

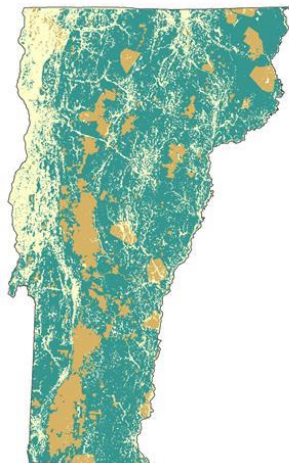
# Vermont Woodland Owner Survey 2014

## Final Project Report

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## Executive Summary

- 80% percent of the forested land in Vermont is privately owned, and of this land, families and individuals, collectively referred to as family forest ownerships, own a majority. Three out of every five acres (62%) of forested land in Vermont is owned family forest ownerships.
- A survey of private forest ownerships in Vermont was conducted in 2014. Adding these data to data collected as part of the 2011-2013 U.S. Forest Service, National Woodland Owner Survey, a total of 1,100 private ownerships of forested land in Vermont were asked to participate. The overall cooperation rate was 53%. Once the data were processed, Responses from 444 randomly selected private forest ownerships were used to make the population-level estimates presented in this report.
- A majority of the family forest ownerships in Vermont own less than 50 acres of forested land. But ownerships with 50 or more acres of land control 77% of the family forest land.
- Most family forest ownerships with 10+ acres own their land to enjoy beauty or scenery, to protect nature, to protect wildlife and to protect water resources.
- The greatest concerns of the ownerships include high property taxes, keeping land intact for future generations, and water quality.
- Common past activities for family forest ownerships with 10+ acres include removing trees for personal use, harvesting timber, and trail construction or maintenance.
- Common management programs/practices for family forest ownerships with 10+ acres include being enrolled in a tax program, having a management plan, and receiving advice or information about the care, management, or protection of wooded land in the past five years.

- Family forest owners have gotten information or advice most often in the past five years by talking to someone (56%) and/or having someone visit their land (51%), but they would prefer to get information and advice through a brochure or other written material in the future (62%).
- Seven percent of the ownerships, who own 15% of the acres, are over 75 years of age, and an additional 14% are between 65 and 74 years old.
- While most of the survey asked the respondents about their forest land, one question was related to their thinking about all the woods and forests in Vermont – public and private. Family forest ownerships with 10+ acres cited parcellation, health of the woodlands, and the impact of insects and diseases as their highest concerns.
- Approximately 73% of family forest land (62% of ownerships) with 25+ acres is owned by people who report they are enrolled in the state’s Current Use property tax program.
  - The average size of forest holdings for family forest ownerships (with 25+ acres) enrolled in the Current Use program is substantially larger than those not enrolled, 117 acres (SE=9.6) versus 69 acres (SE=6.4).
  - Owners enrolled in Current Use are more likely to harvest timber. While 29% of family forest ownerships not enrolled in the Current Use tax program reported performing a timber harvest on their land in the past five years, only 19% plan to harvest timber in the next five years. On the other hand, 41% of family forest ownerships enrolled in the tax program reported having harvested timber in the past five years, while 57% plan to do so in the future.
  - Family forest ownerships (with 25+ acres) enrolled in the tax program are more likely to be involved in other conservation programs, including cost-share and green certification programs, and have a conservation easement.

- In general, owners enrolled in Current Use have had more education than those not enrolled in the program. Eighty-four percent of landowners enrolled in the program have had at least some college education, while 61% of those not enrolled have had at least some college.

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## Introduction

This report summarizes estimates of family forest ownerships and acres in Vermont, using data collected by the National Woodland Owner Survey (NWOS) and the Vermont Woodland Owner Survey (VWOS) from 2011-2014. We collected information on family forest owner's characteristics, attitudes, and behaviors related to their forested land. We present a summary of the methods and results, followed by tables summarizing population level estimates of all data collected.

## Goals and Objectives

The Vermont Department of Forests Parks and Recreation contacted the Family Forest Research Center with a desire to collaborate on a Vermont specific version of the U.S. Forest Service's National Woodland<sup>1</sup> Owner Survey ([www.fia.fs.fed.us/nwos](http://www.fia.fs.fed.us/nwos)) (Andrejczyk et al. *in review*). The goals were two pronged: one to increase the sample size of landowners in Vermont used to make population-level estimates; and two, to ask additional questions not included in the national survey. The general objectives of both the NWOS and Vermont Woodland Owner Survey are to address questions related to:

- How many private forest ownerships are there?
- Why do these ownerships own forest land?
- What have they done with their forests in the past?
- What do they plan to do with these forests in the future?

<sup>1</sup> Throughout this report the terms forest land, woodland, and related terms are used interchangeably. In general, private landowners are more likely to call the portion of their land with trees on it woods or woodland while the forest conservation community uses more technical definitions and is likely to call the same land forest (Andrejczyk et al. *in review*).

## Methods

This section discusses the methods associated with 2014 VWOS implemented between May and August, 2014. Responses from landowners participating in the NWOS between 2011 and 2013 are included in the Results section of this report for questions which were asked in both surveys, or in the case of demographics and others, just in the base NWOS. The basic sampling methodology for the national survey is analogous to what is reported here, however the sampling intensity differs substantially. For detailed information on the sampling procedures of the base NWOS, please refer to Butler et al. (2014). For more details on the VWOS methods in general, see Appendix 1.

A total of 700 forested ownerships were invited to take part in the VWOS (Table 2). The sample points were chosen using a probability-based sampling design. The sampling design used for the VWOS was patterned after the NWOS, which is built upon the sampling framework used for the plot-based FIA forest resource monitoring (Bechtold and Patterson 2005, Dickinson and Butler 2013). The forest resource sampling procedure involves a complex, hexagonally tessellated, random sample of points and plots. For more information on sample design, see Appendix 1 and Butler et al. (*in preparation*).

The implementation of the self-administered, mail-back questionnaire was based on the Tailored Design Method developed by Dillman et al. (2014). For more information on survey implementation, see Appendix 1. The overall response rate was 53% (Table 2). The mail questionnaire was designed using special software (TeleForm by Verity Inc. 2010) to allow electronic data capture to increase data quality and data entry efficiency. Returned paper questionnaires (most of the responses) were scanned, and the software used optical character recognition (OCR) and optical mark recognition (OMR) technology to capture the data.

Once the data were electronically captured, a series of steps were performed to drop blank and other erroneous records, generate new variables, recode skipped questions and item-responses, validate text entries, run logic checks, and validate the entries (i.e., range check). Estimation procedures were then used to scale up the raw data to population-level estimates, both in terms of acres owned and number of ownerships. For more details on the data processing and the estimation procedure, see Butler et al. (*in preparation*) and Dickinson and Butler (2013).

