VERMONT FISH & WILDLIFE DEPARTMENT

MANAGEMENT OF THE DEER HERD 2017 REPORT

Submitted to: Vermont Legislature House Committee on Natural Resources, Fish and Wildlife and Senate Committee on Natural Resources and Energy

> Submitted by: Louis Porter, Commissioner Vermont Fish and Wildlife Department January 15, 2018



Annual Report to the Vermont Legislature on

Management of the Deer Herd

Introduction

This report fulfills the requirements of 10 V.S.A. § 4082 and 4084.

§ 4082 states:

The final annual antlerless deer and moose harvest permit numbers shall be reported to the House Committee on Fish, Wildlife and Water Resources and the Senate Committee on Natural Resources and Energy as part of the annual deer report required under section 4084 of this title.

§ 4084 states: Each January, the Commissioner shall publish an annual deer report.

Deer management is one of the most important projects administered by the Fish and Wildlife Department (herein referred to as the Department). Few Vermonters have not had some level of contact with deer and even fewer are without an opinion as to how to manage them. In 2009 the Department completed a long range 10-year management plan for white-tailed deer and other big game species.

Deer management objectives are: 1) maintain a deer population at a level that is in balance with its habitat and the landscape that supports a variety of wildlife throughout Vermont – that is, an abundant healthy deer herd; and 2) maintain a deer population at a level that is satisfactory to the recreation, agriculture, forestry, and safety interests of the people of Vermont.

Antlerless Deer Permitting and Youth Season Process

Department staff conducted 5 public spring deer meetings in 2017, 3 of which satisfied statute and Fish and Wildlife Board regulation, in the towns of Brattleboro, Island Pond, Manchester, Middlebury, and Randolph during the periods March 21-25th, 2017 and May 9-11, 2017. A total of 128 persons signed in at these meetings; attendance ranged from 10 in Randolph to 38 in Middlebury. The demeanor of the meetings could be characterized as open and friendly. The meetings were designed to receive public comment on numerous issues, including proposed moose season permits and rule, status of the deer herd, youth season, and antlerless deer harvest recommendations. Questions and comments focused mostly on general satisfaction with the health of the deer herd, and good prospects for 2017 given another mild winter. Attendees were grateful for the opportunity to interact with Department staff and Board members. Comments received during these hearings can be found in Appendix A at the end of this document.

On April 26, 2017, the Department proposed allocating 24,900 antlerless permits to be applied in 18 of Vermont's 21 WMUs during the 2017 muzzleloader season. This represented a 31%

increase from 18,950 permits issued in 2016, in response to the mild winter of 2017 and an attempt to address overabundant deer in a few WMUs. In addition, the Department recommended that all WMUs be open to antlerless hunting during the 2016 archery season, the Youth Season bag limit be one deer of either sex in all WMUs, and that hunters during Youth Season be able to take any buck, regardless of antler characteristics. The Fish and Wildlife Board approved the youth season and archery season recommendations as proposed, and reduced the muzzleloader antlerless permit recommendation to 24,500 for consideration during the public input process.

On May 24, 2017, the Fish and Wildlife Board approved the distribution of 24,500 antlerless deer muzzleloader season permits, antlerless hunting during archery season in all WMUs, and allowing youth season hunters to harvest any deer regardless of sex or antler characteristics.

2017 Deer Harvest Summary

Hunters harvested a total of 15,949 deer during Vermont's 4 deer hunting seasons in 2017. This represents a 2% decrease from 16,220 deer harvested in 2016. The total buck harvest (9,477) was 5% less than the 2016 buck harvest (9,995) but 8% more than the previous three-year average (8,760).

Season	Antlered Bucks	Adult Does	Male Fawns	Female Fawns	Total
Archery	930	2299	183	173	3585
Youth	604	584	126	147	1461
Rifle	7272				7272
Muzzleloader	671	2518	241	201	3540
Total	9477	5401	550	521	15949

Table 1. Vermont deer harvest by age-sex class and season, 2017.

Moose Permitting Process

The Department presented the annual Moose Permit Allocation Procedure to the Fish and Wildlife Board on February 15, 2017. The proposal established a total of 80 moose hunting permits: 63 permits during the regular moose hunting season and 17 permits for the archery-only season. The 80 total permits represented a 50% reduction from the previous year. This reduction and, for the third consecutive year, the issuance of bull-only permits, was proposed to grow the population more quickly back to desired levels stated in the 10-year Big Game Plan.

