Fish and Wildlife Board Meeting Minutes Wednesday, May 15, 2024

The Vermont Fish and Wildlife Board held an in-person meeting at 5:00 pm on Wednesday, May 15, 2024, at the National Life Dewey Conference Room, 1 National Life Drive, Montpelier, VT 05620. A recording of the meeting is available on the department's YouTube channel.

Agenda

- 1. Approval of Previous Meeting Minutes (April 24, 2024)
- 2. Public Comments (Limited to 2-minutes per speaker)
- 3. Department Recommendation on Petition Regarding Commercial Fishing, Pan Fish, and Crappie
- 4. Department Recommendation on Petition Regarding Duck Blinds and Various Hunting Regulations
- 5. 2024 Antlerless Deer Permits and Youth Season Final Vote
- 6. Commissioner's Update

Board Members Present: Brian Bailey, Michael Bancroft, Nicholas Burnham, Jamie Dragon, Brad Ferland (Chair), Paul Noel, Robert Patterson, Jay Sweeny, Martin Van Buren

Virtual: David Deen, Neal Hogan, Michael Kolsun

Absent: Allison Frazier, Bryan McCarthy

Department Staff Present: Commissioner Christopher Herrick, General Counsel Hannah Smith, Fish Division Director Eric Palmer, Wildlife Division Director John Austin, Game Warden Colonel Justin Stedman, Wildlife Management Program Manager David Sausville, Game Warden Major Sean Fowler, Principal Assistant Abigail Connolly

Virtual: Deer and Moose Project Leader Nick Fortin, Fisheries Biologist Jud Kratzer, Fisheries Program Manager Margaret Murphy, Information Specialist John Hall

Members of the Public Present: Justin Lindholm, Butch Spear, Rod Coronado, Jonathan McNamara, Bob Galvin, Nancy Fitzpatrick, Maureen Dwyer

Virtual: Robert Steele, Dennis, Gabe T

The meeting was called to order at 5:00 pm

Approval of Previous Meeting Minutes

Board Member Patterson moved to approve the April 24, 2024 meeting minutes. Board Member Van Buren seconded the motion. The Board voted to approve the minutes (12-0).

Public Comment Period

Justin Lindholm, Mendon, regarding the deer rules Rod Coronado, Orange, regarding the North American Model and petition on commercial fishing

The recording of the public comments and the meeting can be viewed here.

Department Recommendation on Petition Regarding Commercial Fishing, Pan Fish, and Crappie

Eric Palmer presented the department's recommendation, which is included below. The Board Members asked questions about the current statutes and rules, the rainbow trout strain evaluation, what the department has been considering regarding panfish, when the new rules to be opened in 2025 will take effect, and whether there are enforcement issues. Board Member Sweeny moved to table the petition until the rulemaking process opens in January 2025. Board Member Dragon seconded the motion. The Board voted (12-0) to approve the motion.

Public Comment

Bob Galvin, Richmond, regarding the legislation banning the sale of internal organs and paws of black bear

Department Recommendation on Petition Regarding Duck Blinds and Various Hunting Regulations

John Austin gave an overview of the department's recommendations. David Sausville explained the department's recommendations in detail, which are included below. The Board Members asked questions and commented about the small game survey, the timing of blind construction and removal, the experience of the wardens with blinds, how blinds are tagged, and squirrel populations. Board Member Sweeny moved to deny the petition in its entirety and accept the recommendations from the department. Board Member Bailey seconded the motion. The Board voted (11-1) to approve the motion, with Board Member Hogan voting no.

2024 Antlerless Deer Permits and Youth Season - Final Vote

The department recommendation and public comments are included below. The Board Members asked questions about purchasing additional permits, public comments, and possible changes to the deer rule in 2025. Board Member Deen moved to approve the 2024 antlerless deer permits

and youth season as recommended by the department. Board Member Dragon seconded the motion. The Board voted (12-0) to approve the motion.

Commissioner's Update

Commissioner Herrick gave legislative updates, including the legislation to ban the sale of black bear internal organs and paws, as well as the capital bill. Commissioner Herrick provided information on the newly regulated season for hunting coyotes with dogs. The Board Members discussed the ban of selling black bear internal organs and paws and asked the department questions. Chair Ferland asked about the staffing of the warden service.

Motion To Adjourn:

The Board voted to adjourn the meeting at 5:56 pm.

Recommendation Related to the Petition Regarding Commercial Fishing, Panfish and Crappie

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

May 15, 2024

The Department has reviewed the Petition to End Commercial Fishing and Set Limits on Pan Fish and <u>recommends that the F&W Board table the petition</u> until the Department opens up the fishing regulations in January of 2025, rather than deny the petition, or immediately open up rulemaking.

The Fish Division's Panfish Team had already begun reviewing panfish regulations and commercial fishing prior to the petition. They have reviewed the petition and think their efforts will cover the species and issues the petition raises, including white perch, yellow perch, crappie, sunfish and bullhead. However, we would like the time to finish our internal review with the Fish Division, Warden Service, General Counsel and Commissioner, and we would like to stay on our regular schedule of opening up the fishing regulations every two years. We have other fishing regulations under review for Berlin Pond, Stiles Pond, the Deerfield River and elsewhere that we would like to present together in January for consistency and efficiency.

Between now and January 2025 we plan to come to the F&W Board to host a robust discussion of the North American Model of Wildlife Conservation.

Any questions the Board may receive in the meantime on the commercial fishing petition can be directed to Eric Palmer and Jud Kratzer.

Recommendation Related to a Petition to: Alter Duck Blind Rules, Muzzleloader Zones, and Ruffed Grouse and Squirrel Seasons

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

May 15, 2024

Petition to alter duck blind rules, muzzleloader zones, and ruffed grouse and squirrel seasons

Recommendation

Summary of Issues for Consideration:

April 10, 2024, William Kirby Petitioned for the Department to:

- (1) No seasonal duck blinds on WMA unless they are built and maintained by VTFW: Many times hunters build blinds in the prime locations, use them for only a handful of days and sit empty. Other hunters are afraid to hunt in or around the blinds to avoid conflict. As in "This is my spot, beat it!" Many of these blinds are never removed at the end of the season.
- (2) The placing of any stake on or in any public water or lands to claim use of a location is prohibited and will be construed as littering on a public land or water way:

There are numerous stakes stuck all over state waters claiming to be blinds and most of the duck hunters I spoke to avoid the area to avoid conflict

- (3) Have a pop-up window that must be agreed to before you can finish your hunting or fishing license purchase. It should state: "I understand and agree that all public land and waters are open to all. I understand that the placing of a blind or sign on public land or waters does not constitute a claim to the special use of any area and in good sportsmanship I agree to first come first use of any area."
- (4) Change the Muzzleloader antlerless deer permit system for the Units: B, F1, F2, J1, J2, K, N & O and be combined into one single doe permit, maybe even over the counter.

The reason for this is that it gives hunters more opportunity to harvest a deer and does not hold them to one assigned area for antlerless hunting. With so many extra permits in these units left over every year it's clear that being able to travel to a better hunting area or hunt with friends will not significantly change the harvest outcome. It gives a lot more freedom to hunt.

(5) Change the ruffed grouse and squirrel season to end on February 15 New York has a similar season with similar environments as Vermont. I'm not sure why it ends on Dec 31, but my guess is that it's a historical tradition. Extending the season will not have any significant impact on either of these species and it will give hunters more opportunity to spend more time in the field.

Department Recommendation:

The Department recommends that the Board:

- 1. Allow the Department to increase its outreach efforts on hunting blinds within the hunter education program, during press releases and within annual presentations to the public. The warden staff can also increase engagement on the subject with the hunters they encounter.
- 2. Allow the Department to increase the information and education that "staking" a location for the purpose of claiming a blind location has no basis in law and is unenforceable.
- 3. That we <u>do not</u> add an additional pop-up at the time of license purchase to inform the public that state lands and waters are open to everyone and that blinds do not claim a location.
- 4. That we <u>do not</u> combine multiple WMUs to allow universal hunting while using antlerless permits.
- 5. That we do not change the current ruffed grouse and squirrel seasons.

<u>Department Response to Proposal:</u>

Comment/Question:

- (1) That the Department not allow seasonal duck blinds on WMA unless they are built and maintained by VTFW.
- (2) That the placing of any stake on or in any public water or lands to claim use of a location is prohibited and will be construed as littering on public land or waterway.
- (3) Develop a pop-up window that must be agreed to before you can finish your hunting or fishing license purchase. It should state: "I understand and agree that all public land and waters are open to all. I understand that the placing of a blind or
- sign on public land or waters does not constitute a claim to the special use of any area and in good sportsmanship I agree to first come first use of any area."
- (4) That the Department change the Muzzleloader antlerless deer permit system for the Units: B, F1, F2, J1, J2, K, N & O and be combined into one single doe permit, maybe even over the counter purchasing.
- (5) Change the ruffed grouse and squirrel season to end on February 15.

Response:

1) The Department currently has language on page 35 of the hunting and trapping guide that explains the laws on placement and removal of water and land blinds and tree stands. The laws are also posted on the Department website and within the waterfowl hunting syllabus. The Department will make an effort to emphasize that all state lands and waters are open to everyone during press releases and annual presentation on waterfowl regulations. A lot of waterfowl hunting history and tradition surrounds building blinds on public lands and waters that is important to many people. We will

- find out more on this subject during our upcoming waterfowl hunter survey that should be occurring in June or July of 2024.
- 2) The Department currently has language on page 35 of the hunting and trapping guide, within the waterfowl hunting syllabus and online that states, "staking" a location for the purpose of claiming a blind location has no basis in law and is unenforceable. We do not support creating a regulation that lists any stake as littering. The Department recommends increasing our outreach and education efforts to reinforce messages about blind stakes and that public lands are available to all hunters, regardless. We will also reinforce importance of responsible behavior and that a blind stake does not prevent another hunter from occupying that area.
- 3) The Department does not believe the addition of another pop-up window will be effective at educating the public that blinds and signs do not claim a location on public lands and waters. We believe too many pop-ups create educational fatigue and may simply be ignored as another item to sign off on in the short term, while in the process of purchasing a license.
- 4) The Department does not support allowing antlerless permits to be used in multiple WMUs. The intent of issuing permits by WMU is to direct hunting activity, and, therefore, antlerless harvest to areas where it is needed. Allowing permits to be used across multiple WMUs would limit the Department's ability to control antlerless harvest in each WMU.
- 5) The Department does not recommend changing the current ruffed grouse or squirrel season. We are currently conducting a survey of small game hunters to determine their preferences of season frameworks. Winter hunting would occur when squirrels are for the most part in their winter dens and don't come out much except for those uncommon balmy winter days. The end of the season currently does not go into the breeding season. With climate change February hunting of squirrels could hit the start of breeding season if the squirrels start to breed earlier than normal. The rabbit/hare season already goes into mid-March and provides opportunities. Rabbits and hare also remain active throughout the winter. We are also concerned about the potential impact of west Nile virus on grouse populations and the potential compounding impact a season extension may have on populations and monitoring. Also of note is the decline in early succession habitat throughout the state with a change in forest harvest techniques. The forest inventory data has shown a steady decline in early successional forest over the past several decades. Early successional habitat is one of grouses preferred habitats and does influence their abundance.

Other Information to Consider:

- o A small game hunter survey is currently in progress.
- o Many waterfowl hunters have been moving away from constructed blinds and are using portable or boat blinds for additional flexibility.

- o The Department will soon be conducting a survey of waterfowl hunters and one of the questions deals with the use stationary blinds.
- o In 2025, the Department will be recommending deer hunting regulation changes to address current limitations on antlerless permit distribution and antlerless harvest.
- o A check box could be added to the certification by signature section that is present when purchasing a license.

The Department's concerns include:

- o The only real way to regulate blinds without an outright ban would be to require permits for blinds, which would increase the Department's workload significantly and is not something the Department feels is necessary at this point.
- o Climate change may alter the breeding season of gray squirrels and affect levels of west Nile virus.
- The addition of a check box does not equal more awareness and can lead to user fatigue/tuning out.

Potential positives in the Department's view:

- o Gray squirrels currently are an abundant, under-utilized species in Vermont (especially the Champlain and CT River valleys) and extending the season would provide additional, likely limited opportunities to hunt them. We do not believe a later season would be a major factor in their population size.
- o Additional popups/check boxes and articles may educate a new portion of the hunting public.