Tables were then created to display the results of the NWOS and the VWOS. In this report, Table 1 - Table 42 report questions from the base NWOS, and these tables are in the same order that they will be in future published reports. Categories or options added to one of these base questions for the VWOS are incorporated into these first 42 tables as well. Table 43 - Table 50 are the results of questions only asked in the VWOS. Some tables, such as Table 44 and Table 46, report population level estimates of respondents' answers to hypothetical questions asked in the survey. For example, we asked landowners how likely they would be to carry out certain activities if they received money from a cost-share program (Table 44). It should be noted that the answers to hypothetical questions are often different than landowner's actual behaviors.

## **Results**

Private forests comprise approximately 80% of Vermont's 4.6 million acres of forest land (Figure 1, Figure 2, and Table 1). Of this 80%, family forests account for 2.9 million acres, corporately owned forests encompass 681,000 acres, and other private forests encompass only 133,000 acres. Federal, state, and local public lands comprise 20% of Vermont's forested lands. Understanding the



characteristics, attitudes, and behaviors of the family forest owners is important because they own over 2/3<sup>rd</sup>s of all forested land in Vermont.

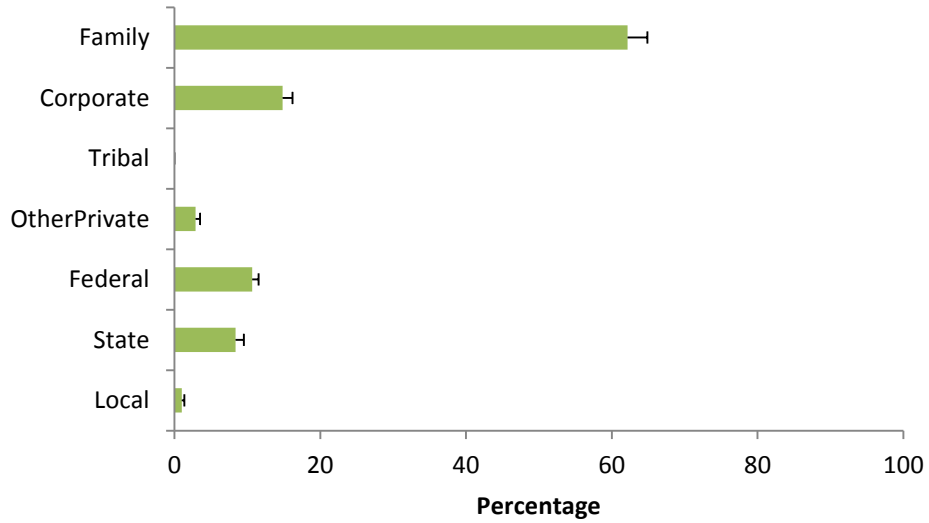


Figure 1. Percentage of forest land in Vermont by ownership category.<sup>2</sup>

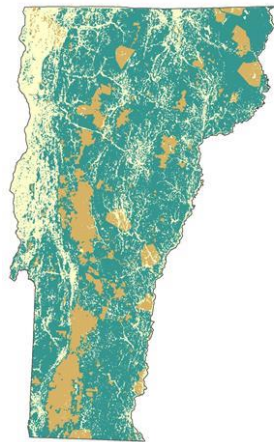
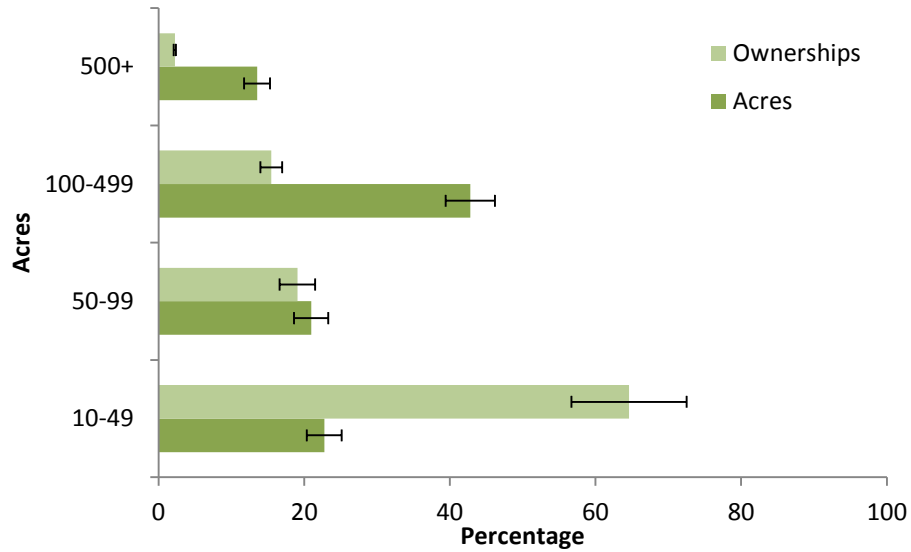


Figure 2. Private (■) and public (■) forest land in Vermont.

<sup>2</sup> Error bars included in the report represent +/- one standard error of the estimate, a value that roughly represents a 68% confidence interval around an estimated value.

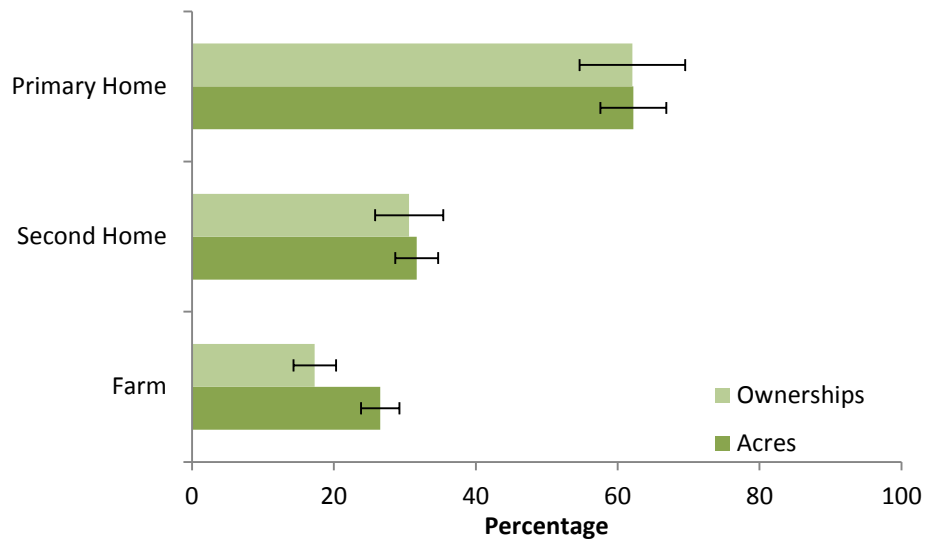
The focus of this report is on the family forest ownerships with 10+ acres of forest land. We concentrate on them because family forest owners control a majority of the forest land in the state, and there is relatively little known about them. The focus on 10+ acres is because smaller parcels are functionally large backyards and are not considered forest land by many in the forest conservation community. These smaller parcels are important, but should be treated separately. Due to the probability proportional to size sample design of the VWOS/NWOS, the data on 1-9 ac ownerships in Vermont is too scant to draw meaningful conclusions. Future reports by the NWOS will address this portion of the population across larger geographic areas.