The Department solicited public input into to proposed moose permit procedure at the three March meetings mentioned above. Meeting attendees formed small discussion groups at separate tables facilitated by Department Staff or Fish & Wildlife Board members. Group comments were recorded on a provided form. A spokesperson for each group then reported their key points and concerns back to the entire assembly. Following the group report session, time was allowed for individual comments to be made from the floor, and written comments were also submitted on forms from individuals. There was much concern expressed about the impact of winter ticks on moose health, and lower moose densities compared to previous years. Consequently, there was widespread support for the proposed reduction in moose permit allocations, and the issuance

of bulls only permits. There were also several calls for shutting the season down completely, or at least in Southern Vermont. The individual comments can be found in Appendix A at the end of this document.

On April 5, 2017, the Fish and Wildlife Board held their final vote on the moose permit procedure. Wildlife Director Mark Scott spoke to the Board about the public process and summarized the public comments regarding the proposed 2017 moose hunting permits. The Board approved the permit procedure on an 8-2 vote, with one-member abstaining.

2017 Moose Harvest Summary

Forty moose were harvested in Vermont's 2017 moose seasons. Eight moose were taken during the archery-only season and 32 in the regular season. An estimated 6 tons of moose venison was harvested during the combined seasons, providing 48,000 meals.

For Vermont's seventh annual archery-only moose season, a total of 1,265 valid lottery applications were received (796 residents and 469 non-residents). Specific numbers of permits were allocated for individual or a combination of WMUs, and only bulls could be harvested statewide (except for 3 Special Opportunity Permittees, who could take either sex). The overall success rate was 44%, up from 33% in 2016 and above the long-term average of 36%.

A total of 5,701 valid applications were received for Vermont's 25th regular moose season (3,995 residents and 1,706 non-residents). The statewide success rate for the regular season was 45%, equal to the previous year. The opening weekend weather was exceptionally warm, with highs in the 70's, and with no precipitation. Rain and wind occurred later in the season, but temperatures remained unseasonably warm. Hunter visibility was once again reduced due to the later than normal leaf fall.

Season	Adult Bulls	Adult Cows	Male Calves	Female Calves	Total
Archery	8	0	0	0	8
Regular	31	1	0	0	32
Total	39	1	0	0	40

Table 2. Vermont moose harvest by age-sex class and season, 2017.

Appendix A

Deer Focus Questions Brattleboro – March 21, 2017

1. What are your comments on the status and health of Vermont's deer herd and prospects for the 2017 deer seasons? Include any specific comments the department should consider when preparing the 2017 antlerless harvest and youth season recommendation.

VFWD Facilitator: K Lawrence

- One hunter plans and kills archery deer and doesn't apply for antlerless
- Youth season leave alone

VFWD Facilitator: Dennis Mewes

- Generally good health
- Not seeing many deer

VFWD Facilitator: David Fielding

- 2 winter increase based on units
- Antlers based what should be harvested from each unit based in prior year harvest

VFWD Facilitator: Theresa Elmer

- Concerned about lack of deer population in their zones.
- Habitat problems.
- Having to hunt harder/longer to be successful
- Antlers are getting smaller genetics
- No brow tines
- Youth season ok
- Dummerston too high doe kill
- Readsboro ok with doe numbers
- Zone management/would like to see

VFWD Facilitator: Tim Beibel

- Concerned about decline in antler development
- Lack of deer
- Zone O is really long/ hard to manage
- Don't need to change anything with antlerless
- Does think that the antlerless harvest is having a negative impact

- More adult hunter ed., esp. from non-hunting backgrounds
- More education for landowners not to post, or to allow select hunters to hunt their land- benefits to forest regeneration
- Have first time hunter season for new adult hunters
- 1 buck/year (\$)

- Full archery season, Oct1 Dec 14
- Take doe before rut
- 'doe weekend" like 1969 and like NH
- PA model, if rifle tag becomes antlerless in late season
- Add youth bow season
- Keep youth season like it has always been
- I think deer are in good health shape
- I would consider reducing the number of antlerless permits in unit O. In our area, I believe the horn restriction has had a positive effect
- In zone P no changes to youth season. No changes to our antierless harvest
- Deer herd healthy. Concerned about buck quality, leave youth alone it's our future
- Winter severity index varies from town to town, within a WMU. Deer yard severity index is the true measure
- Concerned about stress on deer during the season weight loss especially for yearlings, could be from running from hunters.
- Climate change is likely to produce more warm winters and possibly to take
- Deer drives could be particularly problematic as well as dangerous I have heard complaints and seen land posted
- Posted land is a real problem in Halifax and Guilford where I hunt
- Deer herd appears to be healthy to me
- Spike horn law is turning some hunters to quit
- Keep antlerless allocations same as 2016 Season
- Keep youth season any deer no AR
- Good

Public Attendees: total 21

Deer Focus Questions Island Pond – March 23, 2017

2. What are your comments on the status and health of Vermont's deer herd and prospects for the 2017 deer seasons? Include any specific comments the department should consider when preparing the 2017 antlerless harvest and youth season recommendation.