2024 Antlerless Harvest and Youth/Novice Season Recommendation

to the Vermont Fish and Wildlife Board



Vermont Fish and Wildlife Department Agency of Natural Resources 1 National Life Drive, Davis 2 Montpelier, VT 05620-3208 802-828-1000 The Fish & Wildlife Department recommends the same antlerless harvest and youth/novice season regulations accepted by the Board by straw vote on April 24, 2024. During the public comment period, which started immediately after the Board meeting on February 21, the Department did not receive any new or additional information to justify changes to the initial recommendation.

The following is the same text the Department submitted to the Board for its April 24th meeting. All public comments received are provided in the appendices.

Summary of Key Points

- Vermont had the easiest winter on record (since 1970) in 2024.
- The 2023 antierless deer harvest was 15% below the recommended antierless harvest.
- Yearling antler beam diameters, fawn weights, and other physical condition metrics are below optimal levels in many areas, indicating that deer numbers have exceeded the level their habitat can support long-term.
- Deer populations in eleven WMUs are projected to be above their respective population objectives in 2024. The recommended antlerless harvest is intended to reduce deer populations in these WMUs.
- Populations in all other WMUs will be close to their respective population objectives and the recommended antlerless harvest is intended to stabilize populations and provide additional harvest opportunities.
- The recommended permit allocations are expected to result in the harvest of 3,980 antlerless deer during the antlerless (early muzzleloader) and December muzzleloader seasons. This would result in an estimated total harvest from all seasons of approximately 8,744 antlerless deer.
- Antlerless permit allocations in several WMUs have exceeded demand, and allocations may now
 exceed demand in several additional WMUs. This means the recommended antlerless harvest is
 the maximum achievable under current regulations. This level of harvest may not be sufficient
 to achieve established population objectives.

Executive Summary

The Vermont Fish and Wildlife Department estimates there will be approximately 153,000 white-tailed deer on the Vermont landscape prior to the start of the 2024 deer hunting seasons. This represents an increase of 5 percent from the retrospective 2023 pre-hunt estimate. Deer populations in 11 Wildlife Management Units (WMU) are expected to be above their respective density objectives established in the 2020-2030 Big Game Management Plan. The remaining 10 WMUs will have deer densities close to their respective density objectives. Deer are not evenly distributed across Vermont. As a result, harvest management strategies that account for regional differences in deer density are essential to the health and proper management of Vermont's deer herd.

For deer to be healthy and productive, deer populations must be kept below the carrying capacity of the habitat through the regulated harvest of antlerless deer. Biological information collected annually by the Department, including reproductive data, fawn and yearling body weights, and yearling antler size, indicate that deer populations have exceeded the level the habitat can support long-term in some parts of Vermont. Deer populations must be reduced or maintained below the limits of their habitat or physical condition will continue to decline, habitat damage will increase, and populations will become unstable and susceptible to substantial winter mortality.

The winter of 2024 was relatively easy for deer throughout Vermont. Antlerless harvests in recent years will limit deer population growth in many areas, but some growth is still expected. Antlerless harvests will need to be increased to reduce deer densities in those WMUs that remain above objective and to stabilize populations in other WMUs at their current level.

To achieve established density objectives, the Department recommends the harvest of 8,744 antlerless deer during the 2024 hunting seasons. The Department recommends that antlerless harvest be authorized during the archery and youth/novice seasons in all WMUs. After accounting for expected archery and youth/novice season harvests, the Department recommends that 3,980 antlerless deer be harvested, by permit, during the antlerless-only muzzleloader season in late October and the December muzzleloader season. Achieving this harvest requires the issuance of 28,300 WMU-specific antlerless permits distributed among Vermont's 21 WMUs (31 percent more permits than the 22,000 allotted in 2023).

Three public hearings were held March 18, 20, and 21, 2024 to gather comments on the deer herd. Approximately 73 members of the public participated in these hearings. Two additional public hearings will be held May 6 and 8, 2024.

2023 Muzzleloader Antlerless Harvest Recommendation

Pursuant to 10 V.S.A. §§4081, 4082, 4084 and 4742a, and 10 V.S.A. Appendix §37, hereafter is the Department's 2024 antierless harvest and youth season recommendation. Based on population estimates, a harvest of 8,744 antierless deer is recommended during the 2024 hunting seasons. This includes 4,764 antierless deer harvested during the archery, youth, and novice seasons, and 3,980 antierless deer harvested, by permit, during the antierless (October muzzleloader) and December muzzleloader seasons. Adult females are typically 84 percent of the total antierless deer harvest, so harvesting this number of antierless deer would yield approximately 7,322 adult does.

Population Status

The 2023 deer hunting seasons saw a buck harvest one percent higher than the previous 3-year average (see 2023 Vermont White-tailed Deer Harvest Report for more information). Nine WMUs had retrospective population estimates in 2023 that exceeded their respective population objectives established in the 2020-2030 Big Game Management Plan. The 2023 antlerless deer harvest was below the recommended antlerless harvest in 18 WMUs and the winter of 2024 was the easiest winter for deer on record. As a result, deer population growth is expected in most WMUs.

Winter Severity 2024

The Department has long recognized the influence that winter weather can have on Vermont's deer herd and has been collecting winter severity data since 1970. Between December 1 and April 15, volunteers record one winter severity index (WSI) point for each day with at least 18 inches of snow on the ground, and one point for each day the temperature reaches 0°F or below. These data have proven useful to describe deer population dynamics; however, how well deer survive winter depends largely on three factors: 1) body condition of deer as winter begins, 2) availability of quality deer wintering habitats, and 3) the timing of snow in the fall and snowmelt in spring. Snow cover that remains late into spring can cause significant negative impacts by delaying spring green up and, consequently, reducing fawn survival.

The winter of 2024 was the easiest on record for deer, with a state-wide average WSI of 5 points (**Figure 1**). This was well below the 30-year median of 36 and the 10-year median of 30. All WMUs experienced an easier-than-normal winter (**Figure 2**). The lack of deep snow across much of the state for much of the winter allowed deer to utilize habitats outside of traditional wintering areas and access the best available foods. As a result, overwinter mortality was minimal.

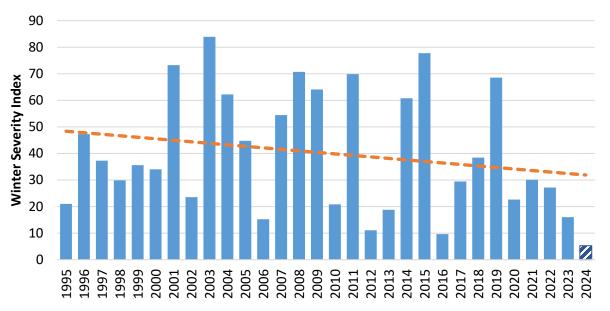


Figure 1. Statewide winter severity index (WSI), 1995–2024. The dashed line shows the 30-year trend.

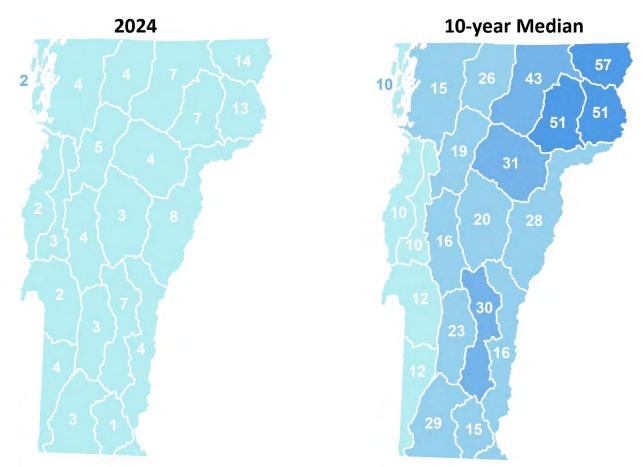


Figure 2. Winter severity index by Wildlife Management Unit in 2024 and the 10-year median.

Population Health

Biological information collected annually by the Department, including reproductive data, fawn and yearling body weights, and yearling antler size, indicate that deer populations have exceeded the level the habitat can support long-term in some parts of Vermont (**Figure 3**, see **Appendix A** for individual WMU information). In many cases, this does not appear to be a new problem. Instead, this appears to be a subtle but chronic problem that may have occurred for decades in some areas. Declines in measures like yearling antler beam diameter have been slow (**Figure 3**); therefore, it takes many years of data to separate the trend from normal annual variation.

Health concerns are most pronounced in central Vermont but are evident in many parts of the state (see **Appendix A** for more detail). In most cases, the Department believes the primary driver of declines in physical condition was not a recent increase in deer abundance, but rather a slow, steady decline in the quality of deer habitat. Deer abundance has been relatively stable during the past 15 years, and, arguably, the past 30 years. However, Vermont's forests are aging and the amount of young forest (less than 20 years old), which provides critical forage for deer, is declining. Other factors, including hunter access to private land, proliferation of invasive plants, and climate change are also important, and make the problem and any solutions more complex. The simple result, however, is that the habitat cannot support the number of deer it used to, and it is likely that carrying capacity will continue to decline. Deer populations must be reduced below the limits of their habitat or physical condition will continue to decline, habitat damage will increase, and populations will become unstable and more susceptible to disease and substantial winter mortality.

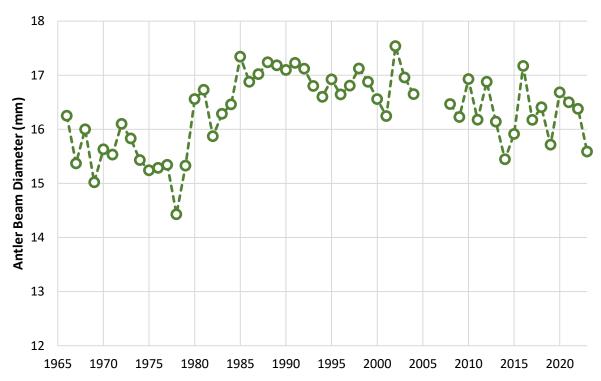


Figure 3. Antler beam diameter of yearling bucks in Vermont, 1965–2023. Data are from deer examined at biological check stations.

Population Projections and Management Objectives

Antlerless deer harvests in 2023 were 15% below objective overall, and well below objectives in most WMUs. Combined with the exceptionally easy winter for deer in 2024, this is expected to result in deer population increases in most areas of the state in 2024. Importantly, deer densities remain above population objectives in several WMUs and recent management efforts have not been sufficient to counter the effects of recent mild winters. To provide healthy habitats and thereby keep deer healthy and productive, deer densities must be kept at established objectives (Figure 8). Maintaining a healthy deer herd is the best way to mitigate the potential effects of winter weather and provide a stable population over the long term.

Based on analysis of herd demographic data, hunter effort, deer sighting rates (Figure 4), buck harvests (Figure 5), antlerless deer harvests, and winter severity data (Figure 2), the Department expects deer numbers to increase in most WMUs while remaining stable in other areas (Figures 6 and 7). Eleven WMUs will have deer densities that exceed their respective population objectives (Figure 8), and the Department's intent is to reduce deer densities in those areas (Figures 9). Other WMUs will have deer densities that are within two deer per square mile of their population objective and the intent is to stabilize those populations at or near their current level.

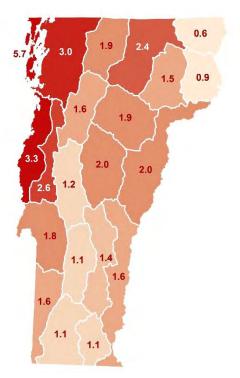


Figure 4. Deer seen per 10 hours of hunting by regular season deer hunters, 2021–2023.

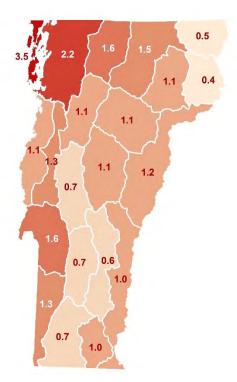


Figure 5. Adult buck harvest per square mile during the 2023 deer seasons. Buck harvest rate is affected by antler restrictions in some WMUs.