There are an over 40,000 family forest ownerships with 10+ acres, owning 2.6 million acres across Vermont, or approximately 62% of Vermont's total forest land. The average size of forest holdings for family forest ownerships in Vermont with 10+ acres is 63 acres (Figure 3 and Table 6). A majority of the family forest ownerships with 10+ acres own less than 50 acres of wooded land (64%) in Vermont (Figure 3 and Table 6). However, the 35% of ownerships that own over 50 acres account for more than 77% of the forested acres (Figure 3 and Table 6). Less than 1% of the family forest ownerships own more than 500 acres. When thinking about how to target policies and programs to impact the highest amount of family forest acres in the state it is important to understand that, while most ownerships have less than 50 acres, a majority of the family forest acres in Vermont are owned by those with over 50 acres of forested land.



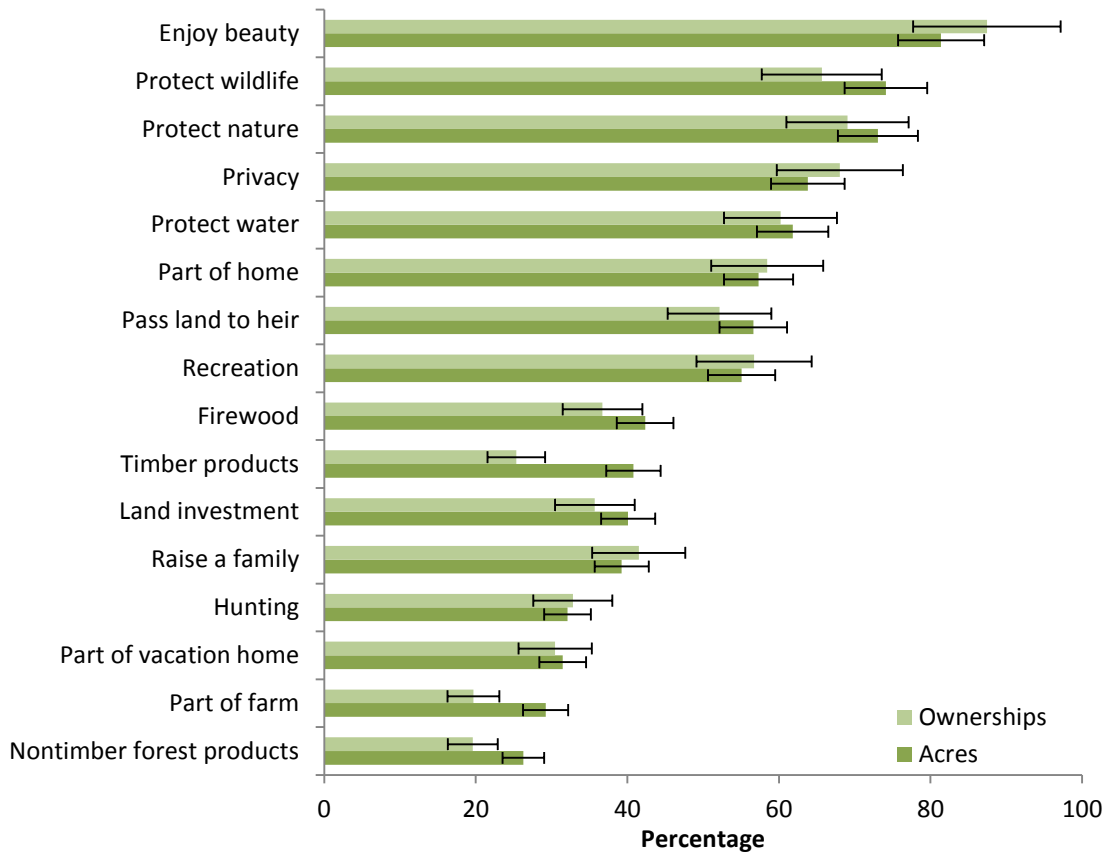
**Figure 3. Percentage of family forest land and ownerships (with 10+ acres) by size of forest holdings in Vermont**

Often, owners who live further away from their property have different attitudes and behaviors regarding their forested land than owners that live near or on their land. Looking at the number of ownerships with a home, vacation home, or farm near or on their forested land gives us insight into these absentee ownerships. These categories are not exclusive, and there is likely some overlap in owners' answers. Over 62% of family forest ownerships with 10+ acres in Vermont have their primary home on their property, while fewer have a secondary home (32%) or a farm (27%) on their wooded land (Figure 4 and Table 8, Table 9 and Table 10).



**Figure 4. Percentages of family forest land and ownerships (with 10+ acres) according to whether the forest land is near (within one mile) of an owner’s primary home, vacation home or cabin, or farm.**