VFWD Facilitator: K Lawrence

- Youth one and done preference
- Enforcement youth/adult shooters?
- Road hunting in youth. Maybe move to written permission?
- Why shoot spikes?
- Applaud extra 5 days archery
- Tip top health of deer now
- Break up zone regulation, different rules for N vs E regional
- Consider shooting "anything not a legal buck" for antlerless
- In N and B extra tags should be sold to successful archery hunters

VFWD Facilitator: Tim Beibel

- St Johnsbury is heavy on doe
- D1 too many does
- Season too short, people don't have enough time to hunt
- One buck per hunter every little bit helps
- We don't have enough wardens to patrol during youth season youth season abused

VFWD Facilitator: Pickens

- Limit number persons in drives?
- Lottery for doe during rifle season
- Regional management every tag "zone"
- No doe season "E"

VFWD Facilitator: Johanna Laggis

- Keep antlerless permits for Vermonters in regions where populations are low

Public Comments:

- Too many spike horns
- Large coyote population
- Bad buck/doe ratio
- Scott Farm. Only allowed B/A ?? during rifle season!!??
- 1 buck or 1 doe
- Wyoming Game and Fish Department Big Game Preference Points document (copy attached to attendee list)

Public Attendees: total 36

Deer Focus Questions Middlebury – March 25, 2017

3. What are your comments on the status and health of Vermont's deer herd and prospects for the 2017 deer seasons? Include any specific comments the department should consider when preparing the 2017 antlerless harvest and youth season recommendation.

VFWD Facilitator: took general questions

- Do we take into account roadkill for deer?
- What is the ratio of how deer die by various causes?
- Beam diameter appear stable. What are your thoughts about high-grading VT's deer herd?
- At what point will a discussion be made on APR
- Comments on the genes of a spike horn
- Concerned about trophy focus. Rather eat a spike horn more often. Focus on sustainable harvestable population
- Initially we talked about 2 counties, but it went statewide
- Read S. Carolina study on coyotes. High coyote mortality on fawns. What has been done in VT to study impacts on deer?
- Study in CT now on coyotes and bears on deer
- Coyotes made woodchucks disappear in Addison County
- Is any state doing research in controlling the ticks? Any natural predator for these ticks?
- A number of people are hunting out of state and not VT, are we looking into it?
- When hunting is good the number of hunters goes up
- Hunter ed. classes are made up of adults who never hunted. Some are retired. Could we allow any first-time hunters to take any deer?
- To keep hunters in VT. Some guys tag out and go to NY, pass extra doe tags to people who tag out
- Asked my legislators to vote against bill to change Board, he is concerned about it
- Legislative proposal that the Board study coyote season in VT

- Status of the deer I see is very good, good weight and numbers
- Keep antler restricting
- Has the board/state considered letting first time adult hunters the same flexibility in shooting any deer. New hunters grandparents could introduce grand children to hunting
- Well managed. State very adapt in tracking management practices
- Muzzleloader season should be early, not in December when deer are trying to prepare for winter. They need to conserve energy this time of year

- In the zones where antlerless kill isn't up where it needs to be (K, N) could you allow for additional youth permits in those areas?
- The data is there so any "grumbling" should be ignored. Our camp had 7 nice bucks on trail cameras. I suggest there may be value in doing some survey work using trail cams. Overall thanks for a great job
- It appears that the deer herd is ample enough to support a robust harvest throughout the state. I was wondering what the ideal population size for Vermont would be and how to get to it?
- Your view on high-grading?
- Deer management I think is on the right track.
- The 3-point system is working well
- Biggest problem is the lack of logging and maturing forest especially on National Forest land
- Concerned about focus on trophy busks as opposed to a generally healthy herd that will sustainably produce harvestable animals for meat on the table
- Would like to see the return of spike horn hunting, perhaps in muzzleloader at least
- Further limits on youth season in some zones (zone I)
- Prospects look good for this year. Yeah, mild winters
- The deer herd is healthy
- More antlerless permits...
- I'm not a deer hunter, but I think you guys are doing a great job of managing the herd.
 I wonder if you could do more to actively direct hunters to areas of over population
- I grew up on a farm in Cambridge 1950-1972. Used to see quite a few deer. Not Now!!
 We moved back to in 1986 and I couldn't believe the paucity of the deer. We lived in NJ for a few years and there were lots of deer, bear etc. Family had 100 acres in Weston PA lots of deer. Our daughter went to law school in Syracuse NY lots of deer!
 What is wrong with the upper part of VT? I have been hunting in Lamoille County, Waterville, Belvidere for the last 10 yrs., Very very few deer!
- How do you increase the amount of doe/antlerless deer taken in K when you can probably walk across the WMU on posted signs? Is sending more folks down there the answer?
- I hunt primarily in I and was very disappointed in the numbers in 2016 and do not have high expectations for the herd to be much better in 2017. I also walk those areas through the winter and have not seen much sign

