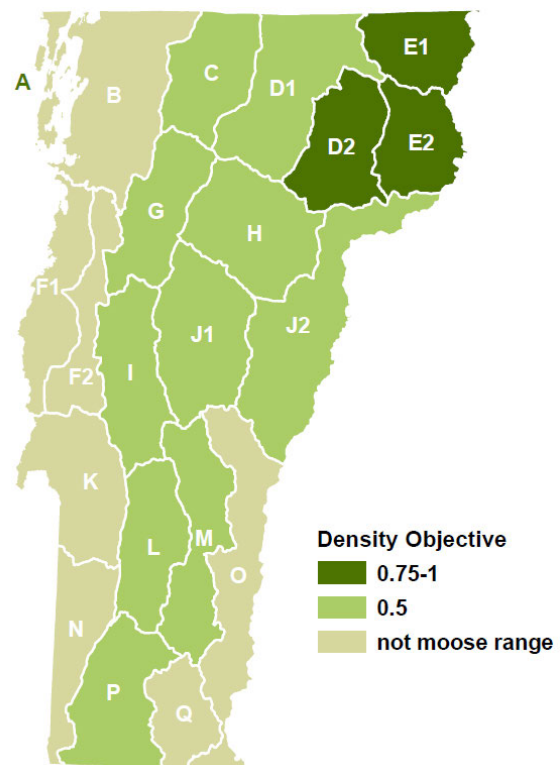


Figure 1. Moose density objectives (moose per square mile of moose habitat) established in Vermont's 2020-2030 Big Game Management Plan.

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 2020), with some moose hosting an astonishingly high number of ticks (>50,000/individual; Jones et al. 2019).

Core moose range (continuous red 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.

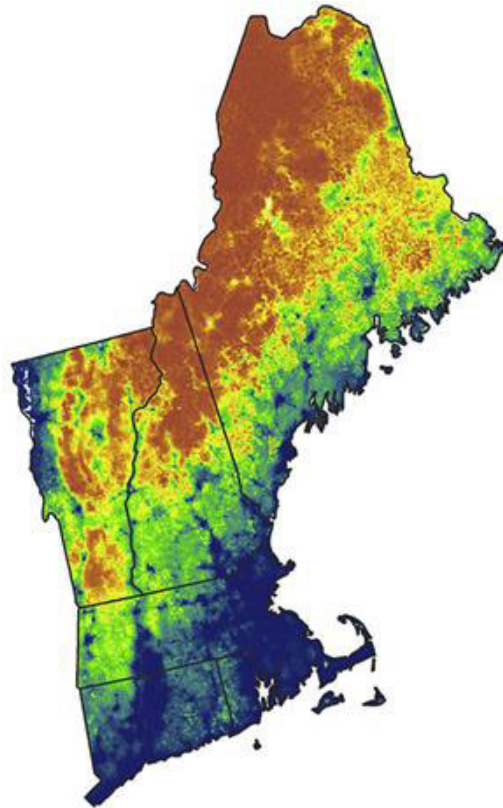


Figure 2. Estimated probability of occurrence of moose in the New England region from Pearman-Gilman et al. 2020.

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 have caused the health of moose in WMU E to be poor. Birth rates were low and overwinter calf survival was poor (49%; DeBow 2020). 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.

Much of the fieldwork associated with this research concluded in 2019; however, the Department continues to monitor survival and calf recruitment in the remaining collared cows. Additionally, University of Vermont researchers continue to analyze the large amounts of data collected during this

study to expand beyond the survival and health findings. Two additional research studies nearing completion are focused on understanding 1) How winter tick impacts on moose relate to habitat use and quality, and 2) How winter ticks affect moose genetic health and stress levels. Five scientific publications related to this research are currently in the final review stages, with more in production for 2022.

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 (Figure 3).

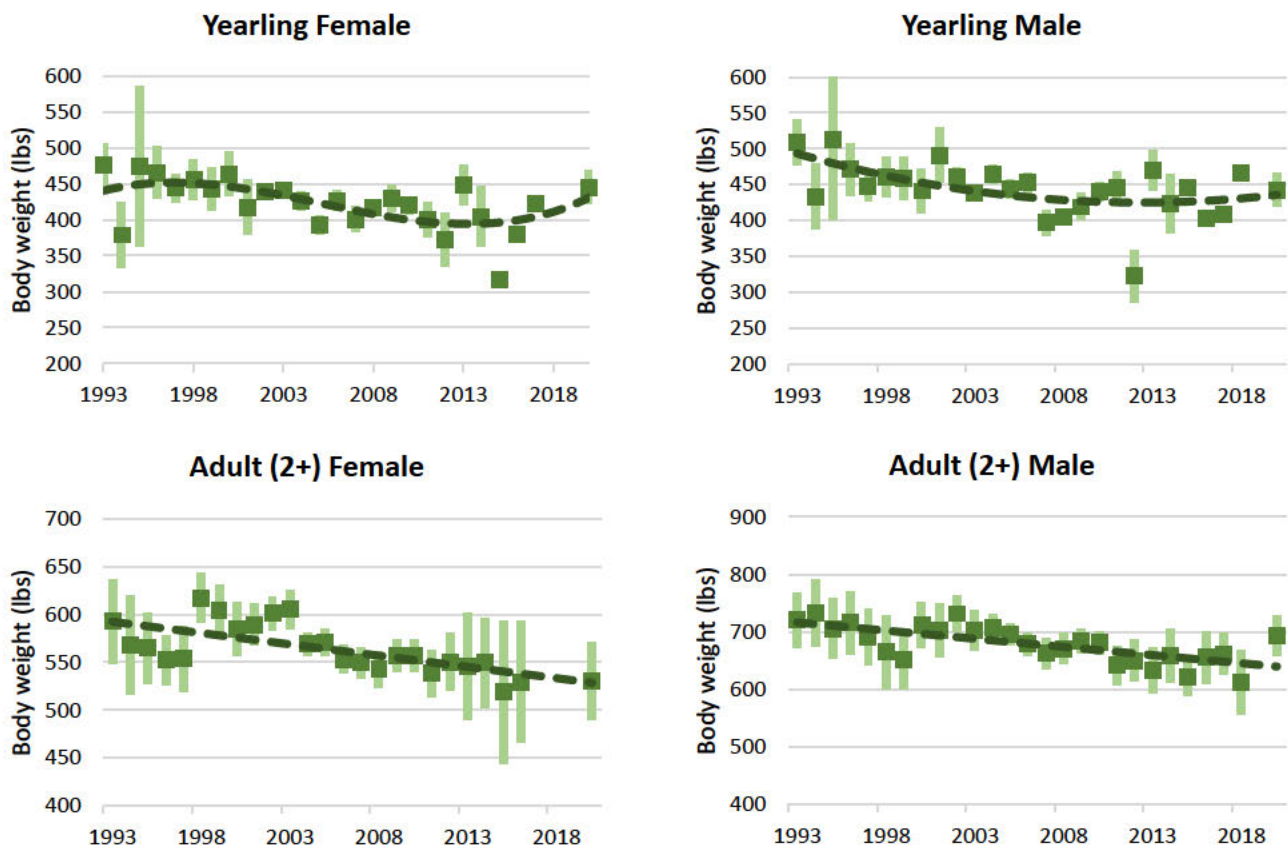


Figure 3. Field-dressed body weights of harvested moose in Wildlife Management Unit E, 1993–2020.

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). Three publications from moose habitat research in Vermont examining how habitat quality influences moose distribution on the landscape and moose health will be forthcoming in 2021.

Based on comparable moose mortality research in New Hampshire and Maine during 2013–2017, it is possible that moose in WMU E experienced winter tick epizootics in 5 of 6 years from 2014–2019. Multiple years of heavy parasitism may have weakened the overall health of adults in the population and thus made them – and their calves – more susceptible to the effects of parasitism.

Tick Impacts in 2020 and 2021

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 numbers can continue to fluctuate at densities that perpetuate heavy tick loads and unhealthy moose for the foreseeable future.

Vermont did not have any collared moose calves in 2020. However, survival of collared moose calves in Maine was among the best observed since they began collaring moose in 2014. Anecdotal evidence (e.g., reports of dead moose, bloody beds, engorged ticks in snowmobile trails) suggests that tick impacts were lower in Vermont in 2020. That is supported by observed summer calf recruitment by collared cows, which was the highest since collaring began (4 years). Adult survival was also slightly better. It is likely that the long winter of 2018–2019 was a factor in reducing tick abundance during the winter of 2019–2020.

Winter tick counts on bull moose harvested in October 2020 were comparable to those observed in recent years (Figure 4). While this measure provides an indication of tick abundance on the landscape,

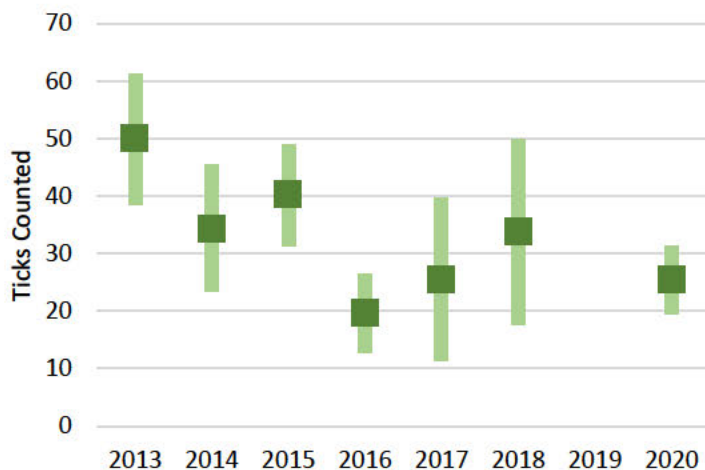


Figure 4. Winter tick counts on bull moose harvested in Wildlife Management Unit E, 2013–2020.