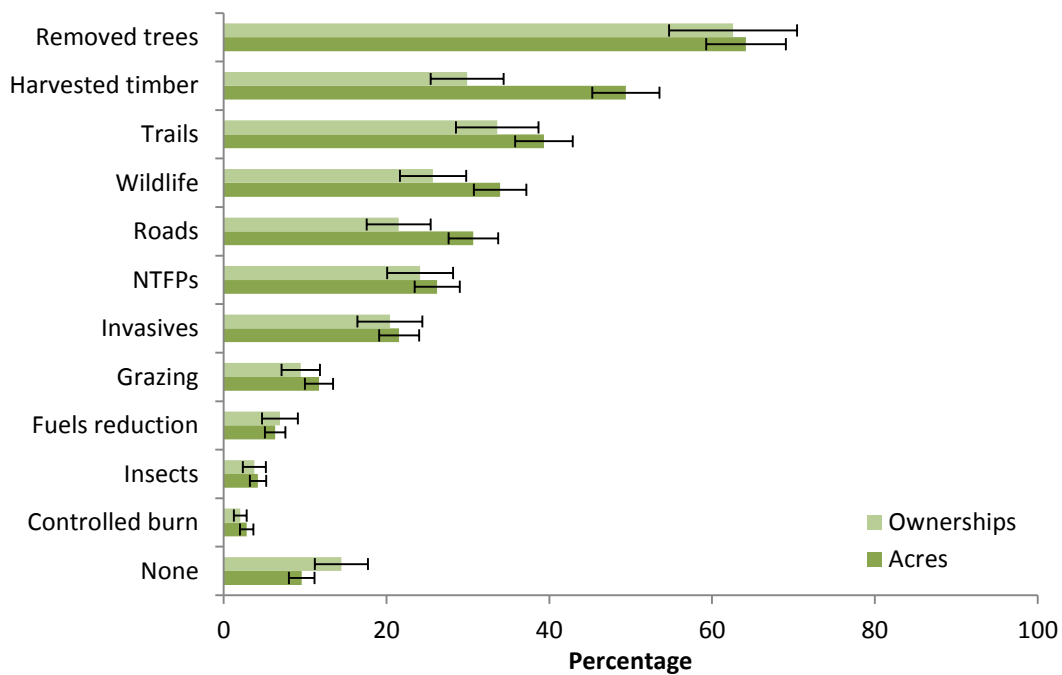
Family forest ownerships have wooded land for a variety of reasons. Most family forest ownerships in Vermont with 10+ acres own their wooded land to enjoy beauty or scenery, to protect wildlife habitat or nature, and for privacy (Figure 5 and Table 13)(approximately 70% of ownerships). The least common reasons for owning wooded land in Vermont, rated as important or very important by less than 30% of the ownerships, include that the wooded land is part of the ownerships’ cabin or farm or for nontimber forest products (Figure 5 and Table 13). It is interesting to note that owning forested land for timber production is rated as important or very important by only 25% of the family forest ownerships, but represents 41% of the acres owned.



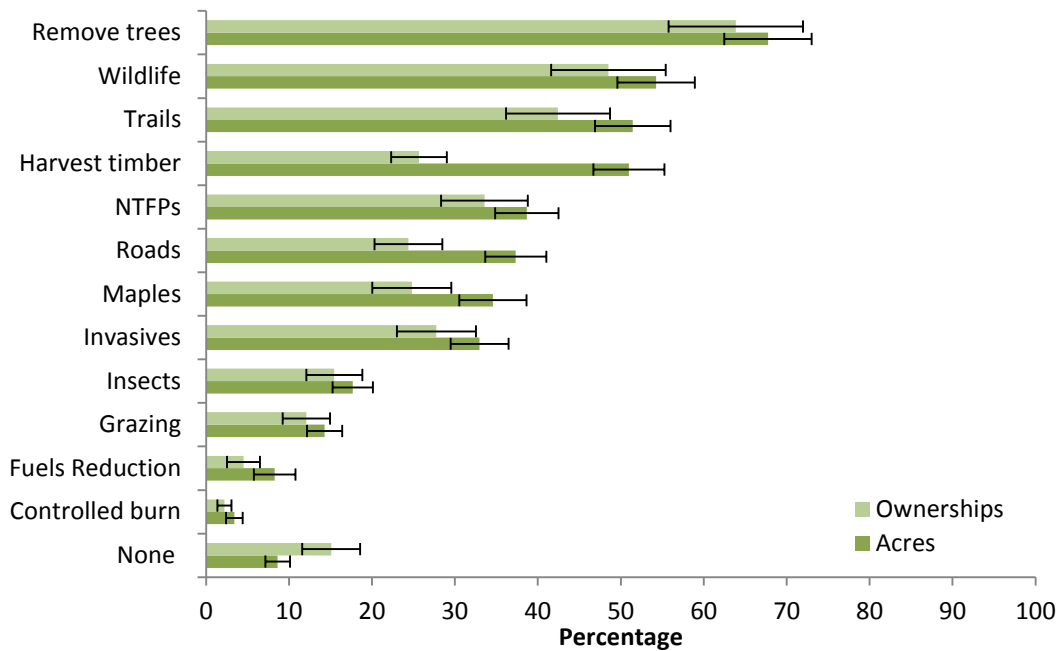
**Figure 5. Percentage of family forest land and ownerships (with 10+ acres) by reason for owning forest land. Percentages reported are population level estimates for those who responded that the reason for owning was important or very important.**

Over 85% of family forest ownerships with 10+ acres in Vermont have performed one or more management or enhancement activity on their forested land in the past five years, and 85% percent report plans to do so in the next five years. Common past activities for family forest ownerships with 10+ acres include removing trees for personal use (most likely firewood), harvesting timber for sale, and trail construction or maintenance (Figure 6 and Table 20). Family forest ownerships with 10+ acres in Vermont are likely or very likely to remove trees for personal use, maintain or improve wildlife habitat, and perform trail construction or maintenance in the next five years (Figure 7 and Table 21). One interesting contrast is in terms of wildlife habitat. While only 25% of ownerships, owning 34% of family

forest land with 10+ acres, have improved wildlife habitat in the past five years, almost 50% of the ownerships, owning 54% of the family forest land with 10+ acres, plans to do so in the future. Here we also see the difference in ownerships and acres when it comes to harvesting timber for sale. In both the past five years and in the next five years, the percentage of ownerships that have harvested timber or plan to harvest timber is less than the percentage of acres associated with harvesting timber (past five years: 30% of ownerships representing 49% of acres have harvested timber; next five years: 26% of the ownerships representing 51% of the acres will likely harvest timber) (Figure 6, Table 20, Figure 7, and Table 21).