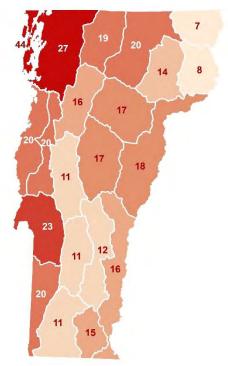


Figure 6. 2023 estimated deer density (deer per square mile of habitat), by WMU.

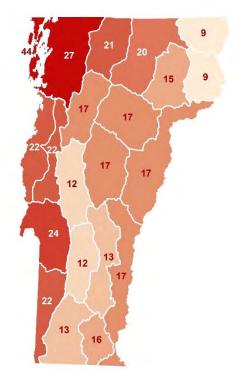


Figure 7. 2024 predicted deer density (deer per square mile of habitat), by WMU.

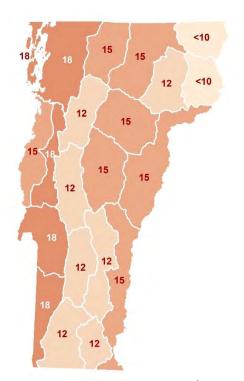


Figure 8. Deer density objectives (deer per square mile of habitat), by WMU.



Figure 9. Desired change in the deer population, by WMU, to reach density objectives.

Antlerless Harvest and Buck Age Structure Management

Antlerless harvests are an important tool for managing buck age structure and the overall buck hunting experience. The 2018 Big Game Survey found that 74% of Vermont hunters are interested in managing for older, larger deer. Further, the most important drivers of hunter satisfaction, after "just going deer hunting," were "harvesting an older, larger-antlered buck" and "the amount of buck sign in the woods." Providing additional antlerless harvest opportunities helps to reduce hunting pressure on bucks, allowing more bucks to survive to older ages. Increased antlerless harvests are also necessary to achieve a more balanced buck-to-doe ratio. Perhaps most importantly, a healthy deer population produces healthier, larger-antlered, larger-bodied bucks.

Ultimately, the Department would like to maintain the buck population at its current level. It may seem counterintuitive that this can be done with fewer does in the population, but age structure and birth rate data clearly indicate that it is possible. When does are in better physical condition they give birth to more fawns, and, more importantly, are able to raise more of those fawns to adulthood. This means that fewer, healthier does can recruit more deer into the population than a larger number of less-healthy does on over-browsed habitat. If the physical condition of deer can be improved, recruitment of fawns to adulthood will improve. Since half of fawns are male, this would allow the buck population to remain at its current level, or even increase, despite fewer does on the landscape.

Antlerless Harvest Recommendation

Archery Season

The Department believes it is appropriate to have all WMUs open to the taking of antlerless deer during the 2024 archery season. Antlerless harvest in archery season is a key component in deer population management in Vermont. Archery hunters tend to distribute their hunting effort and, as a result, harvest in areas with higher deer numbers. Therefore, archery harvest has a low impact in areas with fewer deer. Importantly, archery harvest allows hunters to better regulate local deer herds in areas with high deer densities, particularly areas where firearm hunting is limited.

Youth and Novice Season

The Department is strongly committed to recruiting new hunters into Vermont's deer hunting heritage. Based on this commitment and the importance of harvesting an adequate number of female deer each year, the Department recommends that the youth and novice season bag limit be one deer of either sex in all WMUs. This will provide these hunters with additional opportunity to harvest a deer and the opportunity to help properly manage Vermont's deer herd. The Department also recommends that hunters during this season be able to take any buck, regardless of antler characteristics. It is critical that spike-antlered bucks be taken during this season so the Department can track their prevalence in the population (for population modeling) and obtain important biological information (e.g., weight, antler measurements) from this portion of the yearling buck population. This is the primary reason Department biologists examine deer during this season each year. This will have no impact on buck age structure management in WMUs that still have an antler restriction, as the buck harvest during this season is typically about five percent (four percent in 2023) of the overall buck harvest.

Antlerless Permits

Antlerless permits are recommended for all of the state's 21 WMUs in 2024. These permits may be filled during the antlerless-only muzzleloader season in late October or during the December muzzleloader season. The Department recommends that a total of 28,300 antlerless permits be issued (31 percent more than the 22,000 approved for distribution in 2023). An increase in antlerless permits is recommended in 14 WMUs, while all other WMUs would have the same number of permits as allocated in 2023 (**Figure 10**). However, permit allocations were not increased in WMUs A, F1, K, and N only because current allocations have already exceeded demand for permits in these areas.

These recommendations are intended to move populations toward WMU-specific deer density and physical condition objectives established in the 2020-2030 Big Game Management Plan (see Appendix A for additional detail). This permit allocation is expected to result in the harvest of an additional 3,980 antlerless deer above those harvested during the archery and youth/novice seasons.

This recommendation continues to take advantage of new hunting regulations to achieve the higher antlerless harvests that are necessary to achieve WMU-specific deer density and physical condition objectives. However, for some WMUs this also represents the maximum antlerless harvest achievable under current regulations, which may be insufficient to achieve population objectives. In the future, more antlerless deer will need to be harvested in some years to maintain populations at desired densities, particularly when winters are mild and as deer condition and fawn recruitment rates improve.

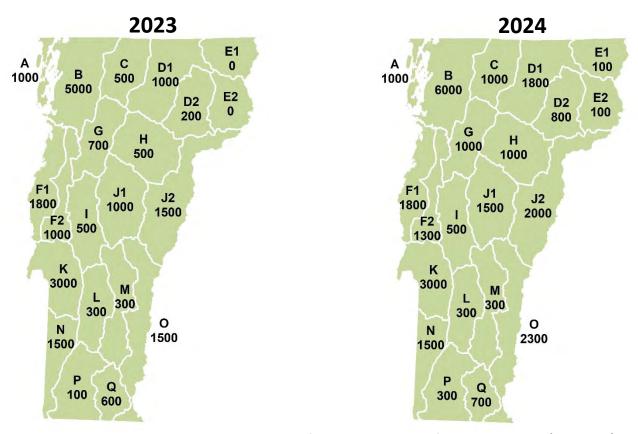


Figure 10. Antlerless permit allocations by wildlife management unit for 2023 and 2024 (proposed).

Table 1. Estimated deer densities and predicted antierless deer harvests during the 2024 archery, youth/novice, and muzzleloader seasons, by wildlife management unit.

	Deer	per mi	2	Muzzlelo		ntlerless	Other A	ntlerless		% of Doe	Doe	Doe Harvest
WMU	Objective	2023	2024	Permits	Fill Rate	Harvest	Archery	Youth/ Novice	2024 Total Antlerless	Population Harvested	Harvest per Mi ²	per 100 Bucks ^a
Α	18	44	44	1000	13%	127	164	22	312	17%	3.71	110
В	18	27	27	6000	14%	861	706	144	1710	18%	2.33	110
С	15	19	21	1000	18%	179	258	46	484	10%	1.05	65
D1	15	20	20	1800	20%	352	353	104	810	12%	1.18	71
D2	12	14	15	800	19%	154	164	34	352	10%	0.76	67
E1	<10	7	9	100	20%	20	26	4	50	3%	0.13	25
E2	<10	7	9	100	20%	20	24	3	47	3%	0.12	28
F1	15	20	22	1800	12%	213	150	25	389	10%	1.03	84
F2	18	20	22	1300	11%	140	132	32	304	9%	0.94	68
G	12	16	17	1000	12%	122	144	13	280	7%	0.61	57
Н	15	17	17	1000	17%	173	298	41	512	9%	0.83	79
I	12	11	12	500	12%	62	95	10	167	5%	0.33	42
J1	15	17	17	1500	15%	224	275	37	536	10%	0.85	80
J2	15	18	17	2000	17%	338	413	72	823	11%	0.97	86
K	18	23	24	3000	11%	332	188	52	571	9%	1.09	71
L	12	11	12	300	12%	36	61	10	107	4%	0.25	31
M	12	12	13	300	14%	42	53	10	106	3%	0.20	28
N	18	20	22	1500	10%	157	116	34	306	7%	0.79	59
0	15	16	17	2300	14%	321	226	27	573	10%	0.88	86
Р	12	11	13	300	14%	41	93	11	146	4%	0.27	38
Q	12	15	16	700	9%	65	90	2	157	7%	0.57	54
STATE				28300	14%	3980	4030	734	8744			

^a In WMUs with an antler restriction, which reduces buck harvest, this number will be higher than a comparable area with no antler restriction.

Table 2. Muzzleloader antlerless permit history by WMU, 2016–2023, and recommended permit allocation for 2024. Numbers in parentheses are the number of permits actually distributed.

WMU	2016	2017	2018	2019	2020	2021	2022	2023	2024
Α	1100	1100 (843)	1100 (720)	1100 (939)	1000	500	800	1000 (855)	1000
В	5500	5500	5500	5500	4500	3500	4000	5000	6000
С	350	700	800	300	500	500	500	500	1000
D1	300	500	1200	500	1000	800	800	1000	1800
D2	100	300	800	300	500	300	200	200	800
E1	0	0	0	0	0	0	0	0	100
E2	0	0	0	0	0	0	0	0	100
F1	200	1200 (917)	1000 (900)	1000	1000	1300	1500 (1453)	1800 (1145)	1800
F2	700	1500 (1297)	1300	1300	1300	1000	1000	1000	1300
G	300	300	300	300	700	700	700	700	1000
Н	750	900	1100	400	300	300	300	500	1000
I	0	300	300	300	500	500	500	500	500
J1	300	750	1200	800	1500	1200	800	1000	1500
J2	1500	1750	2500	2000	2000	1800	1500	1500	2000
K	4100 (3569)	4100 (2505)	4000 (2446)	4000 (2440)	3000	3000 (2795)	2500	3000 (2222)	3000
L	0	300	300	300	300	300	300	300	300
M	200	300	300	300	300	300	300	300	300
N	2100 (1835)	2100 (1588)	2000 (1487)	2000 (1462)	2000	1800 (1642)	1500	1500 (1378)	1500
0	1200	2000	2600 (2300)	2000	2000	1500	1500	1500	2300
Р	0	0	0	0	100	100	100	100	300
Q	250	900 (692)	700 (604)	600	500	600	600	600	700
STATE	18950 (18254)	24500 (21442)	27000 (24057)	23000 (20741)	23000	20000 (19637)	19400 (19353)	22000 (20300)	28300

Table 3. Muzzleloader antlerless permit fill rate by WMU, 2016–2023.

WMU	2016	2017	2018	2019	2020	2021	2022	2023
Α	10%	12%	19%	13%	17%	14%	11%	13%
В	15%	13%	19%	14%	18%	15%	14%	14%
С	29%	19%	33%	24%	23%	20%	20%	21%
D1	25%	28%	29%	24%	23%	19%	18%	22%
D2	18%	18%	21%	21%	20%	17%	18%	22%
E1								
E2								
F1	15%	11%	16%	13%	17%	13%	12%	12%
F2	14%	11%	19%	12%	17%	11%	10%	11%
G	20%	16%	28%	14%	17%	12%	12%	13%
Н	16%	17%	20%	18%	21%	18%	16%	18%
I		11%	24%	15%	19%	14%	10%	13%
J1	23%	19%	26%	19%	18%	14%	17%	14%
J2	20%	16%	23%	17%	21%	16%	18%	17%
K	13%	12%	18%	14%	16%	11%	12%	10%
L		14%	31%	15%	17%	13%	9%	15%
M	18%	15%	24%	13%	17%	13%	17%	12%
N	13%	12%	18%	11%	13%	11%	11%	9%
0	15%	15%	20%	11%	13%	13%	16%	12%
Р					17%	13%	14%	14%
Q	11%	12%	18%	10%	13%	9%	11%	8%
STATE	15%	14%	21%	14%	17%	14%	14%	13%

Public Comments

Three public hearings were held March 18, 20, and 21, 2024 to gather comments on the deer herd. Approximately 73 members of the public participated in these hearings. Two additional public hearings will be held May 6 and 8, 2024.

Appendix A: Population Status and Management Recommendations by WMU

Deer densities, habitat conditions, and winter severity can vary substantially from one part of Vermont to another. Additionally, these factors and the effects of historical deer densities have resulted in deer in some regions being in better physical condition than others. This results in variable deer population dynamics across the state; therefore, deer management prescriptions are made at the WMU level rather than statewide.

The Department is aware that deer densities (and other factors) vary within each WMU, sometimes substantially. Unfortunately, managing deer at a smaller scale than a WMU is not currently feasible given the structure of hunting regulations and the Department's ability to collect enough data. However, hunters generally do a good job of targeting areas of higher deer density within a WMU if they have sufficient access.