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. If the questing period ended early in 2020, tick loads will be moderate and the chance of an epizootic in 2021 will be low. However, if the questing period lasted into December, tick loads could be much heavier. It is not clear whether snow events in mid-October and early November in WMU E were sufficient to end the questing period.

Population Estimates

Regional moose densities in Vermont are estimated from moose sighting rates reported by deer hunters during the November rifle season. This approach was originally developed by the New Hampshire Fish and Game Department by relating 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 2020 (2018–2020 rolling average) density estimates for WMUs E1 and E2 are 2.19 and 1.71 moose/mi², respectively, which are well above the upper density objectives established in the 2020-2030 *Big Game Management Plan* (1 moose/mi²; Table 1).

Moose densities in all other WMUs remain below established hunting thresholds (Table 1).

Table 1. 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 2018–2020.

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	0.06	25	(19–30)
C	351	0.5	0.38	0.32	112	(91–132)
D1	449	0.5	0.38	0.24	108	(89–128)
D2	346	0.75-1	0.56	0.33	116	(97–135)
E1	306	0.75-1	0.56	2.19	672	(611–732)
E2	326	0.75-1	0.56	1.71	558	(492–623)
F1	108	n/a	n/a	0.07	8	(5–11)
F2	158	n/a	n/a	0.04	6	(4–9)
G	363	0.5	0.38	0.06	23	(16–29)
H	466	0.5	0.38	0.34	159	(136–182)
I	407	0.5	0.38	0.13	52	(41–63)
J1	464	0.5	0.38	0.14	64	(51–77)
J2	633	0.5	0.38	0.25	158	(133–183)
K	359	n/a	n/a	0.04	14	(10–18)
L	346	0.5	0.38	0.25	85	(59–111)
M	424	0.5	0.38	0.27	114	(88–141)
N	275	n/a	n/a	0.04	11	(7–16)
O	478	n/a	n/a	0.03	16	(13–19)
P	447	0.5	0.38	0.12	55	(39–72)
Q	219	n/a	n/a	0.03	6	(4–7)
STATE	7380				2361	(2006–2719)

The Department has received interests for moose hunting from different foresters that have documented moose browse impacts to forest regeneration in different WMUs and 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 the hunting threshold.

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, and forthcoming Blouin et al., currently in review) 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.

Generally, it appears that moose numbers in WMU E have been relatively stable over the past 10 years (Figure 5). Given observed survival and recruitment rates from collared moose, it is unlikely that the moose population in WMU E is currently increasing as rapidly as sighting rates suggest. However, given limited moose harvests – and almost no cow harvest – since 2016, some increase in the population can reasonably be expected. Therefore, this harvest recommendation and all population projections herein are based on a more conservative projected population estimate of 1,000 moose (1.6 moose/mi²; approximately 80% of the 2020 estimate) in the fall of 2021.

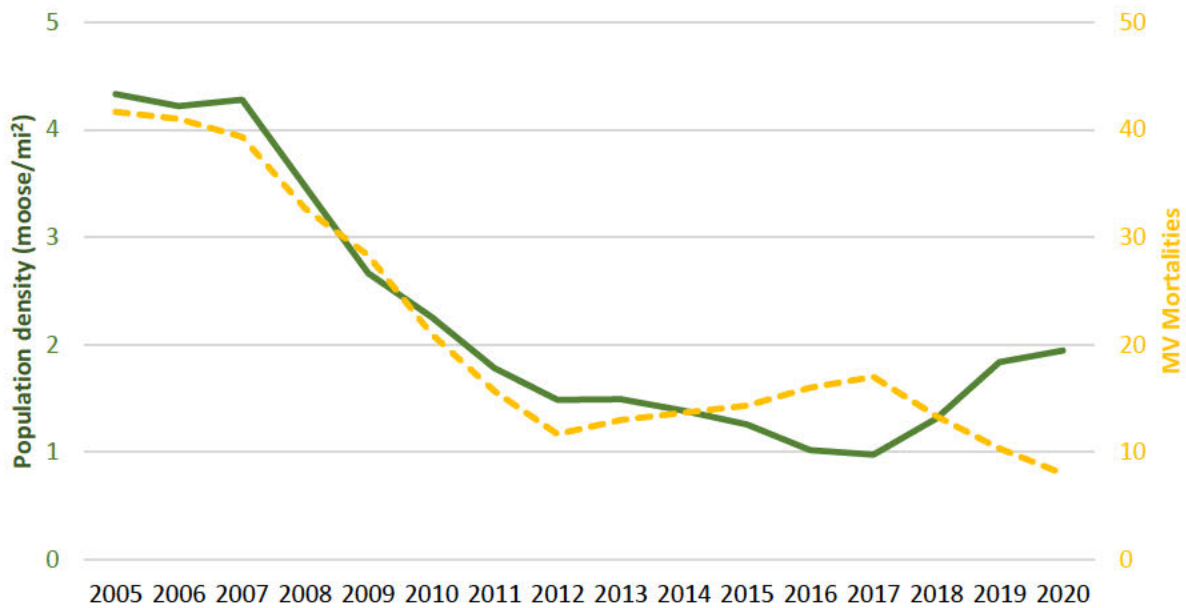


Figure 5. Rolling 3-year average moose density estimates (solid line) and motor vehicle mortalities (dashed line) in WMU E during 2005–2020. Density estimates are based on moose sighting rates reported by deer hunters.

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 in the near future.

The Department recommends harvesting at least 25 adult cow moose (5% of the cow population) in WMU E during the 2021 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 58 moose (range: 51–66) with an expected breakdown of 28 bulls (range: 24–32), 26 cows (20–30), and 4 calves (3–6). 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 2.

Table 2. Recommended 2021 moose hunting permit allocations by season, permit type, and WMU.

	E1	E2	Total
Regular Season¹			
Either-sex	24	15	39
Antlerless-only	24	16	40
Archery Season			
Either-sex	9	6	15
Auction²	choice		3
Special Opportunity³	choice		3
TOTAL			100

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

² Auction permits are either sex and winners have choice of season and WMU.

³ Special Opportunity Permits are either sex and allow choice of season and WMU.

Population Projections

Based on survival rates and calf recruitment observed from collared moose during 2017–2020, the moose population in WMU E would be expected to remain at its current density in the absence of any moose harvest (Figure 6), consistent with observed population trends over the past 10 years (Figure 5). If winter tick impacts are relatively severe each year (as observed during 2017–2019), tick-induced population declines, with no moose harvest, would take 12 years to reduce the population to 1 moose/mi². This presumably represents an unrealistic, worst-case scenario, and would be inconsistent with the observed population trend over the past decade. Further, detrimental effects on moose health will remain for several years after moose densities are reduced to levels that no longer support high tick loads. Even under this worst-case scenario, taking no management action will 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 conservative projected population estimate of 1,000 moose in WMU E (E1 and E2 combined) in the fall of 2021, the harvest of 25 adult female moose annually is expected to reduce the population to 1 moose/mi² in 9 years, assuming tick impacts similar to the previous 4 years, and no improvement in birth rates or survival rates (Figure 6). If tick impacts are relatively severe each year, it would take 6 years at this permit allocation to reach 1 moose/mi². Conversely, if tick impacts are reduced, as in 2020, it would take 11 or more years at this allocation to reach 1 moose/mi².

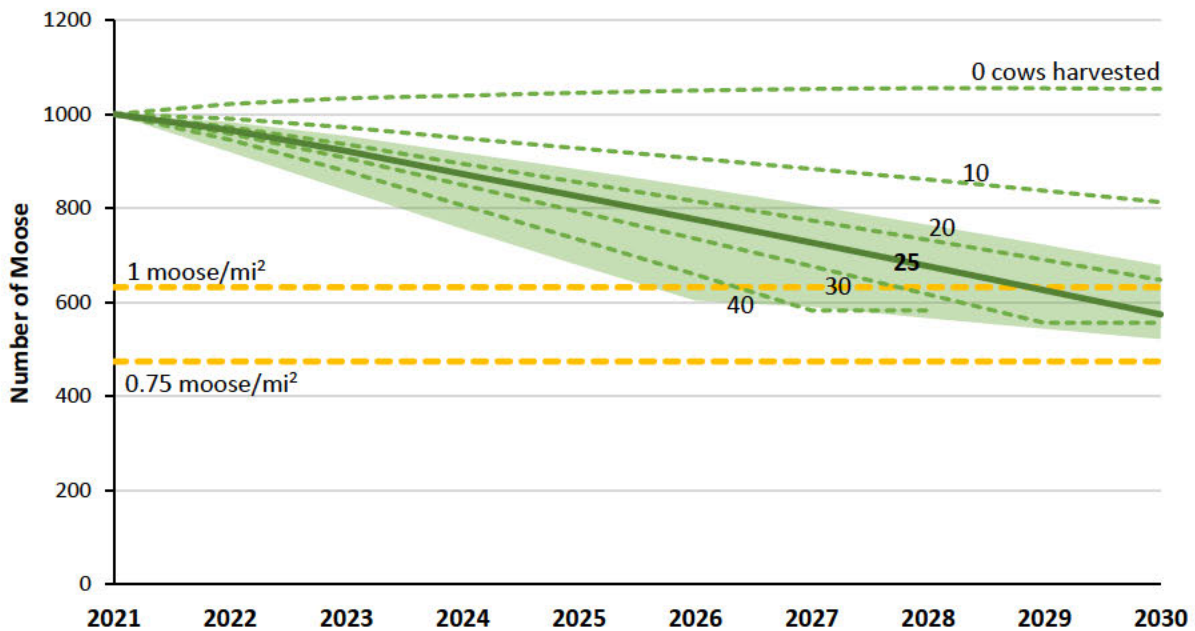


Figure 6. Moose population projections in WMU E at varying annual cow harvests and winter tick impacts, based on a starting population of 1,000 and survival and birth rates from radio-marked moose. Projections assume consistent harvest each year and no improvement in survival or birth rates. Green