Public Attendees: total 38

Deer Focus Questions

Randolph- May 11,2017

VFWD Facilitator: K. Lawrence, Theresa Elmer, Tim Biebel

- 1. What were the main messages you took from the presentation? Did you find the data that was presented to be useful or compelling?
 - Represented what citizen had seen in Unit K (2)- and M
 - Winter weather and habitat- most important factors
 - More logging would help
 - Lower fawn numbers and antler diameters in some areas
 - Heard in good shape, could even lower population a bit
 - Helped me understand the process, how data is used (6)- like that multiple models were used, close to actual harvest, saw dimensions that I had not seen presented before, Winter Severity Index was interesting
 - Frustrated with posted land, disproportionate number of deer shot on accessible land vs posted.
 - 157,000 seems high- would like to see better studies to get more accurate number
 - Herd is managed for health, not volume (3)
- 2. What are your comments on the status and health of Vermont's deer herd and prospects for the 2017 deer seasons? Include any specific comments of the 2017 antlerless harvest and youth season recommendation.
 - Hunter is looking forward to 2017 hunt (2)- deer are bigger and better
 - Hate to see fawns shot by anyone- youth need to focus on a decent deer (2)
 - Could not find somewhere unposted to use "B" antlerless permit
 - Is there a plan B to raise deer numbers?
 - Keep or grow youth program (2)
 - Does not like lower carrying capacity but can't argue with large beam diameter in Eastern Foothills (2)- health of deer increased
 - J1 could sustain more doe harvest than proposed (2)
 - Like beam diameter and tooth age info
 - Worried about number of winter mortality deer seen while turkey hunting (2)-Braintree, VT
- 3. What deer and moose issues do you think the department should consider for the 2020-2030 Big Game Management Plan?
 - Keep spikehorn ban (3)- bringing bigger bucks, if removed it might lead to worse genetics? What are the plans for the future- more, less, continue as is?
 - Bear- too many, causing damage on pigeon- rearing property
 - Are there too many turkeys?
 - How to manage deer numbers in the future with less deer hunters, is muzzleloader killing enough?
 - Improve winter habitat

- Move muzzleloader season
- Lower moose permit numbers (6)- possibly stopped
- 1 buck, 2 deer per hunter (3)- With firearm, can get additional buck with bow
- More selective cutting (3)- State and federal
- What we are doing is working, dependent on winter weather
- Effects of bear and coyote predation on fawns (3)?
- Is there a practical way to address the winter tick issue in moose? (2)
- Plans for spring bear season?
- Work with Maine and New Hampshire on Moose issues

Deer Focus Questions

Manchester- May 16,2017

VFWD Facilitator: Theresa Elmer, Dave Frelding, Tim Biebel

- 1. What were the main messages you took from the presentation? Did you find the data that was presented to be useful or compelling?
 - Data is useful for management (5)- would like to see a study on industrial properties,
 - Seems like state thinks there are more deer than there are (4)- support for study
 - Posted land creates higher localized populations of deer
- 2. What are your comments on the status and health of Vermont's deer herd and prospects for the 2017 deer seasons? Include any specific comments of the 2017 antlerless harvest and youth season recommendation.
 - Since APR hunters not buying doe tags because no deer in area
 - Keep or grow youth program (3)
 - Did not see any fawn tracks this winter
 - Forest has aged out of useful deer habitat
 - Worried about shooting too many does (2)
 - Want to see more deer
 - Did not see as many coyote tracks
 - Weight change since APR? (2)
 - Need more access to land- state should be managing land more
 - Split Units J1 and O (2)
 - Fine land owners who post property
 - Increase doe tags
 - Youth should only be able to take 2 deer
 - Youth should only be allowed to take legal bucks