Description of data provided for each WMU

Area of deer habitat: Deer habitat is all land that is not developed.

Management Objective: The desired change in the deer population (Increase, Decrease, Stabilize)

Recommended Antierless Harvest: The recommended antierless harvest for 2024 during the archery, youth/novice, and muzzleloader seasons. Archery and youth/novice antierless harvests are based on the previous 3-year averages and adjusted for the expected change in deer numbers from 2023 to 2024. The number of permits required to achieve the recommended muzzleloader antierless harvest is also shown.

Deer Density: Estimated pre-hunt deer density over the past 10 years based on retrospective population modelling and the projected density in fall 2024. The density objective established in the 2020-2030 Big Game Management Plan is represented by a red line in the figure. The shaded green area shows ±2 deer per square mile – the range in which the management objective will be to stabilize.

Harvest: The total buck and antierless deer harvests during all seasons during the past 10 years. The proposed antierless harvest for 2024 is shown by the dotted red line.

Yearling Antler Beam Diameter/Yearling Male Weight/Fawn Weight: These physical condition metrics are from deer examined by biologists at check stations. The average for the most recent three years of data is provided. Sample size is shown in parentheses. Minimum acceptable levels for each metric, established in the 2020-2030 Big Game Management Plan, are also shown.

Adult Birth Rate: The average adult birth rate (fetuses per doe) over the past five years based on examinations of incidentally killed deer during February-May. Sample size is shown in parentheses. The minimum acceptable level established in the *2020-2030 Big Game Management Plan* is also shown.

Winter Severity: The median winter severity index in that WMU over the past 10 years and the expected adult doe mortality outside of the hunting seasons based on that winter severity.

Red Numbers: Numbers are red when a metric does not meet the objectives established in the 2020-2030 Big Game Management Plan.

	100	Managen	nent	Re	commended	Antlerless Harv	est
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	71 er habitat	Decre	ase	164	22	127	312
Deer Density (deer/mi ²			Harvest		_	Bucks — A	Antlerless
50	,	2024 Estimate	500 —				
40		44	400 —			^	
30	/	Objective	300 —				
20	20						
10		18	100				
0			0 —				
14 15 16 17 18		4	14	15 16 1	17 18 19	20 21 22	23 24
Yearlin Beam Diameter	g Male Weight	Fawn We	eight	Adult B	irth Rate	Winter Se	everity
3-Year Avg.	3-Year Avg.	3-Year A	wg.	5-Yea	ar Avg.	Median	WSI
15.8 (8)	124.3 (10)	57.3	(7)	1.8	36 (7)	10)
Minimum	Minimum	Minimu	ım	Min	imum	expected non-hu	unt mortality
17	118	60		1.	60	8%	, D



Wildlife Management Unit A encompasses the Champlain Islands (Grand Isle County). Winters here are among the least severe anywhere in Vermont and the habitat is relatively productive due to an abundance of agriculture. Despite high population density, physical condition of deer in this region remains good, presumably due to the abundance of agricultural habitat.

The abundant agriculture and other open land results in only 46% of the habitat being forested. This means the estimated density of 39 deer per square mile of habitat equates to 84 deer per square mile of forest. This density of deer is having significant impacts on forest ecosystems. The health of these ecosystems is the primary management concern in this region.

Although antierless harvests have been higher since 2020, they have not prevented population growth. The antierless permit allocation in this WMU has exceeded demand and it is unlikely that all permits will be distributed. As a result, the recommended antierless harvest is the maximum achievable under current

regulations, and may be insufficient to achieve population objectives.

Limited hunter access to private land is a significant management challenge in this WMU.

	FUA	Managen	nent	Re	commended	Antlerless Harv	est
	MACH	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	16 er habitat	Decre	ase	706	144	861 6000 permits	1710
Deer Density (deer/mi ²)			Harvest				Antlerless
30		2024 Estimate	2000 —			^	
25	\	27	1500 —				<u></u>
15		Objective	1000				
10		18	500 —				
0			0 —				
14 15 16 17 18	19 20 21 22 23 24	1	14	15 16 1	17 18 19	20 21 22	23 24
Yearlin		Fawn We	eight	Adult B	irth Rate	Winter Se	verity
Beam Diameter	Weight						
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI
15.8 (103)	117.1 (107)	58.3	(82)	1.8	2 (28)	15	5
Minimum	Minimum	Minimu	ım	Min	imum	expected non-hunt mortality	
17	118	60		1.	60	9%	, D



Wildlife Management Unit B encompasses the Champlain Valley north of the Winooski River. Severe winters are rare in this region and the habitat is relatively productive, with an ideal mix of forest and fields.

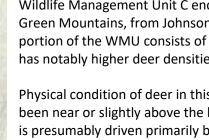
Physical condition of deer in this region is mediocre considering the quality of the habitat, indicating that deer densities have exceeded the level that the habitat can support long-term. This is further supported by widespread and often substantial evidence of deer impacts to forest ecosystems. It appears that recent increases in antlerless harvest may have stopped physical condition from declining, but have been insufficient to allow for improvement.

Deer density in this WMU has been above management objective for many years, and recent antlerless harvests have been insufficient to reduce deer numbers.

The recommended antierless permit allocation in this WMU may exceed demand and it is possible that all permits will not be distributed. As a result, the recommended antierless harvest is likely the maximum achievable under current regulations, and may be insufficient to achieve population objectives.

Limited hunter access to private land is a significant management challenge in this WMU.

	100	Manager	nent	Re	commended	Antlerless Harv	est
	NA P	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
3	86	Decre	ase	258	46	179	484
mi ² dee	er habitat					1000 permits	
Deer Density (deer/mi ²)		Harvest		_	Bucks — A	Antlerless
25		2024 Estimate	800 —				
20	····	21	600 —				
15		Objective	400 —		1		
5		15	200				
0 —			0 —				
14 15 16 17 18	19 20 21 22 23 2	4	14	15 16 3	17 18 19	20 21 22	23 24
Yearlin	g Male	Fawn We	eight	Adult B	irth Rate	Winter Se	verity
Beam Diameter	Weight						
3-Year Avg.	3-Year Avg.	3-Year A	lvg.	5-Yea	ar Avg.	Median	WSI
17.3 (22)	116.0 (22)	58.3	(17)	1.7	3 (11)	26	5
Minimum	Minimum	Minimu	ım	Minimum		expected non-hunt mortality	
17	118	60		1.	60	109	%



Wildlife Management Unit C encompasses the northernmost portion of the Green Mountains, from Johnson to the Canadian border. The westernmost portion of the WMU consists of lower elevation farmland similar to WMU B and has notably higher deer densities than higher elevation portions of the WMU.

Physical condition of deer in this WMU is mediocre and suggests that density has been near or slightly above the level the habitat can support for many years. This is presumably driven primarily by higher density in the western portion of the WMU and/or declining habitat quality in the more heavily forested, mountainous areas.

Deer density has remained relatively stable in this WMU over the past 10 years, but increased notably in 2023 and is expected to increase again this year due to recent mild winters. Importantly, density has been above objective for many years, and previous antlerless harvests have been insufficient to reduce deer numbers.

The recommended antierless harvest this year is an increase over recent years and is necessary to reduce deer numbers. However, if winters continue to be mild, even more antierless deer will need to be harvested to achieve density and physical condition objectives.

	400	Managen	nent	Re	commended	Antlerless Harv	est
D 4	TA CO	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	70	Decre	ase	353	104	352 1800 permits	810
Deer Density (deer/mi ²)		l	Harvest		_	Bucks — A	Antlerless
25		2024 Estimate	1000 —			_	
20		20	800 —			12	<u> </u>
15			600	/			
10		Objective	400		V		
5		15	200 —				
0			0				
14 15 16 17 18	19 20 21 22 23 24	4	14	15 16 1	17 18 19	20 21 22	23 24
Yearlin	g Male	Fawn We	ight	Adult B	irth Rate	Winter Se	verity
Beam Diameter	Weight	1 4 4 4 1		Addit b	mem reace	William Sc	verity
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI
16.1 (47)	117.5 (48)	59.3	(24)	1.5	2 (23)	44	
Minimum	Minimum	Minimu	ım	Minimum		expected non-hunt mortality	
17	118	60		1.	60	139	%



Wildlife Management Unit D1 is in the northern Vermont piedmont biophysical region. Deer habitat in this WMU is fairly productive, with a mix of forest and fields. Winters in this region tend to be more severe than much of the rest of the state, which limits the density of deer that can be supported long term.

Physical condition of deer in this WMU is not good considering the quality of the habitat, with all metrics now falling below minimum acceptable levels. This is a clear indication that deer numbers have exceeded what the habitat can support for many years.

Recent higher antlerless harvests appear to have helped stabilize deer density in this WMU, but have been insufficient to reduce deer numbers when winters are easy or moderate. A higher antlerless harvest is recommended in 2024, and will likely be necessary going forward to effectively reduce deer numbers and improve physical condition.

		Managen	nent	Re	commended Antlerless Harvest		est	
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total	
D2 3	87	Decre	ase	164	34	154	352	
mi ² de	er habitat 💮 💮					800 permits		
Deer Density (deer/mi ²)		Harvest		_	Bucks ——	Antlerless	
20		2024 Estimate	500 —					
15		15	400 —	^				
			300		\times		•••	
10		Objective	200					
5 —		12	100					
0 —			0					
14 15 16 17 18	19 20 21 22 23 2	4	14	15 16	17 18 19	20 21 22	23 24	
Yearlin	g Male	Fawn We	ight	Δdult F	Birth Rate	Winter Se	overity	
Beam Diameter	Weight	Tawii wc	-igiit	Addit	men nace	vviiitei 3e	everity	
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Ye	ar Avg.	Median	WSI	
17.0 (8)	118.8 (8)	59.3	(6)	1.9	4 (17)	51	L	
Minimum	Minimum	Minimu	ım	Min	imum	expected non-hi	unt mortality	
17	118	60		1.	.60	149	%	



Wildlife Management Unit D2 is located in the Northeast Kingdom. Higher elevation portions of the unit are heavily forested while lower elevations, particularly along the Passumpsic river valley, include more open land and agriculture. As a result, deer density is higher in lower elevation areas in the southeastern part of the unit.

Winters in this WMU are often severe, which limits deer density, particularly in the higher elevation areas, and helps keep deer in good physical condition. However, several metrics are now near minimum acceptable levels, indicating deer numbers in some parts of this WMU may be too high. Several of the lower elevation towns (e.g., Burke, Lyndon, St. Johnsbury) have seen record or near-record harvests in recent years, suggesting the deer population in this part of the WMU is growing.

The antlerless harvest recommendation is intended to reduce the population to the objective of 12 deer/mi². Most antlerless harvest, particularly during the archery season, tends to be concentrated in the lower elevation, higher density parts of the WMU.

	1100	Managen	nent	Red	commended	Antlerless Harv	est
	TA CO	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	48 or habitat	Stabi	lize	51	7	40 200 permits	98
Deer Density (deer/mi ²)			Harvest		_		Antlerless
12		2024 Estimate	300 —				
10		9	250 —	^	^		
8		9	200				
6		Objective	150				
4		<10	100				
0			50		<u> </u>		
14 15 16 17 18	19 20 21 22 23 24	4	14	15 16 1	7 18 19	20 21 22	23 24
Yearling	g Male	Fawn We	ight	Adult B	irth Rate	Winter Se	verity
Beam Diameter	Weight	T avvii vve	igiit	Addit b	ii tii Nate	willter 5e	verity
3-Year Avg.	3-Year Avg.	3-Year A	wg.	5-Yea	ar Avg.	Median	WSI
19.6 (9)	122.7 (9)	63.0	(1)	2.1	7 (6)	57	7
Minimum	Minimum	Minimu	ım	Mini	mum	expected non-hunt mortality	
17	118	60		1.60		15%	



Wildlife Management Units E1 and E2 are located in the northeast corner of Vermont in the northeast highlands biophysical region. This region regularly experiences severe winters which limit deer density.

These WMUs are heavily forested, but young forest is abundant due to widespread commercial timber harvesting. As a result, summer deer habitat is relatively high quality. It is the quantity and quality of winter habitat, specifically mature softwood cover, that limits deer abundance in this region.