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 number of permits allocated in 2020 was not sufficient to reduce the moose population in WMU E, even if 10 cows had been harvested, as expected, instead of 5. That conservative allocation was reflective of uncertainty around recent increases in 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 2021 harvest recommendation is sufficient to reduce the moose population and thereby reduce winter tick impacts on moose in WMU E. However, it reduces the population slowly enough to allow for adjustments to the harvest, if necessary, even if the actual current density of moose is lower than 1.6 per square mile (1,000 moose). Ideally, moose health should be improved as quickly as possible. However, low survival and birth rates observed from Vermont moose, 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 may be necessary to improve the health of the region's moose.

Literature Cited

- Bergeron, D. H., P. J. Pekins, and K. Rines. 2013. Temporal assessment of physical characteristics and reproductive status of moose in New Hampshire. *Alces* 49:39-48.
- Bontaites, K. M., K. A. Gustafson, and R. Makin. 2000. A Gasaway-type moose survey in New Hampshire using infrared thermal imagery: preliminary results. *Alces* 36:69-76
- DeBow, J. R. 2020. Effects Of Winter Ticks And Internal Parasites On Moose Survival And Fecundity In Vermont, USA. M. S. thesis. University of Vermont, Burlington, Vermont, USA.
- Dunfey-Ball, K. R. 2017. Moose density, habitat, and winter tick epizootics in a changing climate. M. S. thesis. University of New Hampshire, Durham, New Hampshire, USA.
- Ellingwood, D., P. J. Pekins, and H. Jones. 2019. Using Snow Urine Samples to Assess the Impact of Winter Ticks on Moose Calf Condition and Survival. *Alces*.
- Healy, C., P. J. Pekins, L. E. Kantar, R. G. Congalton, and S. Atallah. 2018. Selective habitat use by moose during critical periods in the winter tick life cycle. *Alces* 54:97-112
- Jones, H., P. J. Pekins, L. E. Kantar, M. O'Neil, and D. Ellingwood. 2017. Fecundity and summer calf survival of moose during 3 successive years of winter tick epizootics. *Alces* 53:85-98.
- Jones, H., P. Pekins, L. Kantar, I. Sidor, D. Ellingwood, A. Lichtenwalner, and M. O'Neal. 2019. Mortality assessment of moose (*Alces alces*) calves during successive years of winter tick (*Dermacentor albipictus*) epizootics in New Hampshire and Maine (USA). *Canadian Journal of Zoology* 97:22-30.
- Musante, A. R., P. J. Pekins, and D. L. Scarpitti. 2007. Metabolic impacts of winter tick infestations on calf moose. *Alces* 43:101-110.
- Musante, A. R., P. J. Pekins, and D. L. Scarpitti. 2010. Characteristics and dynamics of a regional moose *Alces alces* population in the northeastern United States. *Wildlife Biology* 16:185-204.
- Pearman-Gillman, S. B., J. E. Katz, R. M. Mickey, J. D. Murdoch, and T. M. Donovan. 2020. Predicting wildlife distribution patterns in New England USA with expert elicitation techniques. *Global Ecology and Conservation* 21.
- Responsive Management. 2019. Vermont residents' and hunters' attitudes toward big game hunting and management. Responsive Management Report, Harrisonburg, VA. 199pp.
- Samuel, W. M. 2007. Factors affecting epizootics of winter ticks and mortality of moose. *Alces* 43:39-48.

Appendix A: 2021 Moose Virtual Public Hearings Comments, Questions, and Department Responses

March 23, 2021

F&W Board Members:

Tim Biebel, Wendy Butler, Jay Sweeny, Brad Ferland, Marty Van Buren

F&W Staff:

Louis Porter, Mark Scott, Will Duane, Nick Fortin, Katy Gieder, Chris Saunders, Kim Royar, Jason Batchelder

Public Attendees:

37

Moose Comments & Questions:

Comment: Science seems pretty clear. Rely on biologists to do their work.

March 25, 2021

F&W Board Members:

Tim Biebel, Jay Sweeny, Brad Ferland, Marty Van Buren, Michael Bancroft

F&W Staff:

Louis Porter, Mark Scott, Will Duane, Nick Fortin, Katy Gieder, Chris Saunders, Chris Bernier, Jason Batchelder, Randy Hazard

Public Attendees:

13

Moose Comments & Questions:

Question: Research into the use of fungi to control winter ticks is good – might we be able to aerial spray this biological control in new clearcuts where moose congregate?

Fish & Wildlife Response: While the use of fungal pathogens to control winter ticks has shown promise in a laboratory setting, its application in the field has not been tested. The next stages of this research will determine its effectiveness in a natural setting and begin exploring how to best deploy this pathogen.

Question: Noticed that D2 also had a high moose population estimate so he wondered why no season is proposed in that unit?

Fish & Wildlife Response: The commenter appears to be confusing the moose density objectives with the current population estimates. WMU D2 has a higher moose density objective (0.75 to 1 moose per square mile) than all other WMUs except E1 and E2 because the area historically supported moose densities greater than 1 moose per square mile. However, the current estimated moose density in WMU D2 is only 0.33 moose per square mile, well below the objective and the hunting threshold.

Question: According to the moose harvest report, moose appear to be in good shape and relatively young. Wouldn't that indicate a good healthy population?

Fish & Wildlife Response: The average age of harvested bull moose (3.6 years) was close to normal, and too few cows were harvested to conclude anything about their age structure. Further, age structure provides little information on the health of moose.

Adult male weights were higher in 2020 than in recent years, but yearling and cow weights remained poor. Substantial and sustained improvements in moose physical condition (i.e., body weights and antler size) and reproductive rates will be necessary before the population in WMU E can be considered healthy.

Question: Will we treat cow permits the same way we treat antlerless deer permits (i.e., increase permit numbers until fill rates meet harvest objective)?

Fish & Wildlife Response: Harvest recommendations for both moose and deer are based on the number of animals harvested, not the number of permits. Future permit recommendations will be adjusted as needed, based on actual fill rates, to ensure that the desired number of animals are being harvested.

Question: With the increased cow permits, is there potential to have a strictly cow season?

Fish & Wildlife Response: An antlerless-only moose season was previously held during 2005-2009; however, more than 500 moose hunting permits were issued annually in WMU E during those years, so the extra season was necessary to reduce crowding. At this time, permit numbers are not high enough to justify a separate antlerless-only season.

March 26, 2021

F&W Board Members:

Tim Biebel, Jay Sweeny, Brad Ferland, Marty Van Buren, Brian Bailey

F&W Staff:

Louis Porter, Mark Scott, Will Duane, Nick Fortin, Katy Gieder, Chris Saunders, Kim Royar, Jason Batchelder

Public Attendees:

13

Moose Comments & Questions:

Comment: Doing the best you can when faced with changing climate but don't think your efforts are steered in wrong way. Maybe the best strategy is to completely eliminate moose and reintroduce them after the ticks are gone.

Comment: Has a camp in NEK in town of Brunswick. Has seen a lot fewer moose than he's seen before and they don't look good. Keeping the moose kill low is a good thing. The current numbers are appropriate, keep it a fairly small hunt, don't go overboard. Dept gets attacked by anti's a lot saying hunters want to kill moose and it's all about money. Need to keep science strategy. Early successional habitat focus or tax credit could help create more open moose habitat.

Comment: Thinks it's the right approach to reduce moose density in E, sees a lot of moose there.

Appendix B: 2021 Moose Public Comment Emails

Note: emails are listed in chronological order, from oldest to newest.

From: jean public [REDACTED]
Sent: Friday, February 19, 2021 11:56 AM
Subject: Re: tick outbreak prompts moose killing in vermont - what bullshitters they are

i am writing to say that this idea of killing moose because they have ticks biting them makes no sense at all. the idea is to find away to help the moose to resist the ticks not kill them. we need to respect and protect animals, not exist to kill them and makemoney from their dead bodies as the vermont fish and game killing council prposes to do with this. the mendacity andviolence shown by this proposal is disgusting.

moose want to live. they do not want to be shot to death. this comment is for the public recordl please receipt. [REDACTED]

From: Doreen Chambers [REDACTED]
Sent: Sunday, February 21, 2021 4:36 PM
Subject: Moose hunt

We own a camp in the Northeast Kingdom. We used to see moose all the time. We don't anymore. I am disgusted that theboard has decided to kill more to reduce the tick population. You need new non hunters on your board.