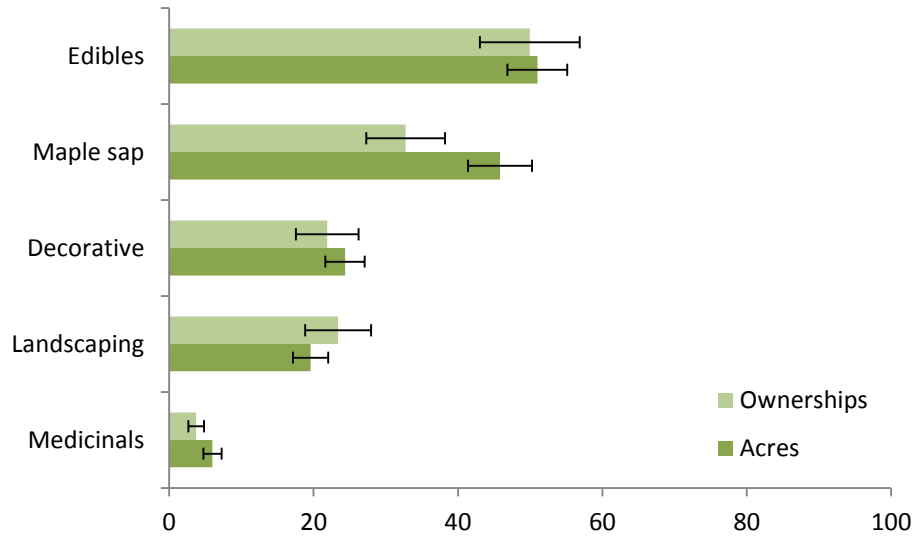


**Figure 6. Percentages of family forest land and ownerships (with 10+ acres) selected activities associated with their forest land that occurred in the previous five years.**



**Figure 7. Percentages of family forest land and ownerships (with 10+ acres) by selected activities that are likely to occur in the subsequent five years. The percentages reported are population level estimates for those who responded that the activity was extremely likely or likely to occur in the next five years.**

Vermont is the largest producer of maple syrup in the United States (Eagleson and Hasner 2006). Understanding private landowner’s behaviors related to collecting maple sap for sugaring is important when thinking about the dynamics of this resource. Over 30% of family forest ownerships with 10+ acres, owning 46% of the land, have collected maple sap for sugaring on their property (Figure 8 and Table 19), and 23% of ownerships, owning 25% of the acres, have received advice regarding maple sugaring (Table 29). Additionally, 25% of ownerships, representing 35% of the acres, will likely tap or lease maple trees for sugaring in the next five years (Figure 7 and Table 21). Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by future (next 5 years) forestry activity, 2011-2014. Numbers include ownerships that rated an activity as extremely likely or likely on a five-point scale.. Interestingly, more people have collected other edibles, such as berries or mushrooms, than have collected maple sap for sugaring (Figure 8 and Table 19).



**Figure 8. Percentages of family forest land and ownerships (with 10+ acres) by selected activities related to nontimber forest products (NTPFs). The percentages reported are population level estimates for those who have collected the NTFP for sale or for personal use.**

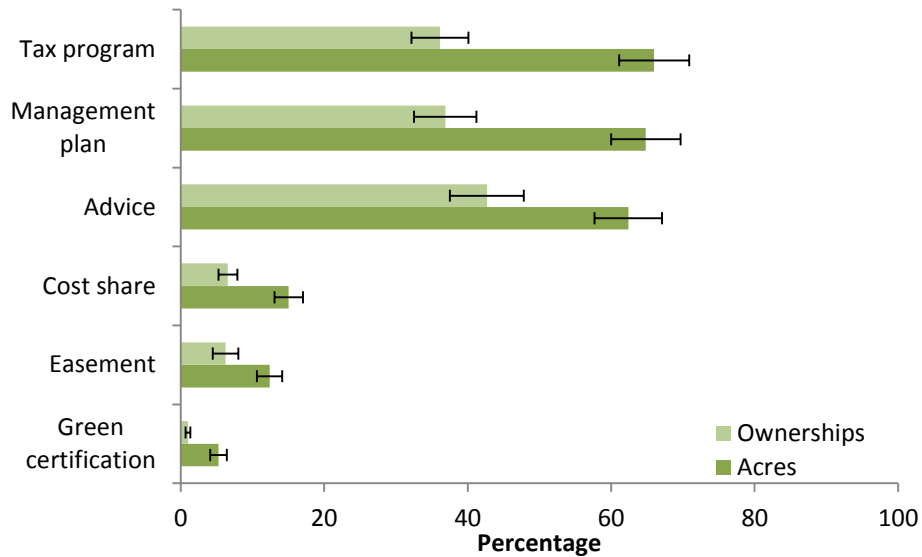
Recreation is also a common activity on family forest land in Vermont. Recreational activity has occurred on over 95% of family forest ownerships with 10+ acres, owning 97% of the land in the past five years (Table 27). Most commonly, the owner and/or spouse, neighbors, or friends were reported to have recreated on the land in the past five years (Table 27). The most common recreational activities include hiking or walking (85% of the ownerships, owning 85% of acres), hunting (72% of the ownerships, owning 82% of the acres), and skiing or snowmobiling (46% of the ownerships, owning 56% of the acres) (Table 27).

Throughout the surveys, we ask landowners about their familiarity with different programs and groups. This information can help us gauge the effectiveness of education and outreach efforts and to plan for future efforts. The most common answer reported for familiarity with all of the programs or groups was that the owner was ‘Not at all familiar’— these include cost-share programs (83%; Table 23), green



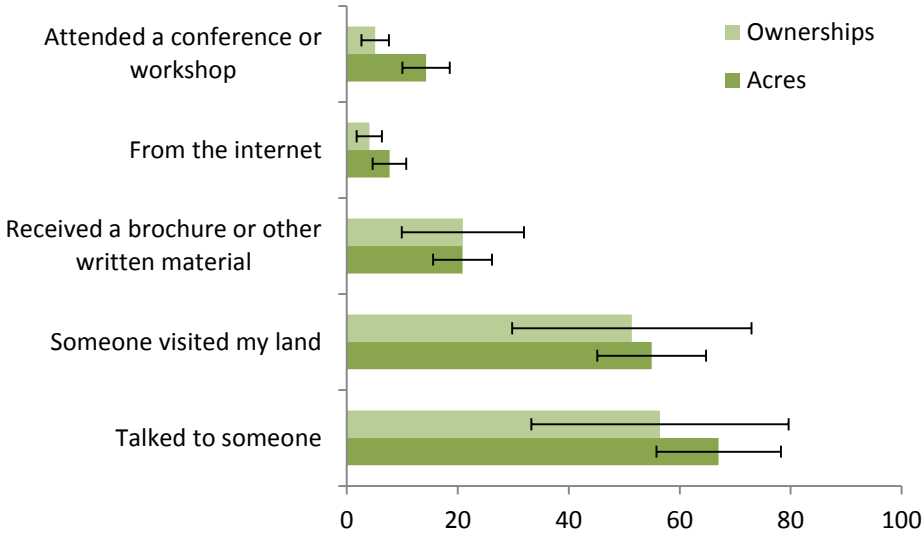
certification (76%; Table 24), property tax program (43%; Table 25), conservation easements (52%; Table 26), and familiarity with woodland owner organizations (66%; Table 48). While increased familiarity doesn't ensure increased participation in programs and groups, increasing awareness could encourage landowner engagement.