Additionally, deer in this region must coexist with a relatively abundant moose population. Because they largely compete for the same resources at certain times of year, the densities of both species must be considered in management decisions. The current density objective in these WMUs considers both the relationship between deer and moose and the limited quantity and quality of

current deer winter habitat. Maintaining deer density below 10/mi² helps minimize the risk of brainworm infection in moose and allows deer winter habitats to improve.

Although deer density remains below the 10/mi² threshold, it has been increasing in recent years. The current antlerless harvest recommendation, including issuing antlerless permits in these WMUs for the first time since 2000, is intended to prevent further population growth.

	UA	Managen	nent	Re	commended	Antlerless Harv	est
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	16	Decre	ase	150	25	213 1800 permits	389
Deer Density (deer/mi ²)			Harvest		_	Bucks —	Antlerless
25		2024 Estimate	500 —				
20		22	400 —			/	·
15			300 —				
10		Objective	200				
5 —		15	100				
0 —			0 —				
14 15 16 17 18	19 20 21 22 23 24	4	14	15 16 1	17 18 19	20 21 22	23 24
Yearlin		Fawn We	ight	Adult B	irth Rate	Winter Se	everity
Beam Diameter	Weight		0				
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI
16.1 (22)	121.2 (23)	61.1	(9)	2.0	7 (15)	10)
Minimum	Minimum	Minimu	ım	Min	imum	expected non-hi	unt mortality
17	118	60		1.	60	8%	, D



Wildlife Management Unit F1 is in the southern Champlain Valley, from Burlington south through the heavily agricultural regions of Addison County. Winters are relatively easy for deer in this part of Vermont and the abundance of agriculture results in excellent deer habitat. This is reflected in the physical condition of the deer, which is often among the best in the state.

The abundance of agriculture and otherwise open land results in only 33% of this WMU being forested. The current density of 22 deer/mi² of habitat therefore equates to 68 deer/mi² of forest. These high densities have caused widespread and significant impacts to forest ecosystems, including many of the uncommon natural communities that are found in this region.

Deer density has increased steadily over the past decade, with many towns having record or near-record harvests each year. The recent increases in antlerless harvest may have helped to slow this increase, and possibly stabilize the population, but have been insufficient to reduce deer density toward the objective.

The recommended antierless permit allocation in this WMU exceeds demand and it is unlikely that all permits will be distributed. As a result, the recommended antierless harvest is the maximum achievable under current regulations, and may be insufficient

to achieve population objectives.

Limited hunter access to private land is a significant management challenge in this WMU.

	100	Managen	nent	Re	commended	Antlerless Harv	est
	4	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	68	Decre	ase	132	32	140	304
	er habitat		11			1300 permits	
Deer Density (deer/mi ²)	2024 Estimate	Harvest 500			Bucks — A	Antlerless
20	····	22	400 —			/4~	
15	•	Objective	300		$/ \vee$		
10		•	200				
5		18	100	/			
0	19 20 21 22 23 2	4	0 —				
14 15 16 17 18		1	14	15 16 1	17 18 19	20 21 22	23 24
Yearlin Beam Diameter	g Male Weight	Fawn We	eight	Adult B	irth Rate	Winter Se	everity
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI
14.5 (14)	119.9 (14)	60.2	(17)	1.7	8 (9)	10)
Minimum	Minimum	Minimu	ım	Min	imum	expected non-hi	unt mortality
17	118	60		1.	60	8%	, 0



Wildlife Management Unit F2 is located in the southern Champlain Valley in the foothills of the Green Mountains. Winters here are relatively easy for deer and the habitat is generally good with a mix of forest and field.

Considering the prevalence of agriculture and mild winters, the mediocre condition of yearling bucks is concerning. This suggests that deer density has exceeded the level the habitat can support. Indeed, deer impacts to forest ecosystems are common in this WMU.

Many towns in this WMU have experienced record or near record harvests in the past few years. However, recent higher antlerless harvests appear to have helped stabilize the population near the objective.

The recommended antierless permit allocation in this WMU may exceed demand and it is possible that all permits will not be distributed. As a result, the recommended antierless harvest is likely the maximum achievable under current regulations, and may be insufficient to achieve population objectives if winters continue to be mild.

Limited hunter access to private land is a significant management challenge in this WMU.

	1 LLA	Managen	nent	Re	commended	Antlerless Harv	est
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
G 3	88	Decre	ase	144	13	122	280
mi ² de	er habitat					1000 permits	
Deer Density (deer/mi ²)		Harvest		_	Bucks ——	Antlerless
20		2024 Estimate	500 —				
15		17	400 —				
			300			\sim	
10		Objective	200 —				
5		12	100				
0 — 14 15 16 17 18	19 20 21 22 23 2	4	0 ——	15 16 1	17 18 19	20 21 22	23 24
	g Male		14	15 10 .	17 18 19	20 21 22	23 24
Beam Diameter	Weight	Fawn We	eight	Adult B	irth Rate	Winter Se	everity
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI
17.4 (10)	118.5 (10)	62.0	(1)	1.6	2 (13)	19)
Minimum	Minimum	Minimu	ım	Min	imum	expected non-hu	unt mortality
16.5	115	60		1.	60	9%	, 1

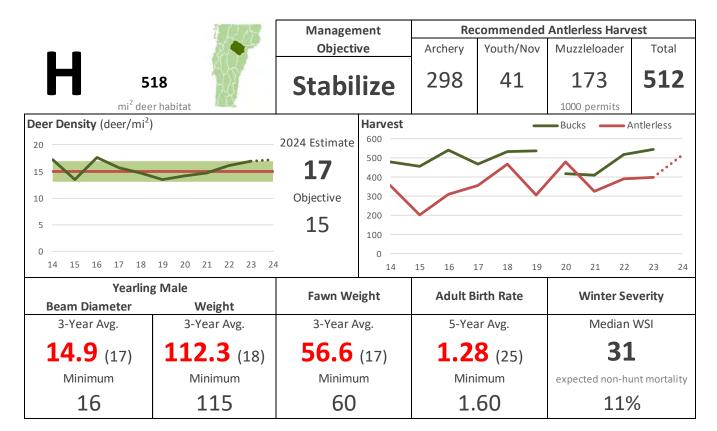


Wildlife Management Unit G is in the northern Green Mountains from the Appalachian Gap (Rte 17) north to Johnson. This area is heavily forested and mountainous, and includes both Camel's Hump and Mount Mansfield. Deer habitat is poor due to the unproductive mountain terrain and very limited young forest habitat. Winters here can occasionally be severe, but are often more moderate at lower elevations where deer typically spend the winter.

Deer density in this unit is low at higher elevations, but moderate to high at lower elevations, particularly on the western edge of the unit. Physical condition of deer was below optimal levels for many years, but it has improved recently. This may be due to increased antlerless harvests in recent years, although deer density has not changed much.

Past antlerless harvests may have helped stabilize deer numbers in this WMU, but have been insufficient to reduce the population toward objective. The

recommended antierless harvest in 2024 is an increase over recent years. This should reduce deer numbers if winter severity is normal, which will help to maintain the improved physical condition.





Wildlife Management Unit H is located in north-central Vermont, from Stowe east to Groton and Barre-Montpelier north to Hardwick. Habitat quality for deer varies considerably in this unit, and that is reflected in local deer densities. Lower elevation areas closer to Montpelier and Barre have more agriculture and open land and easier winters, resulting in relatively high deer density. The remainder of the WMU is higher elevation (including the Worcester and Groton ranges) and heavily forested. Winters are more severe in these areas and habitat quality is generally poor. As a result, deer density is lower.

Physical condition of deer in this WMU is mediocre to poor. Overall deer density in this WMU has been near objective for several years. While that should be sustainable, it will be important to achieve and

maintain higher antlerless harvests in the Barre-Montpelier area where deer are overabundant.

Most of the antlerless harvest in this WMU occurs during archery season and is heavily concentrated closer to Barre and Montpelier. The recommendation for 2024 allows additional antlerless harvest opportunity in the muzzleloader seasons and should help to stop population growth and stabilize deer numbers near the objective.

				1					
	TU A		Management		Recommended Antlerless Harvest				
	MAT	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total		
4	Stabilize		96	10	62	167			
mi ² dee		Harvest		_	500 permits Bucks	Antlerless			
15	2024 Estimate 400								
	12	300 —	^						
10		12	300			^			
		Objective	200		^ /	/ \ _			
5		12	100						
0			0 —						
14 15 16 17 18	19 20 21 22 23 2	4	14	15 16	17 18 19	20 21 22	23 24		
Yearling Male		Fawn Weight		Adult Birth Rate		Winter Severity			
Beam Diameter	Weight								
3-Year Avg.	3-Year Avg.	3-Year Avg.		5-Year Avg.		Median WSI			
15.8 (5)	118.4 (5)	50.0 (3)		1.44 (9)		17			
Minimum	Minimum	Minimum		Minimum		expected non-hunt mortality			
16.5	115	60		1.60		9%			



Wildlife Management Unit I is located in the central Green Mountains, from Route 4 in Killington north to the Appalachian Gap (Rte. 17). Deer habitat is generally poor due to the unproductive mountain terrain and very limited young forest habitat. Winters here can occasionally be severe but are often more moderate at lower elevations where deer typically spend the winter.

Deer density in this unit is low at higher elevations, but can be moderate to high at lower elevations, particularly on the western edge of the unit. Physical condition measures are concerning, but sample sizes are limited.

It appears that higher antierless harvests since 2017 have helped to stabilize the population at the objective of 12 deer/mi². The recommendation for 2024 is to continue with that harvest level to maintain current deer numbers and provide additional harvest opportunity.

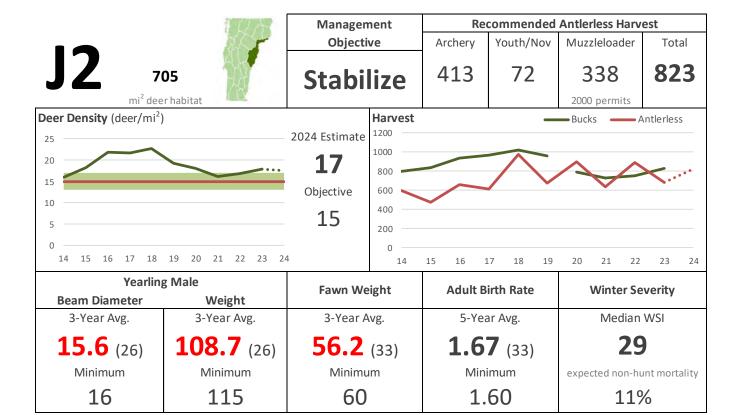
	Managemen		nent	Recommended Antlerless Harvest				
14		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total	
J 1 5	Stabilize		275	37	224 1500 permits	536		
Deer Density (deer/mi ²		Harvest			Bucks — A	Antlerless		
25		2024 Estimate 800						
20		17	600 —			\wedge		
15	Objective	400						
5	15	200						
0			0 —					
14 15 16 17 18	19 20 21 22 23 2	4	14	15 16 1	17 18 19	20 21 22	23 24	
Yearling Male Beam Diameter Weight		Fawn Weight		Adult Birth Rate		Winter Severity		
3-Year Avg.	3-Year Avg.	3-Year Avg.		5-Year Avg.		Median WSI		
16.4 (9)	113.6 (9)	58.6 (5)		1.59 (27)		20		
Minimum	Minimum	Minimum		Minimum		expected non-hunt mortality		
16	115	60		1.60		9%		



Wildlife Management Unit J1 is located in central Vermont. It encompasses the area from route 100 east to route 110 in Tunbridge and Chelsea, and from route 2 south to Bethel. Habitat quality for deer varies considerably in this unit, and that is reflected in local deer densities. Eastern parts of the WMU are hilly with an almost ideal mix of forest and field resulting in relatively high deer density. Conversely, the western half of the WMU is more mountainous and heavily forested. Habitat quality is lower and, as a result, deer density is lower.

Physical condition of deer in this WMU has been poor for many years, but appears to be improving. Poor condition is presumably related to declining habitat quality and historical overabundance of deer. Clearly, deer density in this unit had exceeded the level the habitat can support long-term. Recent population reductions appear to be having the desired effect of improving physical condition.