From: Craig [REDACTED]
Sent: Monday, February 22, 2021 8:57 AM
Subject: Moose Hunt

I am a land owner in WMU E and have had to deal with moose on my property and the damage they do to my trees every yearfor years. I think it is about time that you issue some permits in a lottery system just to land owners that have rather largetracks of land in the unit with the stipulation that they hunt just on their own land. The size of the track should be at least 150 acres or more and the above stipulation of only hunting on their own land with the permit would serve the purpose ofmanaging the moose on their property. Their property should not be posted in any way either. You do it for deer why notmoose as some sort of restitution of having open land for hunting to the general public and providing habitat for the moose tolive.

Thank you for your time
Craig Lantagne

From: Cat X [REDACTED]
Sent: Tuesday, February 23, 2021 6:50 PM
Subject: Moose public comment

Hello, I'm requesting that you DO NOT kill moose, and that you reflect upon the need for F&W to grow out of the culture of death in which you've been mired for WAY too long. Honestly, is killing all your department knows how to do? Ridiculous.
Try something ELSE for once.

Like this. This is how people in other states deal with ticks and wildlife.
<http://www.twincitiesnaturalist.com/2009/05/treating-deer-for-ticks.html?m=1>

Figure out a better way than killing.

Thank you.

C Jones

From: Jeremy Ayotte [REDACTED]
Sent: Saturday, February 27, 2021 10:43 AM
Subject: 2021 moose season recommendations

I'm not sure if I missed it through reading the 12 pages but no young moose please. I totally agree with either sex, I totally agree with targeting cow population, however, I totally disagree if people are going to be allowed to shoot that years calves. in order to be able to go shoot a moose I think people should be able to tell the difference between that years baby and a cow and a bull. Thank you for your dedication and work sincerely Jeremy Ayotte

From: Jeff Beaupre [REDACTED]
Sent: Wednesday, March 3, 2021 7:28 AM

Hello, the proposed plan to up the harvest of Moose, is completely irresponsible action. It is nothing more than a few people wrongfully in power using an excuse to hunt more moose. The majority of the tax payers need to be accommodated over a small special interest group. Moose population have been down since they expanded the numbers harvested some years ago. Thank you for your time
Chittenden County
Jeff Beaupre

From: Holly Tippett [REDACTED]
Sent: Wednesday, March 3, 2021 9:54 AM
Subject: Moose Hunting Season

Its not clear why you keep proposing moose hunting when the population is under such severe strain from climate change, loss of habitat and ticks. It seems odd that to save the moose from ticks you have to kill the moose. Did you ever get your study peer reviewed? And wasn't this the study sponsored by Safari International a special interest group that encourages trophy hunting?

I oppose opening up any areas in the state to moose hunting, its outrageous and not grounded in either science or data.

Holly Tippet
Panton

From:John Aberth [REDACTED]
Sent:Wednesday, March 3, 2021 12:06 PM
Subject:Moose Hunt

To Whom It May Concern:

I do not agree with VT Fish & Wildlife's proposal for a 2021 moose hunt. They claim we have to kill moose to kill ticks.

Fish & Wildlife claims that tick loads are highest in Wildlife Management Unit (WMU) E where moose are supposedly most concentrated, but they do not have sound data to support that statement. Most of their tick counts were done in E and the tick counts from other areas of the state are statistically insignificant. Also, the highest tick count on a single moose last year was 74 ticks. The average tick load was 22. Our dogs and cats probably have that many ticks each summer!

We know that climate change and warmer winters with less snow are the biggest driving factors on tick load. We would like to see Fish & Wildlife pursue other non-lethal alternatives to address the tick issue, such as the possible use of a tick-killing fungus.

Thank you for your consideration.

Sincerely,
John Aberth
Roxbury, VT

From:went mail [REDACTED]
Sent:Wednesday, March 3, 2021 6:39 PM
Subject:No to moose hunt 2021

I don't support a moose hunt to control the tick population. It's not a valid reason, there are other ways to control the ticks instead of killing a moose. I have lived here almost two years in far northeast kingdom and have yet to see a moose here. I also don't have issues with an abundance of ticks.

Please do a valid study that's not financed by those with a financial interest in the outcome.

Please also get even representation on the Vermont fish and wildlife, there are more than just a hunter's perspective living in Vermont.

Wendy Tuller
Island Pond Vermont

From: Steven Giordano [REDACTED]
Sent: Thursday, March 4, 2021 7:49 AM
Subject: Moose Tic solution

Of course killing the Moose reduces the tic problem.. Bad idea. (if you have 10 moose and you kill 4 then 6 survive still with thetic problem out of the 6 how many will die or not be born with the tic issue..Why cant they be treated with front line chemical like we do dogs.
If you can shoot the moose why cant we use a paint ball system to treat the moose with oil chemical or powders like we docows??

Note: the email chain below is related to several other comments

From: Fortin, Nick <Nick.Fortin@vermont.gov>
Sent: Friday, March 5, 2021 4:26 PM
To: Protect Our Wildlife VT [REDACTED]
Cc: Duane, Will <Will.Duane@vermont.gov>; Gjessing, Catherine <Catherine.Gjessing@vermont.gov>; Scott, Mark <Mark.Scott@vermont.gov>; Royar, Kim <Kim.Royar@vermont.gov>; Gieder, Katherina <Katherina.Gieder@vermont.gov>
Subject: RE: Moose tick density

Brenna,

We do have data from across moose range in Vermont, and small sample sizes do not preclude statistical significance. Sample sizes are indeed small in some WMUs in some years, but we can pool data across years and/or across similar WMUs and draw statistically valid conclusions. This is common practice in many fields when sample sizes are limited. We certainly wish we had more data, and we are working on ways to monitor winter tick abundance beyond counts on harvested moose, but the data we have are adequate to draw statistically significant conclusions about regional differences in winter tick abundance.

Importantly, we also work closely with New Hampshire and Maine, both of whom also conduct tick counts on harvested moose. Collectively, we have a large dataset over a broad geographic area that shows clear patterns in winter tick abundance.

Lastly, there is a large body of scientific literature that clearly demonstrates the density-dependent relationship between winter ticks and moose. It has been shown repeatedly, in many different areas, that winter ticks only reach problematic levels in areas where moose occur at relatively high densities (greater than 1 per square mile) and the climate is favorable (i.e., winters aren't too long).

Best,
Nick

Nick Fortin | Deer & Moose Project Leader (he/him)
Vermont Fish & Wildlife Department

271 North Main Street, Suite 215 | Rutland, VT 05701
802-786-3860 office | 802-793-8777 cell
vtfishandwildlife.com

From: Protect Our Wildlife VT [REDACTED]
Sent: Tuesday, March 2, 2021 8:17 PM
To: Fortin, Nick <Nick.Fortin@vermont.gov>
Cc: Duane, Will <Will.Duane@vermont.gov>; Gjessing, Catherine <Catherine.Gjessing@vermont.gov>; Scott, Mark <Mark.Scott@vermont.gov>; Royar, Kim <Kim.Royar@vermont.gov>
Subject: Re: Moose tick density

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.
Hi Nick,
How can VTFWD confidently state that tick load in WMU E is highest without having data on tick loads from moose across the state or only using small sample sizes (1 or 2 moose) in other WMUs? The data in the other WMUs is statistically insignificant. Or are you assuming that the tick load is highest in E because moose density there is presumably higher? We don't think you can accurately tell the public that the tick load in E is highest without having more data.

What are we missing?

Brenna

Brenna Galdenzi
President
Protect Our Wildlife POW
www.ProtectOurWildlifeVT.org
Stay current on: Facebook! | YouTube | IG @protect_wildlife_VT | Twitter @WildlifeVt
To unsubscribe, reply to this email with your first and last name and write "unsubscribe" in the subject line.

On Mon, Feb 22, 2021 at 1:59 PM Protect Our Wildlife VT [REDACTED] wrote:
Hi Nick,
We'll dig into this later this week, but I noticed there are only tick counts in 2018 and 2020 for WMU E1 & 2. Where's the data for other WMUs? Also poor sample sizes outside of E1 and E2.

Brenna

Brenna Galdenzi
President
Protect Our Wildlife POW
www.ProtectOurWildlifeVT.org
Stay current on: Facebook! | YouTube | IG @protect_wildlife_VT | Twitter @WildlifeVt
To unsubscribe, reply to this email with your first and last name and write "unsubscribe" in the subject line.

On Mon, Feb 22, 2021 at 10:43 AM Fortin, Nick <Nick.Fortin@vermont.gov> wrote:
Brenna,

The attached PDF includes all winter tick counts conducted on harvested bull moose from 2013 through 2020. We did not conduct tick counts on harvested moose prior to 2013. Those data are summarized in the table below. The procedure we use for counting winter ticks on harvested moose is also attached. We have always used this approach. I've also attached an email I sent you on 13 April 2020 which, at least in part, addressed this topic.

Mean winter tick counts on harvested bull moose in Vermont, by WMU, 2013-2020. Sample sizes are in parentheses.