Over half of the family forest land with 10+ acres is owned by people who report that they are enrolled in the state's property tax program (more information of the property tax program below). This likely accounts for the high percentage of forest land owned by people with a written forest management plan. Fifty-seven percent of ownerships also reported that they have received advice about enrolling in a property tax program, but this implies that 43% of the ownerships have not received this advice (Figure 9, Table 16. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by written management plan status, 2011-2014 Table 25, and Table 29). Other forest conservation programs, namely cost-share, conservation easements, and green certification, are much less common (Figure 9, Table 23, Table 24, Table 25, and Table 26).

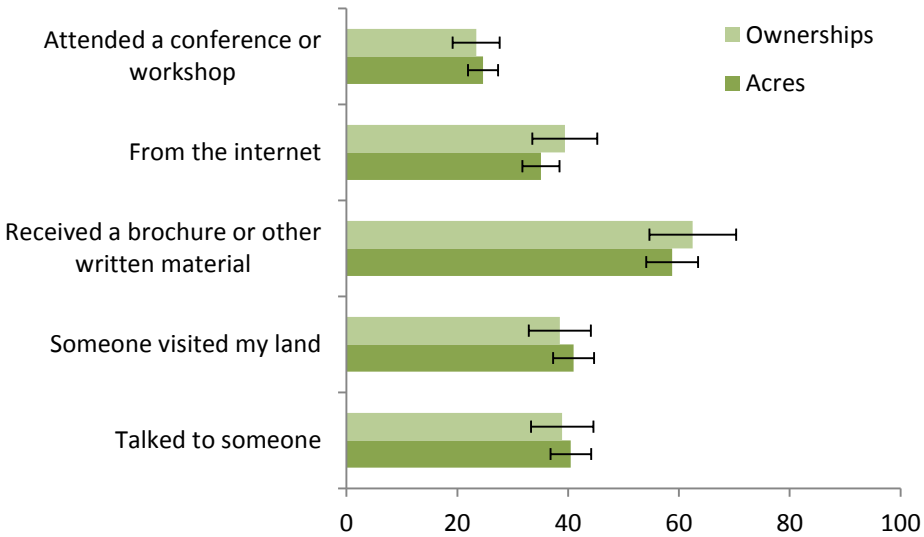


**Figure 9. Percentages of family forest land and ownerships (with 10+ acres) having a written forest management plan, having received forest management advice, having participated in cost-share, certification, or property tax programs, and having a conservation easement.**

Understanding how family forest owners with 10+ acres have received advice in the past and how they might prefer to receive information and advice in the future can be useful when implementing outreach efforts. In the past five years, landowners who have received information and advice have done so mainly by talking to someone (56% of ownerships, owning 67% of the land) and/or having someone visit their land (51% of ownerships, owning 55% of land) (Figure 10). However, landowners reported that they would most like to receive information and advice through brochures or other written materials (62% of ownerships, owning 59% of the land) in the future. Ownerships reported equal preference for talking to someone, having someone visit their land, or receiving information and advice through the internet (39% of ownerships) (Figure 11) in the future. It is important to note that landowners often answer these questions about receiving more formal information and advice, rather than casual chatting with neighbors or friends about their land.

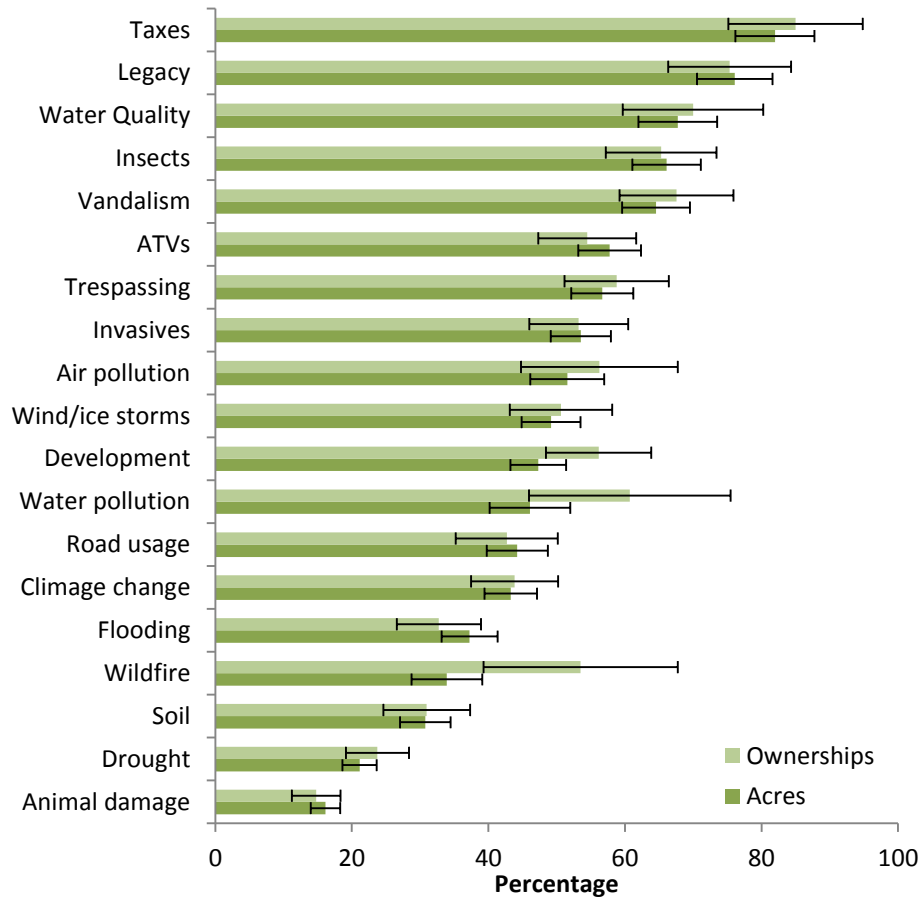


**Figure 10. Percentages of family forest land and ownerships (with 10+ acres) by source of management advice received in the preceding five years.**



**Figure 11. Percentages of family forest land and ownerships (with 10+ acres) by preferred methods to receive forest/woodland information and advice.**