Recent higher antlerless harvests and the moderately severe winter of 2019 have reduced the population in this WMU and held it near the objective of 15 deer/mi². The recommended antlerless harvest in 2024 is a slight increase over recent years and is necessary to counter expected growth due to recent mild winters. This level of harvest will likely be necessary to maintain the population near the objective level, particularly when winters are mild.



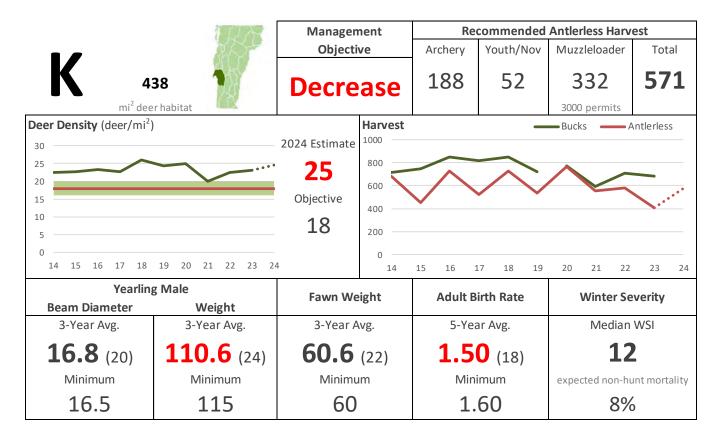
Wildlife Management Unit J2 encompasses the Connecticut River Valley from Lunenburg to White River Junction. Winters can occasionally be severe but are typically moderate to easy. The habitat contains a desirable mix of forest and field but forest

habitats are poor quality due to a lack of young forest and historical overabundance of deer.

Physical condition of deer in this WMU is poor and has been for many years. This is presumably related to historical overabundance of deer and declining habitat quality. Clearly, deer density has exceeded the level the habitat can support long-term. To improve the health of deer in this WMU, deer density must be reduced and maintained at the objective level.

Recent higher antlerless harvests and the moderately severe winter of 2019 have reduced the population in this WMU and held it near the objective of 15 deer/mi². The recommended antlerless harvest in 2024 is similar to the harvest achieved in recent years. This level of harvest will be necessary to maintain the population near

the objective level, particularly when winters are mild.





Wildlife Management Unit K is located in the Western Foothills biophysical region, encompassing areas west of US Route 7 from Brandon south through Rutland to Danby. This region has relatively easy winters and habitat with a good mix of forest and field. Importantly, oak is abundant and widespread and is an important factor in maintaining mediocre physical condition of deer despite chronic overabundance.

Deer browse damage to forest regeneration is ubiquitous throughout the WMU and has been occurring for decades in many areas. Chronic overabundance of deer has significantly impacted forest ecosystems and contributed to the proliferation of invasive species.

Following an apparent population decline in 2021 that was likely related to reduced hunting effort following a local EHD outbreak, the density estimate in 2022 returned to levels typical of this WMU over the past decade.

The recommended antlerless permit allocation in this WMU exceeds demand and it is unlikely that all permits will be distributed. As a result, the recommended antlerless harvest is the maximum achievable under current regulations, and will be insufficient to achieve population objectives.

Limited hunter access to private land is a significant management challenge in this WMU.

	Man		nent	Re	Antlerless Harv	ntlerless Harvest				
	MA	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total			
365 mi² deer habitat		Stabi	lize	61	10	36	107			
		Harvest			300 permits	N t.				
20 —	Deer Density (deer/mi²)				_	Bucks — A	Antlerless			
15	15			^	^					
10	10			Objective 200						
5		12	100			_	••••			
0 <u>14 15 16 17 18</u>	19 20 21 22 23 2	4	0 ——	15 16 1	17 18 19	20 21 22	23 24			
Yearlin	g Male	Fawn We	eight Adult Birth Rate Win		Winter Se	au Carravitur				
Beam Diameter	Weight	rawii vve	eigiit	Adult b	irtii Kate	winter se	eventy			
3-Year Avg.	3-Year Avg.	3-Year A	3-Year Avg. 5-Year Avg. Median W				WSI			
13.3 (1)	108.0 (1)	54.0 (2)		1.65 (17)		23				
Minimum	Minimum	Minimu	ım	Min	imum	expected non-hunt mortality				
16.5	110	60	60 1.60 10%			%				



Wildlife Management Unit L is located in the southern Green Mountains, from US Route 4 in Killington south to route 30 in Winhall. Deer habitat is generally poor due to the unproductive mountain terrain and very limited young forest habitat. Winters here can occasionally be severe but are often more moderate at lower elevations where deer typically spend the winter.

Deer density in this unit is low at higher elevations, but can be moderate to high at lower elevations on the western edge of the unit, particularly closer to Rutland.

Physical condition metrics are below desired levels, but sample sizes have been very limited. Importantly, the population has not grown over the past 10 years despite very limited antlerless harvests. This suggests that habitat quality is the primary factor limiting deer density in this WMU.

The recommended antlerless harvest is intended to maintain the population at its current level. It is similar to recent antlerless harvests and will provide reasonable

antlerless harvest opportunities and help address higher deer densities along the western edge of the unit.

FUN		Managen	Management Recommended Antler			Antlerless Harv	ntlerless Harvest	
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total	
	9 51 er habitat	Stabi	lize	53	10	42 300 permits	106	
Deer Density (deer/mi ²		•	Harvest		_	· · · · · · · · · · · · · · · · · · ·	Antlerless	
15		2024 Estimate	400 —					
10	13	300 —						
		Objective	200					
5		12	100		/	^		
0 — 14 15 16 17 18	19 20 21 22 23 2	4	0	15 16 1	17 18 19	20 21 22	23 24	
Yearlin	ig Male	Fawn We	ight Adult Birth Rate		Winter Severity			
Beam Diameter	Weight	14411111		Addit b	ii iii iidee	William 30	venty	
3-Year Avg.	3-Year Avg.	3-Year A	Avg.	5-Yea	ar Avg.	Median	WSI	
16.8 (3)	109.7 (3)	55.3 (3)		1.62 (16)		30		
Minimum	Minimum	Minimu	ım	Minimum		expected non-hunt mortality		
16.5	110	60	60 1.60 11%					



Wildlife Management Unit M is located in the eastern foothills biophysical region from Stockbridge south to Townshend. Deer habitat is generally poor due to the heavily forested, unproductive mountain terrain and limited young forest. Winters here can occasionally be severe but are often more moderate at lower elevations where deer typically spend the winter.

Deer density in this unit is variable, but generally low.

Physical condition metrics are near minimum levels, but sample sizes have been low. The population has been stable for several years despite very minimal antlerless harvests. This, and the current physical condition of the deer, suggests that habitat is the primary factor limiting deer density.

The recommended antlerless harvest is intended to maintain the population at its current level. It is similar to recent antlerless harvests and will provide additional antlerless harvest opportunities.

TUA		Management		Recommended Antlerless Harvest				
	MACH	Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total	
	23	Decre	ase	116	34	157	306	
	er habitat		Homiost			1500 permits		
Deer Density (deer/mi ²)	2024 Estimate	Harvest 800			Bucks —— A	Antierless	
30								
25		22	600		✓			
15				~				
10								
5		18	200 —					
0 —			0 —					
14 15 16 17 18	19 20 21 22 23 2	4	14	15 16 1	17 18 19	20 21 22	23 24	
Yearlin	g Male	Fawn We	ight	ight Adult Birth Rate Wi		Winter Se	inter Severity	
Beam Diameter	Weight	Tawii wc	-igiit	Addit b	ii iii ii	Willter Sc	verity	
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI	
18.0 (14)	111.1 (15)	57.6 (18)		1.66 (29)		12		
Minimum	Minimum	Minimu	ım	Minimum		expected non-hunt mortality		
16.5	110	60		1.	60	8%		



Wildlife Management Unit N is in the southwest corner of Vermont, including parts of the Taconic Mountains and Vermont Valley biophysical regions. This region has easy winters, productive soils, and habitat with a good mix of forest and field. Deer browse damage to forest regeneration is ubiquitous and has been occurring for decades in most areas. Chronic overabundance of deer has significantly impacted forest ecosystems and contributed to the proliferation of invasive species. Importantly, oak is abundant and widespread and is an important factor in maintaining physical condition at mediocre levels.

Physical condition of deer has improved some in recent years, but remains concerning, particularly given the productivity of the soils, mild winters, and abundance of oak. Presumably, this is related to chronic overabundance and declining amounts of young forest. Deer densities must be maintained at lower levels to improve the health of the deer and the forest ecosystems.

The deer population in this region declined from 2017 to 2020 and has been slightly above the target density since then. The decline, and lack of growth in recent years appears to have been caused by poor fawn recruitment during many of those years. This is yet another indicator of poor habitat quality and overabundant deer.

The recommended antlerless permit allocation in this WMU exceeds demand and it is unlikely that all permits will be distributed. As a result, the recommended antlerless harvest is the maximum achievable under current regulations, and may be insufficient to achieve population objectives.

Limited hunter access to private land is a significant management challenge in this WMU.

	1 Uni	Manager	nent	Re	est		
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	48	Stabi	lize	226	27	321	573
	er habitat 💴 🚾		1			2300 permits	
Deer Density (deer/mi ²)		Harvest 800		_	Bucks —— A	Antlerless
20		2024 Estimate	800		•		
15		17	600		7		
10 Objective 400							
5		15	200 —				
0 —			0				
14 15 16 17 18	19 20 21 22 23 2	4	14	15 16 1	17 18 19	20 21 22	23 24
Yearlin	g Male	Fawn We	ight Adult Birth Rate		Winter Severity		
Beam Diameter	Weight	rawii vve	igni	Adult B	irtii Kate	winter se	verity
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI
17.4 (8)	111.4 (8)	54.3	(10)	1.7	1 (28)	16	5
Minimum	Minimum	Minimu	ım	Minimum		expected non-hunt mortality	
16	110	60	60 1.60 9%		, D		



Wildlife Management Unit O encompasses the Connecticut River Valley from White River Junction south to Massachusetts. Winters here are relatively easy for deer and the habitat contains a good mix of forest and field.

Deer browse damage to forest regeneration is common throughout the WMU and has been occurring for decades in many areas. Chronic overabundance of deer has significantly impacted forest ecosystems and contributed to the proliferation of invasive species. This, combined with declining amounts of young forest, has contributed to the generally poor quality of forest habitats. Physical condition of deer is mediocre, but appears to be slowly improving.

Recent antierless harvests have helped stabilize deer numbers near the objective level, and will need to continue. The recommended antierless harvest is slightly higher than that achieved in recent years to counter expected growth due to recent mild winters.

The recommended antlerless permit allocation in this WMU may exceed demand and it is possible that all permits will not be distributed. As a result, the recommended antlerless harvest may be the maximum achievable under current regulations, and may be insufficient to achieve population objectives if winters continue to be mild.

Deer density does vary within this unit due to both habitat quality and hunter access to private land. Limited hunter access to private land is a substantial management challenge.

	10A	Managen	nent	Re	est		
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total
	55 er habitat	Stabi	lize	93	11	41 300 permits	146
Deer Density (deer/mi ²	L	Harvest		_	Bucks — A	Antlerless	
15	,	2024 Estimate	400 —				
13					~		
	Objective						
5		12	100			^	••••
0		_	0				
	19 20 21 22 23 24	4	14	15 16 1	17 18 19	20 21 22	23 24
Yearlin Beam Diameter	g Male Weight	Fawn We	eight	Adult Birth Rate		Winter Severity	
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Yea	ar Avg.	Median	WSI
15.6 (5)	95.0 (5)	63.0	63.0 (4) 1.81 (16)		1 (16)	29	
Minimum	Minimum	Minimu	ım	Minimum		expected non-hunt mortality	
16.5	110	60		1.60 11%			



Wildlife Management Unit P is in the southern Green Mountains, from the Massachusetts border north to Winhall. This high elevation, mountainous, heavily forested unit contains some of the poorest quality deer habitat in the state. Winters are often severe, particularly at higher elevations. However, many deer can migrate to lower elevation areas along the southern and western edge of the unit where winters are much more moderate.

Physical condition of deer in this unit is concerning, but small sample sizes limit inference from these data. However, deer density has remained around 10 deer/mi² over the past 10 years despite very minimal antlerless harvest, suggesting that deer numbers are limited by habitat quality.