- 3. What deer and moose issues do you think the department should consider for the 2020-2030 Big Game Management Plan?
 - Habitat issues
 - Declining number of hunters
 - What are future APR goals?
 - What to do about ticks?
 - More cutting on public land (5)
 - Habitat education for the public
 - Planting disease resistant trees
 - Bear population is too high (2)- lengthen season
 - Posted land is a problem
 - Effects of predators should be taken into consideration (3)- more than they are now
 - APR working
 - Youth season is too liberal, kids allowed to hunt too many years
 - Moose permits too low (2)- would like to see more harvested, will just die in woods from ticks anyway
 - Spring bear hunt (4)- population seems to be increasing and having a big effect on deer population, would like to see bear density vs deer density on map
 - Want bow season from Oct1-Oct31
 - Move muzzleloader season to before the rut
 - Habitat stamp is great, more ways for non-hunters to pay for use of land
 - Earlier doe season so bucks don't waste energy breeding does that get shot later
 - All doe tags should be lottery
 - Just increasing permits will not increase hunter interest, need more deer

Moose Focus Questions Brattleboro – March 21, 2017

What are your comments on the status and health of Vermont's moose population and the proposal for 2017 moose season permit numbers?

VFWD Facilitator: K Lawrence

- Take no moose
- Keep on track as proposed

VFWD Facilitator: Dennis Mewes

- not good
- Ok with permit numbers

VFWD Facilitator: David Fielding

- Moose population is being affected by ticks
- Reduced permits was well received

VFWD Facilitator: Theresa Elmer

- Lack of moose is a concern/what moose
- Think should close moose season in the bottom of the state
- Were ok with moose permits overall

VFWD Facilitator: Tim Beibel

- Concerned about the decline of moose
- Don't even shed hunt anymore
- Comfortable with moose hunt permit #'s
- Would like to close it in the southern states

- I think proposal is ok
- Obviously, there has been a significant decline. The proposal sounds to be on target.
- I support the reduction. I wish to close it down in the southern part of the state till a substantial comeback.
- Not many moose left in the southern part of the state, strict permit #'s by zone.
- Moose don't seem healthy, reduce permits till stable.
- I am concerned about both moose numbers and health. Though moose permit numbers for 2017 are lower than 2016, which is good, they are still too high. NH estimates twice as many moose as VT but far fewer permits. I have seen sick moose and know they have many challenges.
- Ok with permits
- I've watched the moose population in southern VT almost disappear, if they are going to keep dying off I propose more permits, especially in the southern part of the state.
- Same?

Moose Focus Questions Island Pond – March 23, 2017

What are your comments on the status and health of Vermont's moose population and the proposal for 2017 moose season permit numbers?

VFWD Facilitator: K Lawrence

- Permit numbers are in line with current population. Habitat is not prime any more
- Road siting's are uncommon. Cows, calves, and bulls suffer.
- Shut down season, but we need data.
- Raise price of permit. Maybe auction more tags to raise revenue.
- Tick's and habitat are problems! Bloody in January.
- Vaccination in a salt block. (available for cattle)
- What is objective of collaring? Data for what?

VFWD Facilitator: Tim Beibel

- Moose to preference system instead of bonus points
- Doing the right thing with moose permit

VFWD Facilitator: Pickens

- Close season not seeing moose
- Okay with bulls only state wide

VFWD Facilitator: Johanna Laggis

- Keep moose permits in state as much as possible
- No permits for a few years

- No problems, less permits
- Wyoming Game and Fish Department Big Game Preference Points document (copy attached)

Moose Focus Questions Middlebury – March 25, 2017

What are your comments on the status and health of Vermont's moose population and the proposal for 2017 moose season permit numbers?

VFWD Facilitator: took general questions

- Is any state doing research in controlling the ticks? Any natural predator for these ticks?

- Let's focus on tick control and maybe have a moratorium on hunting for a couple of years.
- Since the moose population has steadily declined over the last 10-12 years, I question the rational to give out any permits. I feel that moose hunting should be stopped until the population recovers to closer the 3000 target.
- This is problematic
- Worried about the ticks
- How can we protect our animals? It's been wonderful to see them in the wetlands beside the roads!
- Not good I hunted in Weston area 2016 never saw a moose. I ran across a dead moose.
- Would like to see an increase in moose population
- Permit numbers recommended appear in line with the data, but would like to know with the lower permits, lower population is the current method of hunter sightings still a good means to estimate the herd?
- Concerned about the decline of moose numbers
- Would like to see tick issue aggressively dealt with, burns an option?
- We saw positive calf tracks with cows in all three states, VT, NH, ME
- Moose population is in trouble. The proposal is probably good with fewer permits. I agree with bull only.