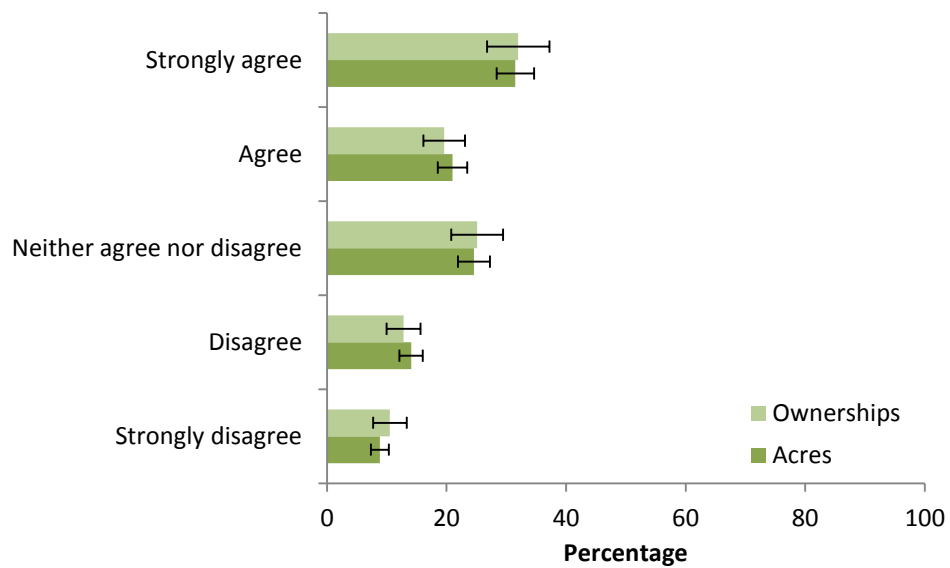
Most family forest owners in Vermont have concerns about their forest land. Most of these concerns are related to human or social issues, but some are natural issues, albeit potentially human influenced. Family forest landowners with 10+ acres are most concerned about high property taxes, keeping land intact for future generations, and water quality, and they are least concerned about reduced soil productivity, drought or lack of water, and damage from animals on their wooded land (Figure 12 and Table 32). It should be noted these are their stated concerns, and the actual threats to the land may be very different. For example, relatively little of the forest land in Vermont is likely to be impacted by wildfires, but nonetheless, this is a concern of 54% of the family forest ownerships.



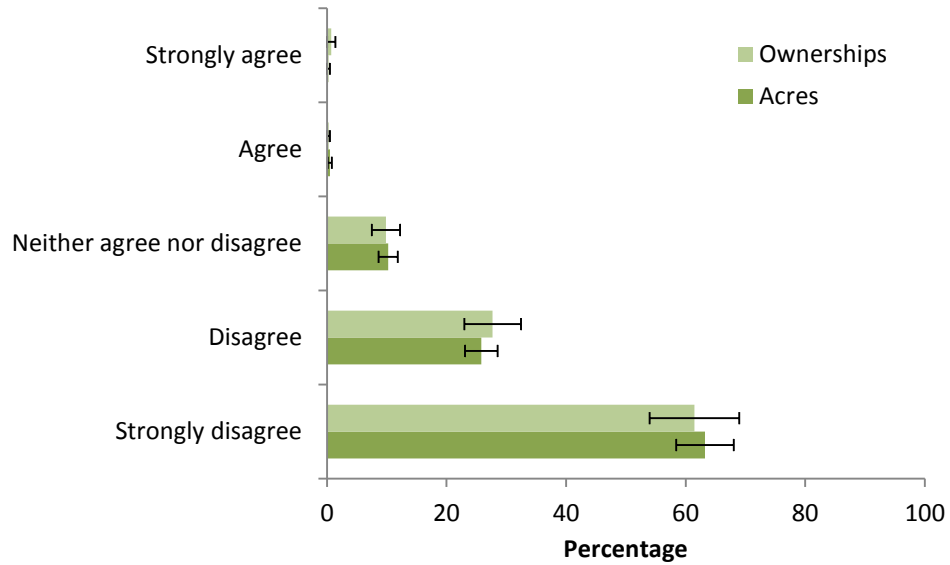
**Figure 12. Percentage of family forest land and ownerships (with 10+ acres) by landowner concerns for their forest land. The percentages reported are population level estimates for those who responded that the topic was of great concern or concern.**

Because family forest ownerships with 10+ acres own a majority of the forested land in Vermont, their attitudes on forest conservation are important when thinking about potential changes in the forested landscape. In order to gauge family forest owners' attitudes about conserving their forested land, we asked them to rate their level of agreement with two statements – 'I want my land to stay wooded' and 'I would sell my land if I was offered a reasonable price'. About half of the family forest owners, owning about half of the acres, agreed or strongly agreed that they want their wooded land to stay wooded,

while about half of the family forest owners, owning about half of the acres, either disagreed, strongly disagreed, or remained neutral about wanting their wooded land to stay wooded (Table 11 and Table 34). However, when asked if they would sell their land if offered a reasonable price, a majority of family forest owners (89%), owning a majority of the acres (89%), disagreed or strongly disagreed with the idea of selling their land if offered a reasonable price, and less than 1% of the family forest owners, owning less than 1% of the acres, agreed or strongly agreed with this statement (Table 12 and Table 34).

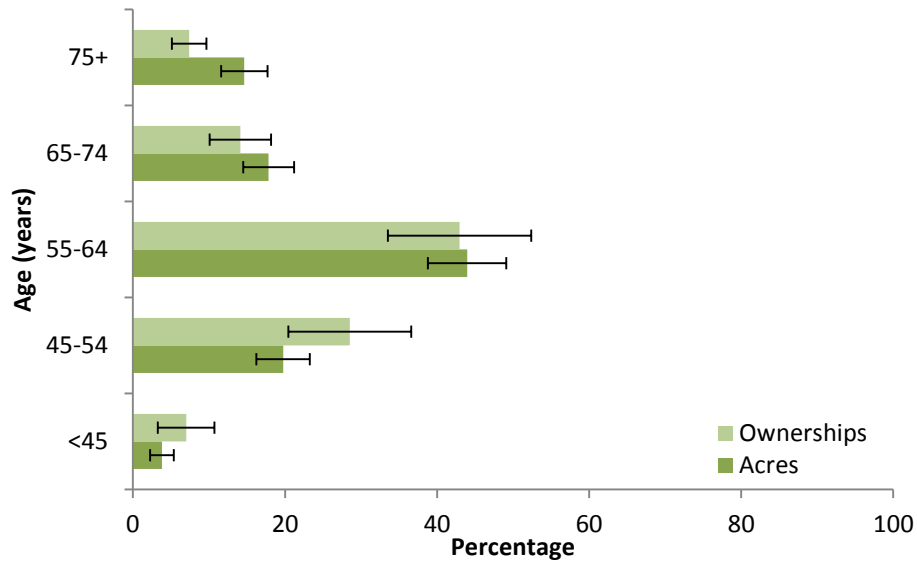


**Figure 13. Percentage of family forest land and ownerships (with 10+ acres) by ownerships' agreement/disagreement about statements related to keeping land forested/wooded.**