A lower density objective may be appropriate in this WMU, but deer impacts to forest ecosystems are uncommon and the Department is hopeful that increased timber harvesting on National Forest lands will improve habitat quality and allow for some population growth.

Deer harvests have been steadily increasing near Bennington and in towns along the Massachusetts border. Some of these towns have had near-record harvests in recent years. Given this trend, the Department would like to increase antlerless harvest opportunity by increasing the number of antlerless permits available in this WMU.

	TUA	Manager	nent	Re	commended	Antlerless Harv	est	
		Objecti	ve	Archery	Youth/Nov	Muzzleloader	Total	
233		Decre	Decrease		2	65	157	
mi ² de					700 permits			
Deer Density (deer/mi ²)		Harvest		_	Bucks —— A	Antlerless	
20		2024 Estimate	300 —					
15		16	250 ——					
			200			^		
10		Objective	150				1	
5	5							
		12	50					
14 15 16 17 18	19 20 21 22 23	24	0 ——	15 16 1	17 18 19	20 21 22	23 24	
Yearlin	g Male	Fawn We	iaht.	Adult Birth Rate Wir		WinterSe	nter Severity	
Beam Diameter	Weight	rawii we	igni	Addit b	II III Kale	winter se	verity	
3-Year Avg.	3-Year Avg.	3-Year A	vg.	5-Year Avg.		Median WSI		
no data	no data	no data		1.21 (14)		15		
Minimum	Minimum	Minimu	ım	Minimum		expected non-hunt mortality		
16.5	110	60		1.	1.60 9%		, 0	



Wildlife Management Unit Q is located in the eastern foothills biophysical region from Massachusetts north to Townshend. Habitat quality is relatively poor in this small, heavily forested WMU, primarily due to a lack of young forest habitat. Winters here are relatively easy for deer. Generally, deer density is highest near Brattleboro and lower to the north and west as elevation increases.

Birth rates are currently well below minimum acceptable levels. The small size of this unit and limited youth weekend harvest make it difficult to collect other physical condition data.

The deer population in this WMU appears to be slowly increasing. The recommended antlerless permit allocation in this WMU may exceed demand and it is possible that all permits will not be distributed. As a result, the

recommended antierless harvest may be the maximum achievable under current regulations, and may be insufficient to achieve population objectives if winters continue to be mild.

Evidence of deer damage to forest ecosystems is common near Brattleboro. Unfortunately, deer harvest is limited by the town's firearm discharge ordinance. As a result, the Department will be considering an expanded archery zone to reduce deer impacts in this area.

Appendix B: Comments from 2024 deer public hearings

Hardwick - March 18, 2024 (public attendance: 23)

Assuming very healthy with the mild winters past few years.

Keep up the good work.

Keep antlerless harvest at least at what it is currently.

Winters more severe than recorded. Can't find a doe – only 1 fawn Low-no increase in numbers – camera.

I like the health of deer in our D1 area.

I see the greatest threats to deer hunting are the limits to where we can hunt and changes to habitat/ Conservation Range Program?/ Hunters registering w/ land owners to find places to hunt.

I would say that the deer hunting in Vermont is improving.

Review current use – your land should not be posted.

Brattleboro - March 20, 2024 (public attendance: 36)

I believe that deer in my area are at a healthy level.

Good info. Harvest goals seem prudent.

We live in section Q and your graph says we are overpopulated which is wrong. In the last 15 years living in the same place we started out seeing tons each night to now maybe seeing 2. Its definitely dropped by numbers.

Keep hearing overpopulated in Q. I hunted every season last year I saw 1 deer. I would like to know where the information is gathered.

Deer populations are good in my opinion. Based on presentation it sounds like State is on track. Kill rates being down also are a result of lazy hunters?

Excellent job – increase the no. of deer a hunter can harvest – does.

The deer population where I hunt seems healthy.

Personally I have seen a consistent decline in deer seen over the last 30ish years. IMO the single biggest issue is coyote predation. I spend an enormous amount of time in the woods and I consistently cut more coyote tracks than deer tracks. *Way too many coyotes*

Clearly there are too many deer in most areas of VT if more people have their land in land use.

I think it's bad in my area. Think maybe taking a few antlerless deer during rifle season would help.

I live in W Brattleboro most land is posted & fewer hunters but a healthy population – hunters have created bad feelings – somehow we need to educate both landowners & hunters to get along.

My observations parallel dept's own. Population numbers exceed habitat and consumption of seedlings and browns on saplings is often severe and is diminishing forest diversity. I would support any mechanism that allowed greater success rates in doe harvest.

As described we have too many deer for out forest health. We should issue enough permits to increase antlerless & youth season harvests. We should also encourage specified methods of hunting especially rifles on landowners properties i.e., no trapping, no baiting, only shooting.

Enosburg - March 21, 2024 (public attendance: 14)

Stop shooting so many doe and go back to two bucks.

Provide more incentives and programs (not just NRCS) for habitat management on private lands. Maybe a tiered system for open/posted land.

Deer are in great shape.

Deer populations in most of Vermont too dense.

Noted (via certified forester) no new generational growth due to deer overbrowse (I am in WMU B). Must find a way to recruit/retain/reactivate more hunters.

Plenty of deer but access is still an issue. WMU B.

Rutland - May 6, 2024 (public attendance: 7)

Deer seem healthy in most areas.

Population seems very out of whack. Areas have low deer densities and some are high. High seem to be areas with lots of posted land and liberal demographic.

It (antlerless harvest) will come in under objectives.

Too many deer.

A lot of places had no apples or acorns last year due to late frost. Wouldn't that have affected winter kill?

The deer population appears to be dwindling, even in areas where there is habitat to support them. I believe that there should be much less antlerless deer harvested in VT.

From what I've seen the deer themselves seem to be very healthy, but the population is extremely poor. I hunt units M & L, and I think this season will be as slow as the ones prior. Why hunt these units when NH is a half hour away? Hunters are losing interest because of the lack of deer.

Health seems fine.

Prospects depend on weather (no control) and other activities!

They (the recommendations) are fine.

I think the health is good due to the mild winter this year.

WMU have too many does to support the population, increase doe harvest.

Thetford - May 8, 2024 (public attendance: 14)

We need more access it seems to hunt WMUs where we need to kill more deer (Chittenden county, western edge of the state.

Recommendations seem good.

Is there room in the budget to advertise youth weekend more?

Healthy today, worried that if we've surpassed the carrying capacity of the land then we'll definitely be seeing a decrease in deer health over the next couple of years.

I wonder if the deer/sq mi. is low enough to permit habitat to improve.

I hunt J2. Decline in deer size has been noticeable. Deer numbers appear to be good.

I'm not sure how effective an increase in antlerless permits will be if previous year's goal were not met.

I'm concerned that we are going to see numbers skyrocket, and our available habitat is hopelessly inadequate.

We need to increase antlerless harvests far more than is recommended.

The status seems okay, more bigger bucks, personally pass on smaller bucks for youth.

Too many deer with increased housing more pressure on landscape plantings, native plants and forestry regeneration.

Antlerless harvest should be for all seasons.

It (deer population status and health) different from town to town with the limited acres to access to hunt.

It's (deer population status and health) getting better.

There are a lot of healthy deer out there.

I feel there are enough but not too many deer. I – J2.

Okay with it (the 2024 antlerless recommendation).

Habitat and vegetation cannot support the current deer densities.

Expand all efforts to increase the antlerless deer harvests.

Appendix C: Written Public Comments

From: Wendy Wieland-Alter

Sent: Wednesday, May 8, 2024 9:56 AM

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

Subject: Deer herd management

I'm all for professional culling of the deer herd. I no longer have wild flowers in my woods, let alone and landscape plantings from the relentless deer browse. I had 7 looking in the windows earlier this week. There are way too many deer in Corinth! Let's get rid of them!

From: Michael Murdock

Sent: Sunday, May 5, 2024 8:07 PM

To: Herrick, Christopher Subject: Deer meeting

Here you go brother!! Hope all is well. Keep fighting the good fight!

Dear Commissioner Herrick,

I'd like to first say I applaud the efforts of the Department of Fish and Wildlife and your leadership in managing Vermonts game, non game and fisheries in the state. Not an easy task in this state that I was born in and still reside in. Vermonts landscape is changing both in population, interests, conflicts with hunting and non hunting communities and promotion of recent legislation fostering development to solve the housing crisis in Vermont.

I was reviewing the recent deer harvest report and recommendations posted on the departments web site . Starting with WMU A . I'd like share my thoughts and opinion .

Projected deer per square mile 44 Target deer density at 18.

How was the deer density determined to a 44 deer per square mile?

I hunt an area with 7 others that is just over 600 acres in combined private parcels. With 12 game cameras (year round), scouting, hunting we observe numbers that reflects 50 percent of what the estimated density is. The parcels we hunt are a mix of young and old forest land with agricultural and large wetlands areas. Some does are taken and each year and all 7 of us tag out with a Buck. Post season we still see bucks both spike and 3 point and up. I feel that the doe to buck ratio hovers at 4:1- 3:1 year after year. I believe that the target the department was looking for was a 2:1.

Average 3 year weight 124lbs Well above the minimum of 118 My harvest this year 3 year old buck at 164.

A fellow hunting partner 4 year old buck 182. We had received these results on the departments web site.

I guess where I'm going with this is if the test area was say the Dunes state park in Alburgh or the WMA in Alburgh that is close the Canadian border. The results may be presenting a false base line for the rest of the county.

Dunes state park and recently acquired Coon Point acreage . Historically off limits to public hunting until acquired by the state kept the deer numbers high in this area . A very large wetlands area that provides cover for deer pressured during the hunting season .

WMA in Alburgh near Greenwoods road sees an increase in deer population as a result of Quebecs earlier seasons, no restrictions and extremely high hunting pressure.

I've hunted both sides of the border in past years and it's very common to see deer from Quebec migrate to Vermont . Obviously good genetics is a benefit but is the increase to the local herd count being affected by this migration .

I guess the point I'm trying get across is how the actual deer density data is collected . A possible tool for data collection could be a survey to include archery season in addition to survey of the 16 day rifle season . Enlist volunteers as data collectors while their in the woods or to share footage and numbers from cellular game cameras and actual eyes on numbers

The 3 point rule. It's achieved the intended results in most areas. But in other WMUs with a higher than 50 percent spike harvest rate could have negative affects on quality of deer being harvested. The belief of once a spike it's always a spike is not correct. Likely just a year and half old deer. Let them grow!

Posted property:

In WMU A it wasn't really a problem until the antlerless season was introduced. Many landowners said enough is enough . Road hunting and deer drives in areas that had residential dwellings close by really pushed landowners to post .

Or parcels are posted so that hunting pressure is kept to a minimum or parcels just posted because the owner doesn't agree with hunting at all . The 2023 report notes this as an issue in almost every WMU in Vermont . The only fix for this is to try for better relations between hunting and non hunting communities and promote ethics to the hunting community. No one talks about the hunter who shares his harvest with the landowner . But someone who's ethics are lacking and clearly has no respect for the landowner . Well that spreads like wildfire.

Weather trends:

Graphs in report show milder winters in the last few years. But if you look at the chart as a whole you can see a cycle where roughly every 3-4 years we have a harsh winter. Good habitat for deer to build their fat reserves are crucial in their survival.

Change the youth / novice weekend back to the original weekend . Numbers lowered after the change . I think the early muzzleloader season has an impact on these numbers .

Early muzzleloader season didn't achieve the desired results. But it did make it tougher for the tail end of archery season. The pressure affects the deer movement. Let the archery hunters do their part without the disruption.

Forest and Land Management: This is huge for our herd. It's more important now than ever. Efforts like select timber harvest and preservation of agricultural land are very important. Even efforts by landowners to do hinge cuts on trees which provide cover and forage during the winter months can make a difference. If we as hunters and landowners practice small scale game management wether it's on 20 acres or 200 acres. We benefit and the wildlife benefits.

I'm afraid that this housing crisis, promoting of development and proposed changes to Act 250 and land use will do more harm than any of us realize.

Now more than ever we as sportsman need to maintain a respectful attitude and practice good ethics while encouraging others to do as well . With the looming S258 our hunting and fishing could and will be affected . Get involved and respectively share your opinion .

Thank you Commissioner Herrick and his team for all of your efforts . Thank you for the opportunity to share my opinion and thoughts on our deer herd and its management . Don't let us down!