WMU	2013	2014	2015	2016	2017	2018	2019	2020
C	10.8 (5)	19.1 (9)	7.8 (12)	34.5 (2)	6.0 (1)			
D1	2.5 (2)	14.4 (10)	23.9 (9)	7.5 (2)	27.0 (2)			
D2	29.3 (7)	19.7 (9)	18.4 (5)	26.4 (8)	8.5 (2)			
E1	60.3 (11)	34.1 (18)	41.3 (18)	24.2 (11)	33.1 (10)	28.1 (7)		27.0 (18)
E2	36.1 (8)	36.0 (3)	36.8 (6)	12.4 (7)	10.2 (5)	53.5 (2)		22.7 (10)
G		7.3 (3)	1.0 (2)	1.0 (2)				
H	5.0 (5)	24.2 (5)	0.0 (1)	5.5 (2)	0.0 (1)			
I	2.0 (1)	1.9 (8)	0.0 (3)	7.8 (4)				
J1		2.8 (4)	9.3 (3)					
J2	5.0 (1)	47.7 (3)	30.5 (2)		12.0 (1)			
L	0.0 (1)	0.0 (1)	0.7 (3)	9.5 (2)	0.0 (1)			
M	2.0 (1)	1.4 (5)	8.9 (10)	0.0 (1)	0.8 (4)			
O	3.5 (2)			0.0 (1)				
P		0.5 (2)	2.0 (2)		0.0 (1)			
Q		0.0 (1)	3.0 (1)					

Best,
Nick

Nick Fortin | Deer & Moose Project Leader (he/him)
Vermont Fish & Wildlife Department
271 North Main Street, Suite 215 | Rutland, VT 05701
802-786-3860 office | 802-793-8777 cell
vtfishandwildlife.com

-----Original Message-----

From: Protect Our Wildlife VT [REDACTED]
Sent: Monday, February 22, 2021 8:09 AM
To: Fortin, Nick <Nick.Fortin@vermont.gov>
Subject: Re: Moose tick density

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

Following up on this. Thanks.

Brenna Galdenzi
President
Protect Our Wildlife
www.ProtectOurWildlifeVT.org

> On Feb 17, 2021, at 7:47 PM, Protect Our Wildlife VT [REDACTED] wrote:
>
> Hi Nick,
> Can you please send me the tick load on moose kills from across the state by year, by WMU going back 10 years through the 2020 hunt? You said the tick load in E is significantly higher, but I haven't seen any hard data supporting that. Also, have you used the same methodology to count ticks historically?
>
> Thanks,
> Brenna
>
> Brenna Galdenzi
> President
> Protect Our Wildlife
> www.ProtectOurWildlifeVT.org

From:K Cameron [REDACTED]
Sent:Sunday, March 7, 2021 9:31 AM
Subject:Please say no to a 2021 moose hunt

Dear Agency of Natural Resources:

I have long been doubtful of this moose density thesis paper that established the save the moose by killing the moose theory the Fish & Wildlife Department is using. When I look at the sparse tick data by WME, I'm even more skeptical. What I see in the chart I was provided are holes and small numbers used to make simplistic conclusions for using hunting as the only tool available. Noticeably, though not conclusively, the 2020 tick numbers are lower after a harsh winter in a year without moose hunting.

We all know that climate change and warmer winters with less snow are the biggest driving factors on tick load. Let's use a systems approach to solving the complex problem of climate change and winter ticks on moose. Let's get out of our silos, work across departments and be creative. Let's see some modern ingenuity into non-lethal options like the promising research happening at UVM using fungi. We can't keep using tools from the 1800s to fix 21st century problems.

Please say no to the 2021 moose hunt.

Sincerely,
Kristen Cameron
Burlington, Vermont

From: Brenna [REDACTED]
Sent: Monday, March 8, 2021 9:40 AM
Subject: Moose hunt

I do not support a 2021 moose hunt.
I encourage fish and wildlife to find other ways to address the tick issue other than killing more moose to kill ticks. The herd is already suffering from the effects of climate change. Killing approx 50 - 60 moose will do nothing to improve herd health!

Brenna Angelillo
Stowe VT

From: [REDACTED]
Sent: Monday, March 8, 2021 10:19 AM

Dear Committee Members, I do not agree with VT Fish & Wildlife's proposal for a 2021 moose hunt. Fish & Wildlife claims that tick loads are highest in Wildlife Management Unit (WMU) E where moose are supposedly most concentrated, but they do not have sound data to support that statement. Most of their tick counts were done in E and the tick counts from other areas of the state are statistically insignificant. Also, the highest tick count on a single moose last year was 74 ticks. The average tick load was 22. Our dogs and cats probably have that many ticks each summer!

We know that climate change and warmer winters with less snow are the biggest driving factors on tick load. We would like to see Fish & Wildlife pursue other non-lethal alternatives to address the tick issue, such as the possible use of a tick-killing fungus (see more here <https://www.mypmp.net/2019/10/10/fungi-could-be-the-answer-to-winter-ticks-new-research-shows/>)

VT Fish and Wildlife should support more non-lethal methods. Thank you for your consideration in this matter.

Sincerely,
Lark Shields
Craftsbury, VT

From: Lisa Jablow [REDACTED]
Sent: Thursday, March 11, 2021 10:00 AM
Subject: NO to 2021 Moose Hunt

In view of the fact that the data on tick loads is incomplete and inconclusive, more and better studies need to be done.

Even more importantly, there are non-lethal alternatives to addressing the tick situation. Truly responsible management on the part of the FWD would be to investigate and pursue these options before caving in to pressure from the small cadre of license holders.

The numbers of moose are falling and the answer is definitely NOT to have a moose hunt.

Lisa Jablow
Brattleboro

From: Sophie Bowater [REDACTED]
Sent: Monday, March 15, 2021 11:46 AM
Subject: Moose hunt

The Fish and Wildlife Department:

I have lived in Vermont for 18 years and I have seen 3 Moose. This is just not enough! I know that the Moose population has decreased dramatically due to tick infestation in the last 10 years. I do not agree that we need to kill Moose to kill ticks and I would like to see no hunt in 2021. It would be great to actually have a few years without hunting them and see what effect this has on the population. I know that this was done in 2019 but I have not yet had my question answered on how the Moose population was affected that year. These ticks don't just live on Moose but can live on deer as well as farm animals so why would these ticks not just find another host if Moose start disappearing? Climate change is not going away as it is getting warmer each year. This brings more ticks so I would think they would just find another host. I would like to see the Department try and find non-lethal options to address the tick issue like a tick-killing fungus (see more here <https://www.mypmp.net/2019/10/10/fungi-could-be-the-answer-to-winter-ticks-new-research-shows/>). This seems like a much better option than to kill more Moose in turn bringing the population further down.

Sincerely,
Sophie Bowater
Middlesex, VT.

Note: below is a related email chain between department staff and this commenter.

From: Fortin, Nick <Nick.Fortin@vermont.gov>
Sent: Friday, February 19, 2021 12:34 PM
To: Sophie Bowater <protectanimals26@gmail.com>; Scott, Mark <Mark.Scott@vermont.gov>
Subject: Re: Moose population

Ms. Bowater,

Thank you for the reminder.

Answers to your questions can be found in the Department's [2021 Moose Harvest Recommendation](#), which was presented to the Fish and Wildlife Board on Wednesday night, and in the related [Moose Management FAQs](#) on our website. Please let me know if you are not able to find the answers you are looking for.

Best,
Nick

Nick Fortin | Deer & Moose Project Leader (he/him)
Vermont Fish & Wildlife Department
271 North Main Street, Suite 215 | Rutland, VT 05701
802-786-3860 office | 802-793-8777 cell
vtfishandwildlife.com

From: Sophie Bowater [REDACTED]
Sent: Friday, February 19, 2021 12:22 PM
To: Fortin, Nick <Nick.Fortin@vermont.gov>; Scott, Mark <Mark.Scott@vermont.gov>
Subject: Re: Moose population

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.
Dear Mr. Fortin and Mr. Scott,

I wrote you this letter 8 days ago and still have not gotten a response from either of you. I look forward to hearing back from you. Thank you.

Sincerely,
Sophie Bowater
Middlesex, VT.

On Thu, Feb 11, 2021 at 9:21 PM Sophie Bowater <protectanimals26@gmail.com> wrote:
Dear Mr Fortin and Mr. Scott,

I wrote to you last May with some questions about the tick loads on Moose. You sent me an informative letter but there were some questions not answered. One of the questions I had which didn't get answered was if there was a comparison study done in Vermont on Moose populations and tick loads when there was no hunting permits given out for the year of 2019?

A couple more questions I have are:

1. I would like to know the tick loads on moose in WMU E1 and E2 pre 2020 hunt and the load data per moose from the 2020 hunt?
2. Also, if there are less Moose, it is said that these ticks also enjoy deer, horses and cattle, so why do you think that killing Moose will decrease the tick population? I would think they would find another host.

I hope you are well during this trying time.

Sincerely,
Sophie Bowater
Middlesex,VT.

From:Hollie-Anne Campbell [REDACTED]
Sent:Sunday, March 21, 2021 8:24 AM
Subject:Moose population

Hello. I have a deep love for wildlife and moose happen to be my favorite animal. I was reading an article on the moose population and tick problem. What if people started planting more vegetation for the moose to feed off of so they have a larger potential of surviving the feasting period for the ticks? I read that the moose are becoming anemic. When we eat we get most of our nutrients. It's an idea that could help! ☺

I hate the thought we have to kill the moose. I understand how it may be more human but it's the calf population that isn't doing the best. I know people are not going to just hunt calf. We finally have moose back in our region again so to kill it off nothing seems, unjust. There has to be a better solution!

Hollie-Anne Campbell

From:Dottie Nelson [REDACTED]
Sent:Monday, March 22, 2021 5:20 PM
Subject:Moose hunt 2021

To Members of the Agency of Natural Resources,
I'm writing to ask that you please not allow a 2021 moose hunt. I understand that the decision to allow a hunt in WMU-E was made using questionable data. Killing moose is not going to solve the tick problem which is getting worse because the climate is warming. Humans are to blame for that and animals, like moose, should not have to die because humans are failing to live in harmony with the environment. Really. Think about it. How will killing moose get rid of ticks? It won't. Please don't allow a 2021 Moose hunt to happen.