Michael Murdock North Hero

From: Haskins, Michael

Sent: Wednesday, May 1, 2024 8:28 AM

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

Subject: 2024 Antlerless Recommendation

I wanted to just say a few things. I firmly believe that the only way the State is going to achieve the numbers is to find a way to get access to more hunting areas and convince landowners that logging isn't a bad thing. Every year more and more areas are being posted and don't allow any hunting. I know for myself I have asked these landowners. These new landowners for the most part are coming from the big city and buying big parcels of land and posting it. Coming from the city most don't approve of hunting. Then there are others who don't believe in logging. They won't put their land in Land Use because they don't want to be told how to manage their land. Even if they did it doesn't mean you could hunt there.

Let's face it deer don't know posted signs but they do know where they don't get pressured. The deer migrate to areas where they aren't pressured. In a lot of areas this is posted property. You can even find a lot of deer on the fringes of people's yards but that's not a place to hunt. Not sure how you will ever achieve the densities you want when every year more and more land is posted. I have been hunting for over 40 years now. In the past 5 years I would say 70% of the land I hunted is now posted and not accessible. Covid brought a lot of people from the cities purchasing property and posting it.

Unfortunately, the unposted land mostly sees a ton of hunting pressure, deer densities are low and you don't see many. It's getting harder and harder to find a place to hunt with some deer.

From: Mark Malinowski

Sent: Sunday, April 28, 2024 4:03 PM

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

Subject: 2024 antlerless harvest recommendation

Hello,

I am against the taking of more antlerless deer for the 2024 harvest.

Too many does are being harvested. I enjoy seeing deer.

I support the 3 pt.

minimum harvest rule for bucks. I enjoy harvesting bigger racked bucks.

I support turning over the management of the deer herd back to the Vermont State Legislature. I support using single shot center fire rifles, with straight walled cases during muzzle loader season.

Thank You Mark Malinowski Woodford, Vt. From: Thetford Conservation

Sent: Thursday, April 11, 2024 10:06 AM

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

Cc:

Subject: Public Comment re: Deer Management

Vermont Fish & Wildlife 1 National Life Drive Davis 2 Montpelier, VT 05620-3702

Dear Wildlife Managers,

We, the Thetford Conservation Commission, are charged with stewarding the municipal lands of our town, which includes four parcels totaling 560 acres. We have 14 objectives for managing the parcels, some of which we want to highlight for the purposes of this letter, these being to:

- Enhance forest-based carbon sequestration.
- Support the sustainable production of wood products through improved forest management.
- Preserve the character of the Thetford community and natural environment.
- Control non-native invasive plant species.

The commission members, the county forester, and private foresters have all observed the effect deer have had on the town lands and our ability to manage for the aforementioned objectives. The impacts of deer have been noted in the forest management plans for each tract and we have attempted to account for them in our management decisions.

Despite these efforts, the deer population of Thetford is degrading our town lands. The deer browse is severely impacting the regeneration in our town forests. We are observing very little regeneration of hardwood species on hardwood sites, some areas have no regeneration. Invasive species are prevalent and not browsed by deer. Without native trees and shrubs to compete with the invasives, the invasives are persisting.

Scientific research is in line with our observations.

- "Deer have more frequent and more consistently negative effects than invasive plants. Widespread deer impacts now threaten many native plant species through much of their range." (6)
- "Trampling and intense browsing by white-tailed deer limited forest regeneration and
- reduced the forest carbon sequestration rate." (1)
- "Species richness showed a negative linear trend with increasing deer density in all silvicultural treatments." (2)
- "..deer densities have an immediate and consistent negative impact on forest regeneration and timber through time." (3)
- "High deer densities were associated with low levels of both sapling density and sapling species diversity." (4)
- "Decades of overbrowsing by white-tailed deer have led to almost complete recruitment
- failure in size classes >2.5 cm dbh for preferred deer browse species."(5)

As you can imagine, these impacts are not limited to the town-owned lands; they also occur on private properties in the town, affecting the entire ecosystem on a broad scale.

The Thetford Conservation Commission advocates for significant reductions of the white-tailed deer population in Thetford (management area J2) and anywhere where similar deer densities exist.

Sincerely,

Krista Karlson, Co-Chair, on behalf of the Thetford Conservation Commission

References:

- 1. Beck, H. & Beauchamp, V. (2012) Beyond the browse line: complex cascade effects mediated by white-tailed deer, Oikos, January 2012
- 2. Horsley, S., Stout, S., and, deCalesta D (2003) White-Tailed Deer Impact on the vegetation dynamics of a northern hardwood forest, Ecological Applications, 01 February 2023
- 3. Millington, D.A., et al (2013) Modeling for forest management synergies and trade-offs: Northern hardwood tree regeneration, timber and deer, Ecological Modeling, Volume 248, 10 January 2013, Pages 103-112
- 4. Powers, D & Nagel, L (2009) Pennsylvania sedge cover, forest management and Deer density influence tree regeneration dynamics in a northern hardwood forest, Forestry: An International Journal of Forest Research, Volume 82, Issue 3, Pages 241–254
- 5. White, Mark A (2012) Long-term effects of deer browsing: Composition, structure and productivity in a northeastern Minnesota old-growth forest, Forest Ecology and Management, Volume 269, Pages 222-228
- 6. Gorchov, David L. et al.(2021) Differential and interacting impacts of invasive plants and White-tailed deer in eastern U.S. forests, Biological Invasions, Volume 23, pages 2711–2727

From: Steve Tavella

Sent: Wednesday, March 27, 2024 3:12 PM

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

Subject: Deer Assessment

Dear State of Vermont,

I am a property owner in Dummerston who grows a substantial amount of food through a 700 ft2 vegetable garden, sizeable blueberry, strawberry, and raspberry beds, and eight fruit trees. I am constantly surveying and trying my best to protect my food supply due to the number of deer. I have been noticing an increasing number of doe and antierless deer on my property.

I would like to see the deer population lowered by increasing the number of antierless deer in our area and throughout Vermont, where I have shared and heard these same concerns.

I appreciate your consideration.

Sincerely, Steve Tavella

From: Carolyn Mayo-Brown

Sent: Tuesday, March 26, 2024 2:51 PM

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

Subject: Deer problem

There are more deer on our property than the land can sustain. We cleared 11acres of forest. There were thousands of red maple sprouts the first year. A dozen deer browsed the new field. By fall and the next spring all of the red maple sprouts were gone. The deer have destroyed the young tree understory on all of our 230 acres leaving only beech and hay scented ferns. They are out of control and ruining the forest. Please allow a doe season and take other measures to restore the balance.

Carolyn Mayo-Brown

From: Christine Goepp

Sent: Saturday, March 23, 2024 10:21 AM

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

Subject: deer hunting

Hi,

As a gardener and conservationist, I am very concerned about the effect of the unnaturally high deer population on the local ecosystem, especially young tree seedlings, native shrubs, and other plants that provide food and shelter for a wide variety of animals. Often, overgrazing leads to deer suffering and death as well. Although I am not a hunter myself, I am all for people hunting deer for food, including antlerless deer with rifles as appropriate.

Thank you,

Christine Goepp 1320 Middle Road Dummerston VT 05301

From: Diana Lischer

Sent: Saturday, March 23, 2024 12:30 PM

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

Subject: Deer in gardens

Every year deer bother my young fruit trees and magnolia tree. They even jump the fence to eat Brussels sprouts that are overwintering.

I am fine with the deer population being culled more. They are destructive herbivores.

I live near Deer Run Preserve. And now I understand how it got its name.

Diana Lischer 41 Browns way Dummerston, vt 05301

From: Lynn Levine <forester.lynn@gmail.com>

Sent: Friday, March 22, 2024 8:09 PM

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

Subject: Fwd: Deer Hearing this Wed night

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

From: Noreen Cooper

Sorry that I didn't respond sooner. Yesterday was my annual cardiology/lab workup. A stressful day - but good

results.

Re the deer herd:

Last winter I picked up dropped antlers from two good bucks. Eight and six points. There are antlered deer to be hunted.

What I have not been seeing in the woods is any signs of winter kill. The last two mild winters have not culled the herd to the degree we've come to expect. Deer have not yarded and few to none have starved. They have roamed freely and browsed throughout their ranges. All winter we had deer moving through our neighborhood. Warm temperatures, lack of snow and the resulting herd mobility in the lower Connecticut River valley has been a boon to whitetails. They came through the winter in relatively good health. As a result the does are going to drop a lot of fawns this spring.

Management practices that worked well when allied with "traditional" harsh winters may be out of sync with the reality of our current weather. Mild winters lead to more deer which result in less forest regeneration. I believe that our area will have even more deer, hardwood regeneration is already suffering and an increased harvest of anterless deer is inevitable. Call it the snowball effect of snowless winters.

John Anderson

Dummerston Conservation Commission

From: Thomas Ebert

Sent: Thursday, March 14, 2024 10:20 PM

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

Subject: Deer Comments

Hello,

I am a deer hunter and a professional in the agricultural and forestry fields. I live in Thetford, Vermont. I believe we need to do more to decrease the deer population in the upper valley. Deer in this area are a major problem to both agricultural producers (eating crops) and forest regeneration. Despite management with deer populations in mind we are finding it difficult to regenerate native hardwood species in Thetford and surrounding towns due to deer browse. I believe the browse is to the point that is affecting our forests ability to sequester carbon. Multi age stands with structural diversity (short, medium, and tall trees) both store more carbon and are more resilient to the severe weather brought on by climate change. With the current deer

browse we are lacking young regeneration in our forests. We don't have to look far to other states, New York and Pennsylvania, that are installing fences and building slash walls to prevent deer from eating forest regeneration. I believe the deer herd in the Upper Valley could be greatly reduced while still maintaining a healthy population and hunting opportunities.

I strongly encourage you to increase the harvest in J2, offer more doe tags, and also offer a doe rifle season.

Thank you,

Tom Ebert East Thetford, VT

From: Teddy Hopkins

Sent: Monday, March 11, 2024 6:18 PM

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

Subject: Deer hunting

How about taking a serious look at owners of Current Use Program in Vermont posting all their lands No Hunting???? Thanks Ted Hopkins Readsboro Vermont

From: Erik Bailey

Sent: Thursday, March 7, 2024 8:49 AM

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

Subject: Deer & Moose Public Comments

Hi,

My first comment is that the largest concentration of hunters are in Chittenden County & far western Franklin county. There should be a meeting close to these folks. Enosburg Falls is ove an hour away from most of those hunters. Putting meetings closer to population centers reduces the combined travel miles, and therefore the carbon footprint of the meetings.

Deer:

- -5 or 6 Years ago, the "5-year Plan" included a suburban antlerless archery season starting mid-September. This never came to fruition. "COVID" was the initial excuse (even though stomping about suburban woods doing field research is perfect "social distancing"), but that has gotten to be beyond stale. When will we begin following the Plan?
- -I am not a fan of the 4 deer/1 buck rule. I think it should be modified to allow an archer who shot a nice buck to still be part of the Grand tradition that is VT Rifle Season. What about a 6 point minimum to use an archery tag on a buck? If you shoot one smaller, you burn your buck tag, otherwise, you can take a rifle or muzzleloader season buck. I see no reason to have a fourth tag either, unless that tag is tied to the suburban hunt, since those areas & posted farmland is where our high deer concentrations occur.
- -Kudos on the active forestry happing on WMAs and F&P forests. I personally see the wildlife effects on Camels Hump Forest & Robbins Mtn WMA. Thanks.

Moose:

- -I know this is a legislative thing, but I'd like to see the Veteran drawing to be archery or rifle choice (just like the auction tags).
- There are overpopulations of moose along the spine of the Greens well south of the NEK. For instance, the entire top ridges of Mt Cleveland and Mt. Roosevelt in Lincoln/Ripton are literally blanketed in moose scat. There are those of us who have the skills and gear to hunt and retrieve a moose from such territory (I'm not the only DIY Rocky Mtn backpack elk hunter in VT).

Thanks for all you do for the sports folks of VT! Erik Bailey 55 Wilkinson Drive Essex Junction, VT 05452

From: Burt Maynard

Sent: Wednesday, March 6, 2024 11:43 AM

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

Subject: opinions

With more and more people putting in deer food plots, deer move less and stay close to food plots. Need to put one in or the deer go to where there is one! and wait till dark to come out..