Thank you,
Dottie Nelson
Middlebury

From:Ann Smith [REDACTED]
Sent:Wednesday, March 31, 2021 11:39 AM
Subject:2021 MOOSE HUNT LOTTERY

I am AGAINST the proposed Moose Hunt because of the tick infestations on the Moose.
A more humane method must be used to prevent tick infestation such as work being done at UVM to use fungus to kill ticks.

Annie Smith
Westminster VT

Appendix C: 2021 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 a message.

2.23.21 - This is Karen Shaw in Hardwick. I think that you should be attacking the ticks not the moose and if you could call her a hundred and twenty six of them, you know, at least treat that many there's also the possibility of putting some avermectin into paintballs and having an open season on moose try to kill the ticks down at the moose.

2.23.21 - Hi, I'm Kathy from Montpelier. I'm calling about the moose proposal. I understand takes are a big deal, but there are better ways to save moves from to extend to kill them that just makes zero sense except in Fish and Wildlife World. Please do not kill moose. Don't don't do it. They're they're so special here, and I will never forgive you if you do this, so, please don't do it. There's just no reason there's so many ways to go online for Christ's sake study all the ways that that other states have dealt with ticks on Wildlife including on deer on Bears on all sorts of things. It's all out there. I I just did a quick search and there's so many things you can do. You don't have to kill these moves and how ridiculous of you to think that that is a solution. Thank you.

2.25.21 - Hi, this is Walter Beckford lives in Lyndonville. I was wondering if you guys are. Putting the car was on I'll let loose and you claim in the paper. It is something that moves or 90,000 ticks or when you put in the long run off to spray stuff to kill the ticks. Agree, or sushi? Can you bring up my direct Grill spray both sides that would give a few more of them a chance to live and get going to make the bird bigger. That's my opinion. Doesn't let them all die a slow death. But anyway, take care. Bye.

2.26.21 - This is Sandra Schneider town of Westfield Westfield. I think your moose season plans are just fine. I would like to know more about this Tech and why there are such a huge number. How do they get on the Moose? It looks like the same thing that they do when they want to do. What do you call it where the government the military has been dumping ticks and Lyme Connecticut and places like that for for the Lyme disease and where would a moose be and how long before 90,000 pics could get on one moose, or is it a deliberate plant off and what kind of physical problems are those moose having there must be some kind of internal stuff that you could tell from blood test. Thank you very much. [REDACTED]

3.3.21- This is Sandra Schneider calling from Westfield Westfield. I had called before but I keep thinking about this picture that was in the chronicle of all the ticks on the moose and trying to figure out how so many get on one animal. It's off. I've under the impression that ticks are attracted to carbon dioxide. I think it is the animals give off and that would be animals that are not a prime help that would do that and that the ticks are like at ground level and as the animal goes along they crawl up. Now these moves have great big long strides. So how many ticks on the ground are they going to half an hour? Monday I guess if they laid down some place where some picked had a lot of eggs and just laid there a long time and enough kicks act. I guess they could get on it that way but it doesn't make a whole lot of sense that so many ticks can congregate on the moose and what other animals in the home state are requiring this large number of ticks off. Thursday Thursday off so there's a new book out called and they do seem to have credentials Freedom of Information Age type calls for our military releasing tips with viruses as part

of their own home. program on biological warfare which apparently they did back when Kennedy was in office and apparently said real places around the United States since I don't know if accidental or deliberate off They showed Fort Eustis a couple of times. Well, I'm New Hampshire was one month and so many many ticks. It looks like someone walked up to them and released a whole politics when you have that many. So could you please tell us in an article in the paper how they get that many ticks on them. I mean, I would think that that it would be a pretty straightforward kind of thing.

3.3.21 - This is Sandra Schneider from Westfield Vermont. I had called before I'm calling again. I been reading Pat Cole b c o l b y. She is from New Zealand, I believe and she is dead for books on Animal Care One is on horses. One is on cattle one is on cheap and one is on goat's cheese and they are the simplest to read books on animal care that I think I have ever found and she indicates in their wage when animals are getting an adequate amount of copper that they are not bothered by the parasites and that would include phone number. I believe and what she uses our licks and elixir designed for the specific type of animal and I believe the LED light and copper maybe Boron different things in it, depending on what you are trying to feed and I wondered if that approach has ever been taken off with the Moose who are clearly not healthy animals, so they cannot be eating right? I would suggest the Sheep maybe one of the most detailed in terms of her various experiences with some really wide range of conditions, but actually having all of them and opening them side-by-side and seeing how different animals respond might be helpful to you Thursday. Nothing, no, nothing about the the digestive system of the Moose. So they're available from Acres Thursday a c r e s u s a and or if they're out of stock. I'm absolutely certain you'll be able to get them from Amazon package and I would really encourage you to take a look at those and see what could be done with the salt licks. Even if you thin the herd you're still not going to get rid of the new age Christian problem because of what is growing in this area code. home best of luck to you and I really think you will be satisfied in Reading those books that this could be a very good approach and thank you so much for lunch Monday.

3.3.21 - My name is Shaun fair. I live in Milton Vermont and I'm calling to let you know I oppose the 2021 moose hug. I believe that the number of moose in the state is at a critical low point and that protecting the Moose is important job and that killing moose to reduce the tick population seems very counterproductive. Thank you and good day.

3.3.21 - Hey, this is Jack galdenzi. I live in Stowe Vermont and I want to be on record as opposing moose hunting season for 2021. The moose hunt I should say. Thank you.

3.3.21 - Ken Bechtel starksboro. I'm I'm calling to say no to a 2021 moose hunt is ludicrous to kill off the deer because they're being decimated by 6. That's the dumbest thing. I have ever heard. It's like are we all just balance down to whatever the hunters wants. Let's protect some of our Wildlife. We won't have him in twenty years if we keep up this way. Thank you for your time.

3.3.21 - Yeah, hi. I'm leaving my name Deborah Hurlburt, Salisbury, Vermont. Regarding the moose hunt and the proposal my public home. It is I am opposed to that. I think you're looking in the wrong place for managing ticks as I say, it's killing more moose are not going to do that leaving free toyos and possums and bobcats and all the little critters around. There are better able to take care of the tick population, which is exploding around here, and it has nothing to do or little to do with populations. So I'm opposed to that please log that in and I'd love to see the final count of what these calls are. Thank you so much. Again, Deborah Hurlburt, [REDACTED] [REDACTED]. Thank you.

3.3.21 - My name is Alice pillow and I live in Roxbury Vermont and I'd like to leave the message to say no absolutely no to a 2021 moose hunt. It's a very bad idea from many many different aspects and I want that on the record Alex pillow Roxbury Vermont. Hi.

3.3.21 - Hello, my name is Joanne Herrick. I am from Reidsville Vermont and I'm asking you to please say no to 20 21 moose hunting and to urge your department to use other non-lethal options to address the tick issue besides killing our moose in Vermont. That is ridiculous. Thank you.

3.3.21 - Hi, my name is Sarah Woodard and I live in Newfane. I do not support a moose hunt ever. I do not support any hunting ever. I am a vegan. I don't support em any other animals in any way I don't support fishing or hunting or anything like that. So as far as a moose hunt for 20 21, it's a I would say no further more killing moose is not going to help prevent ticks ticks are actually detrimental to the moose population. So you guys have it the other way. You have guys have it backwards waterfall. I'm a bird watcher off in addition to being vegan. So I say leave them alone. I want to look at them not kill them, and as far as fish management, the only management I want to see is the kind when we don't pick them out of the rivers for any reason. They took a pain just like human beings and other animals, so leave them alone to thank you so much for taking public comments and have a great day. Bye.

3.3.21 - Hi, my name is Brenna Lindsay, and I'm calling from Stowe Vermont and I'm calling to object to the twenty Twenty-One thousand. The Moose herd is on a steep Decline and Vermont fish and wildlife should be figuring out other ways to address the tick population other than killing moose to kill ticks. I am not confident in the data that fish and wildlife is using order methodologies on the account. So again, I'm asking or my position is no to a 2021 moose hunt. Again, it's running from Vermont to [REDACTED] to thank you.

3.3.21 - Hi, my name is teal church. I live in Middlesex Vermont and I'm leaving a public comment to say that I think that the 2021 Mouton M idea and I am would say no to it for sure. Thanks.

3.3.21 - Hi, my name is Danielle Lindsay. I'm in Stowe Vermont. I'm calling to express my concern about the moose hunt and I want to say that from a public comment perspective. I don't think there should be a moose hunt in 2021 at all. Let alone a hundred most in water management unit that the the data is off completely flawed. It's it's not empirical and I think this is based on anecdotal data. You don't have enough of a sample size to work from across all the different Water Management units and to say that there's more ticks in E is only because there's more moose in E and to kill more moves to kill ticks is life. You know the The carpenter with a hammer and everything looks like a nail is just doesn't make sense. So I think I think the group needs to go back to the drawing board and and stop play cating to Hunter's. It's just focus on the facts and the science and base it on that and not money and profit and and culture or Heritage and those things just just stick to the facts. I sat through the entire moose hunt call, and it's just it's kind of an embarrassment your your data Gathering skills, and so on so long, so no more son 21. Thank you.

3.3.21 - Hi, my name is Gail Lily Lilly. I'm from Guilford Vermont and I'd like to vote no on a moose season. Thank you very much.

3.3.21 - Hi, my name is Jessica Russell and I live in Morrisville Vermont, and I wanted to say please know to the 2021 moose hunt. I think there are far better ways to manage a tick population that's killing off moose is actually frankly a little bit ridiculous. So, but the more science a little less insanity, and please know to the 2021 is sent. Thank you.

3.3.21 - Hi, my name is Alyssa polacek Lakota from Dorset Vermont and I am very opposed to the moose hunt. I think it's rather ridiculous when they are suffering the way they are combating ticks is combating ticks not combating moose to reduce the ticks. There's many other species out there that also collect ticks. So before you know, it you'll have called all of the animals in wildlife habitats in order to control the ticks. So do us all a favor stop appeasing those who have dollars or wants to hang a trophy on their wall and do what's right protect the Moose don't destroy the moose we need them. That's my public comment. If you need to call me back. My cell phone is area code [REDACTED] Thank you, and please do right by wildlife.

3.3.21 - This is Pat Monte Ferrante from Stow. Thank you for letting me leave this comment. I am a hundred and 10% against the 2021 moose hunt proposition. It's outrageous. It's wrong, and it just doesn't make any scientific sense from what I've studied in Red. So I am totally opposed to it. Thank you for letting me voice my opinion and I hope you will let everybody's voice be heard when you make these decisions. Thank you.

3.3.21 - Hello, my name is Aaron Robinson e r i n Robinson Michael Smith family and I live in Windham County Vermont. I want to go on record and say I'm a big old know for the 2021 Routan and I urge you to pursue other non-lethal options to address that issue. Like, you know, having a were having chicken, you know, having people have chickens more anything. There's no use and there's no reason to have to kill animals, too. kill other animals I don't know what I'm saying. But no I I say no and I want to go on record saying no to the 2021 moose hunt cuz you don't need you don't need to kill moose to kill ticks off. I understand that, you know people kill Moose for food, but we don't support killing moose until the state has a better handle on their on their populations. You guys need to be a bit more creative in your recommendations how to how to decrease the population. All right. Thank you. Have a free day. Hello, my name is Aaron Robinson. I just called a second ago. My county of residency is Windham County here in Vermont? Obviously, so I called to talk to say no to the 2021 moose hunt and the department to prefer to pursue other non-lethal options to address that issue like a job hunting if you ban turkey hunting turkeys eat up to what is it to Wild Birds Unlimited according to Wild Birds Unlimited in adult life is one of the most precarious predators. Around an individual may eat up to \$200 more a little creatures a day. That's that's many of the of the the wild birds eat up to that many. So there you go. Stop killing turkeys and you only have to kill all the the Moose. There's no sense in any of of of what you're doing. All right. Have a great day.

3.3.21 - My name is Renata Callahan. I call on my own behalf and behalf of my husband Glen Callahan. We live in Johnson County and we most people say no to a 2021 moose hunt if it is about controlling the tick population. I would say that there are far better options and months to doing so then to kill the few moose that we have left moose under under severe threat, and we should be doing anything to protect them and not kill them. Thank you very much.

3.3.21 - Hi, my name is Kelly Robinson. I'm calling from Greensboro Vermont and I am calling to say no to a 2021 moose hunting season. Thank you.

3.3.21 - Hi, this is Kerry Edmonds from Greensboro Vermont. I want you to vote no fleas on the moose hunt and 20 21. Thank you. Bye.

3.3.21- Hi, this is Alex Pastor from very City. And I say no to the 2021 there are better ways to manage ticks and it's not by killing one of the animals that carry them. You should move that back a little bit and start thinking about the vector species that carry them like mice and so forth and allowing that to also

be managed through allowing more fox and coyotes to do their job. So anyway, just some thoughts for you guys. No absolutely not to the 2021 moose hunt. Let's move on and think of better Solutions. Thank you so much for taking public comment. Really. Appreciate it. Have a good day.

3.3.21 - Hi, my name is Norma Norland, and I'm from New Haven Vermont. I'm calling in opposition to the 2021 projected moose hunt. Thank you. Bye.

3.3.21 - Hello, this is Steven Davis in South Burlington Vermont calling to leave my public comment on the moose hunting proposal. I strongly strongly disagree with putting boost particularly this year as we continue to see the moose hunting the sorry the moose population decreased. It's going below the the the very numbers that the fish and game while the fish, you know, fish and wildlife scientist put forward as a stable population. So you're disregarding your own scientists and science to continue hunting moose, which are already in a sharp Decline and say you need to hunt them to keep them the population healthy by reducing tick infestation is nonsense home particularly. So anyways, I'm strongly opposed to moose hunting this year. It goes against everything we as vermonters stand for.

3.3.21 - Hi, my name is Leslie Hudson h u s t o n and I live in Waltham Vermont and I'm calling to leave comments on a 2021 moose hunt. I don't think this movie should go forward with the current state of affairs with moose. They're in enough trouble as it is, and I just think we should call it off for a year and take stock of the situation. Thank you.

3.3.21 - Hello, my name is Gretchen hidell h i d e l l. I live in Colchester Vermont, and I'm calling to say no to drugs killing moose, and I would like to see a more appropriate method to doing pick control in our state of Vermont turkeys and possums are too picky eaters, and I would like to see an encouragement of those two or more species that are able to help with controlling ticks vs. Killing moose. So I say no to killing moose. Thank you again, and hopefully you get home message.

3.3.21 - Hi, my name is Christine Cabrera. And I'd like to I live in Rutland Vermont Rutland County. I'd like to give my opinion or comment on the job hunting thing. I I honestly I think it's terrible. I don't think it's fair that an exotic hunting club can donate \$120,000 to our fish and wildlife and more or less like like rigging their own study cuz I just seems pretty criminal and then I think it's better ways. You can go besides like with murdering a bunch of moose were already on the decline. I'm sure like, we could suggest vermonters eat a little bit more garlic as it's anti tick repellent things like just simple things off cover your head with a some sort of wrap, you know, just simple basic things that you could do in the woods on top of other methods such as fungi and dead. Other research related prophylactics besides just eradicating animals. Yeah, that's about all I got to say. Goodbye. Thank you.

3.3.21 - Hello, my name is Rebecca Bizet. I live in Milton Vermont. I'm calling to leave a comment about the proposed season. Absolutely am not in support of killing moose to Kill tax. There are so many other animals that ticks travel on. It feels absolutely ridiculous. To kill move. I don't think we have a moose overpopulation and it's a travesty to kill such a beautiful animal.

3.4.21 - My name is Caitlin and I live in South Burlington and I would like to vote no on the moose hunting. Thank you.

3.4.21 - Hi, my name is Theodore feder. I'm a resident of Essex town Vermont in Chittenden County. I'm calling to say no and encourage you all to deny having a 2001 moose hunt. This is not a responsible move despite this study that was funded in part by Safari Club International suggesting that there was

should be there should not be a moose hunt. Please study the results further look into the issue further and pursue other non-lethal options to address the ticket. Thank you.

3.4.21 - My name is e d Varley Essex Junction and like vote no moose hunting. crazy people

3.4.21 - Hello, my name is Jennifer Love It I live in starksboro Vermont. I want to strongly voice my concern about the moose hunt and I want a real strong no vote to a 2021 moose hunt and urged the department to find another way to deal with a non-lethal way to deal with the ticket issue fact that there are ticks and there are diminishing moose population are not necessarily correlated. In fact probably are not most need to be protected and killing money is not a smart way to deal with either situation. Please cancel any further Hunts on moose and perhaps even protect them. Thank you.

3.4.21 - My name is Sean Smith. I'm calling from Huntington and I'm calling to comment on the proposal for those hunting and I would say that no to a 2021 was hunt. Killing more moose is not the answer to reducing the tick population. Thank you.

3.4.21 - Yes, this is Linda Rayville Belvedere Vermont, and I'm saying no to that 2021 moose hunt. There's got to be other ways to address the ticket issue. I don't think killing more of our Wildlife is the answer. Thank you.

3.4.21 - Hi, my name is Joel Bartley. I'm a resident of Essex town. I'm calling to leave comments on the 2021 moose Harvest recommendation. I like to urge consideration of not having a moose hunting season because in this day and age hunting is not a necessary thing for people to be able to get food and there has to be some better way to to manage the tick issue. That's all. Thank you.

3.4.21 - Hi, my name is Ming and I'm from Burlington and I don't want most hunting and killing of The Moose for the month. They can do any other thing. Thank you.

3.4.21 - My name is Joyce Littlefield, and I'm calling from Lyndonville Vermont and I am opposing the 2021 moose hunt off. This is not good science. It's not backed by good science, and there are other non-lethal methods to reduce tick infestations such as home stopping the mass extinction of coyotes and other animals that feed on either Vector animals or feed directly on ticks. So again, I am being mentally opposed to the 2021 moose hunt. Thank you.

3.4.21 - Hi, this is Maya Drummond from Londonderry Vermont. And my phone number is [REDACTED] I'm calling to say no to the Vermont moose hunt in 2021. I'm opposed to that also is a note. I am opposed to trapping of all kinds. I think it's barbaric and I know that this form may not be for that topic, but that is something on my mind as well. So known knew the moose hunt and no trapping, please thank you so much.

3.5.21 - Hi, my name is Stephanie carabello. I'm from Essex Junction, and I just wanted to give my input on voting for know in the killing of innocent most of our state law. Thank you so much. If you need a call back number, it's [REDACTED]

3.5.21 - This is Alison my recovery, and I'd just like to vote. No on the moose hunting season for 20 21. Thank you.

3.7.21 - Yes, my name is Sheila Vogel. I'm in Newport Centre. And I'm pretty sure this is going to fall on deaf ears, but I would like to add my name and my voice to know on a 2021 moose hunt. I'm not sure

that killing. The host of The Winter ticks as the Moose is is really the solution to the problem any more than I would be to kill. Kovac patience to rid the planet of the virus. But anyway for whatever it's worth. I would like to say no to the moose hunt. Thank you very much.

3.19.21 - Good morning. My name is Sam. Aquino. And I live in Grafton Vermont in Windham County. I Vietnamese opposed this wage. I think it's just another money grab from the state to promote this moose hunting. I think the third column on the well, I don't know what paper you have forged paper is the Vermont Journal says it all research has beginning with research has shown I doubt very much the streets research has shown anything. That's valid. I think it's just another way of getting money for I don't know. You know. I'm so I'm very upset about this. I'm having a hard time spitting this out, but I understand it's also open to out-of-state Hunters so that I'm not opposed. Also if this moose hunt has to happen, which I wish it really wouldn't I prefer it to happen with a vermonters hunting them? That's my comment. Thank you.

3.23.21 0 I am calling to leave my public comment Stephen Davis South Burlington Vermont regarding the moose hunt. I'm strongly against having a moose hunt this year with the numbers are crashing. Your own scientists are saying that the numbers are crashing and it's clear that if you go forward the moose hunt you're doing it just to satisfy your own constituency. We're ignoring the science behind this. The last thing we need right now is moose hunting according to quote unquote Ki pic management under control. That is total BS in your scientist who worked there even agree with that so by vote strongly opposed to a moose on. Thank you.

3.23.21 - Hi, my name is Claudia Wells w e l c h and my town is callus Vermont. Cala is dead, and I am calling to register my know for a moose hunting season and twenty Twenty-One. Thanks.

3.23.21 - Hi, my name is Whaley Miller, and I'm a resident of Roxbury Massachusetts. That's Boston, and I'm calling about the moose hunting season. I don't think the population can support hunting and took the rules have to be amended to encourage vermonters to hunt and not new englanders. I don't think people should be coming up and trotting around and shooting moose this year. Thank you very much.

3.23.21 - My name is Shaun Fair Thayer. I live in Milton Vermont, and I'm calling to say that I oppose the 2020 moose hunt. Thank you.

3.24.21 - Hi, my name is Leslie blow and I live in Middlebury and I'd like to comment on the 2021 moose hunt. I say absolutely not, I believe fish and wildlife should be in existence to preserve the health of the animals in Vermont. And I don't think trophy hunts eggs are representative of maintaining Health trophy hunts are pointless self-centered and I don't want to sound cruel to fish and wildlife. I know you guys need money just like every other state agency but hunts like that should not be supported by fish and wildlife just to generate Revenue. So anyway, I say absolutely not. Thank you very much. I appreciate it by

3.24.21 - My name is Monica Farrington. I live in South Burlington Vermont. I'm a native vermonter and I say no no no to the moose hunt off work short of moose as it is and they're Hunters are coming in from out of state to kill the best and in the largest and the oldest it's got to stop. No. Thank you very much.

3.24.21 - Hi, I'm calling to voice my opinion about the moose hunting question and my opinion is no no, and I you know, please moose hunting. That's just not not right. No. I say no to the moose hunt. My name is Eugene White Jr. My residence is I live in Essex Junction Vermont off. That's Eugene White Jr.

Essex Junction, Vermont. [REDACTED]. Thank you very much for taking my opinion into account. Thank you.

3.24.21 - Hi, this is Rick Cohen. I'm from Rockingham Vermont and I would like to oppose the expansion of the Moose permission, especially to out-of-state Hunters who are trophy hunting are are moose. I don't think the herd can stand much more hunting and when you kill the trophies breeding stock goes downhill. And so please take this as a vote against expanding the moose hunt or even holding it at all this year given the the terrible condition of the herd. I'm a Hunter, so I'm not anti-hunting. I just want to be smart about hunting and also use our Wildlife Resources for the people of Vermont not for out-of-staters coming here to pick up a few trophy moves. There are to be to be hunted. Okay. Thanks. Bye.

3.24.21 - Hello, I'm Anna Benson b e n s o n. I live in weybridge Vermont. My number is [REDACTED]. I am calling to say no to the 2021 moose hunt. And I would say no every day if I could have had a chance. That's how I feel about it. It's in the the idea of people coming to get a trophy head of a beautiful Vermont moose makes me just sick in the angry. Thank you, bye-bye.

3.24.21 - Hello, my name is John Benson, and I live in weybridge. My phone number is [REDACTED], and I wanted to leave a comment regarding the moose hunting season for twenty Twenty-One, and I went to Rome say I strongly favor a complete moratorium on that hunting season this year. So no no issuing of moose hunting licenses at all. Thank you, bye-bye.

3.24.21 - My name is George Keeley. I live in East Middlebury and I'm very much against the moose hunt and waterfowl shooting.

3.25.21 - Good morning. My name is Anne Jameson. I live in Marshfield and I represent Green Mountain animal Defenders as their Wildlife advocacy coordinator of I feel very strongly that there should be no responses here twenty Twenty-One since most populations are already threatened killing. The healthiest ones is true. Well, I don't believe those of lesser breeds left. There's Frank to breed further weakening the population as a whole please no hunt in 20 21. Thank you.

3.25.21- Hello, my name is Sam Rogers. I'm calling from Stowe Vermont and I would just like to say no to the 2021 moose hunting season. I've seen a decline in my lifetime living in Vermont of moose that we have and I just see it as an absolute crime. We need to protect the most and bring back their numbers in Vermont. Thank you so much.

3.25.21 - This is Lisa from Brattleboro, and I am calling to State my opposition to the 2021 moose hunt. Thank you.

3.25.21 - My name is Barbara Felicity. I live in Huntington Vermont and I am saying no to a 2021 moose hunts. There is not sufficient data to indicate that a moose hunt is off.

3.25.21 - Hello, this is dr. Wendy Lavalley a resident of Brattleboro Vermont and I'm calling to register my adamant opposition to the 2021 moose hunting season. Thank you very much.

3.26-21 Hi, this is Molly Casino from Stowe Vermont [REDACTED], and I'm calling to say no to the 2021 Bruce hunt down the declining population due to brain worms texts, and especially climate change when their population shrinks is already shrinking and as is dead, so my my opinion is to say no to that for the upcoming year. Thank you. Bye.

3.26.21 - Hagerty Burlington Vermont, I'd like to say no to 20 21 moose hunt. Thank you. Have a great day. Bye.

3.30.21 - Yeah, hi. My name is Mike la PC. I'm in Pittsfield Vermont and I was calling to say no in a 2021 moose hunt. I think it's absolutely ridiculous. That's based on a study that was conducted by the Safari Club International a non-hunting organization and just the concept that there were not many moves to begin with. So we should kill more to reduce the population even further the to reduce the tick load doesn't make sense to me that there were hardly any moves to begin with that. We should kill more. I don't know about in the Northeast Kingdom, but definitely throughout the rest of the state that apply. I just like to say I'd like to see a study conducted by scientists and not hunters and game management people from the Safari Club and that is a problem itself within the state. The game board is also made up primarily of hunters and Trappers and they get to make all these rules and regulations so dead. Ridiculous very biased and it's just terrible. So anyway, that's my opinion. Thank you.

3.31.21 - Hi, this is Kimberly D'Onofrio and I reside in Morrystown Vermont Northtown or Morrisville. If you off well, and I'm calling to say no to a 2021 moose hunt. And I urge the department. Fish and wildlife to pursue other non-lethal options to address the ticket issue again Kimberly did off for, you know from Morrystown Vermont, and I am saying no to a 28-21 moose hunt. Thank you.

3.31.21 - Hi there. My name is Charlotte Hopi. I reside in Waterford Vermont. And this is a comment for the moose hunt proposal this year. I can also send an email. I was just wondering if instead of hunting the Moose who it seems based on the charts there. I did look at the proposal that might it be possible. It seems their their population still quite low and might it be possible to do a beat drop for kicks such as we do the rabies drop for raccoon. Also, perhaps we could utilize our technology and maybe inoculate the Moose against ticks using drones from another possibility. I was wondering about would be to maybe fruit some Hunters to not hunt to kill the Moose but possibly to hunt and shoot them with some sort of chicken occupation, um a device as well as perhaps purchasing some more public land for conservation month. I don't know if you guys already do this, but would it be possible to treat the moose that are already captured for GPS tracking for ticks off and I also read an article on WCAX. Not long ago in regards to mountain biking trails that are opening up wage and they over in central Vermont area in a very special dear yard area. I think it was near Waterbury. Would it be possible to Thursday instead of letting the humans take over these areas to save them for the Wildlife that month. We so need to to kind of conserve user just some ideas to maybe grow the most heard and wage and make the rules heard healthier. And then once the once the numbers are up a bit more than reasonably and the future but I just don't really see the point in killing quite a few moves to try to grow the population. There's no way you could know which month start strong to survive when you're out hunting dog. I also had a conversation with my father who is a veterinarian and we did discuss in brainstorm this.