**Figure 14. Percentage of family forest land and ownerships (with 10+ acres) by ownerships' agreement/disagreement about statements related to selling forest/wooded land.**

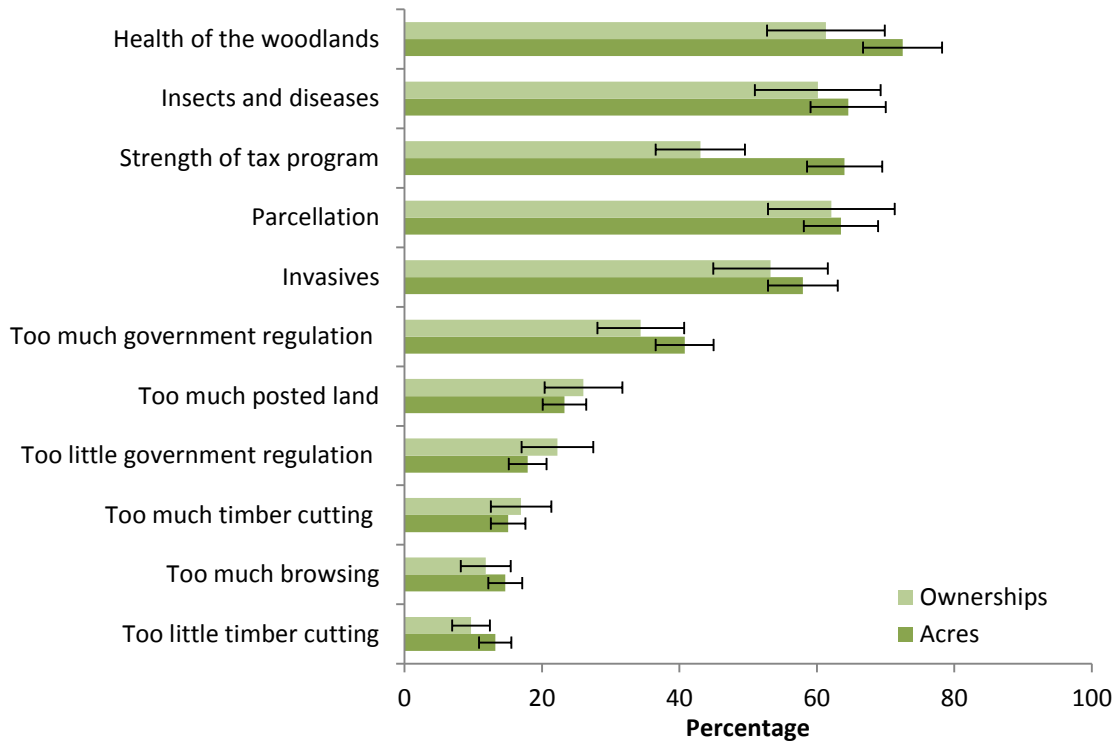
The demographic makeup of the primary forest owners in Vermont is largely white males over the age of 55 with an associate's degree or higher (Figure 15, Table 37, Table 38, Table 39, and Table 40). See Table 35 - Table 42 for the demographic makeup of the secondary landowners. As landowners age, the question of land transfer becomes more important when thinking about the potential changes to the forested landscape in the coming years. In Vermont, the owners of 7% of the family forest ownerships with 10+ acres, owning 15% of the forested land, are over the age of 75. Seventeen percent of the family forest ownerships with 10+ acres, owning 19% of the forested land, reported that they are extremely likely or likely to sell or give away their land in the next five years (Table 33). The most common reason listed for transferring land was that it is too expensive to hold or maintain (59% of the ownerships, owning 49% of the acres; Table 33). Interestingly, 46% of family forest ownerships with 10+ acres, owning 47% of the land, report that information or advice on how to transfer land to the next generation would be helpful to them (Table 30).



**Figure 15. Percentages of family forest land and ownerships (with 10+ acres) by age of the primary forest owner.**

While most of the survey asked the respondents about their forest land, one question was related to their thinking about all the woods and forests in Vermont – public and private. Family forest ownerships with 10+ acres cited parcellation, health of the woodlands, and the impact of insects and diseases as their highest concerns (**Error! Reference source not found.** and Table 50).





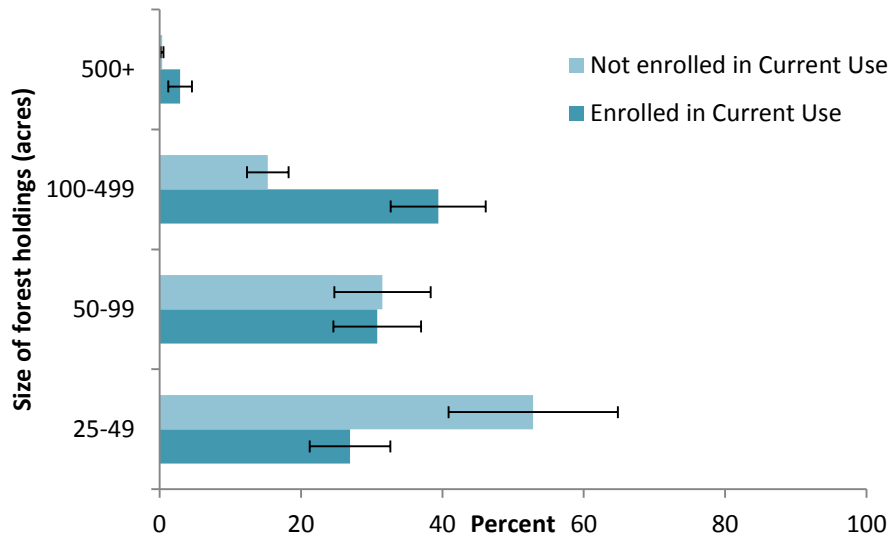
**Figure 16. Percentage of family forest land and ownerships (with 10+ acres) by landowner concerns related to all forested land in Vermont – public and private. The percentages reported are population level estimates for those who responded that the topic was of great concern or concern.**

### Current Use Tax Program

The Current Use property tax program (also called Use Value Appraisal Program or Land Use Program) allows landowners whose land meets certain criteria to enroll in a property tax program where their forested land is assessed for its current forestry value rather than its fair market value, often meaning the value if it were to be developed for housing. Having a better understanding of landowners enrolled in the program versus those not enrolled allows for better evaluation of the program’s effectiveness and impact on the landscape. Below, we look at the characteristics, attitudes, and behaviors of family forest ownerships (with 25+ acres – the minimum acreage to enroll) enrolled in Current Use program and

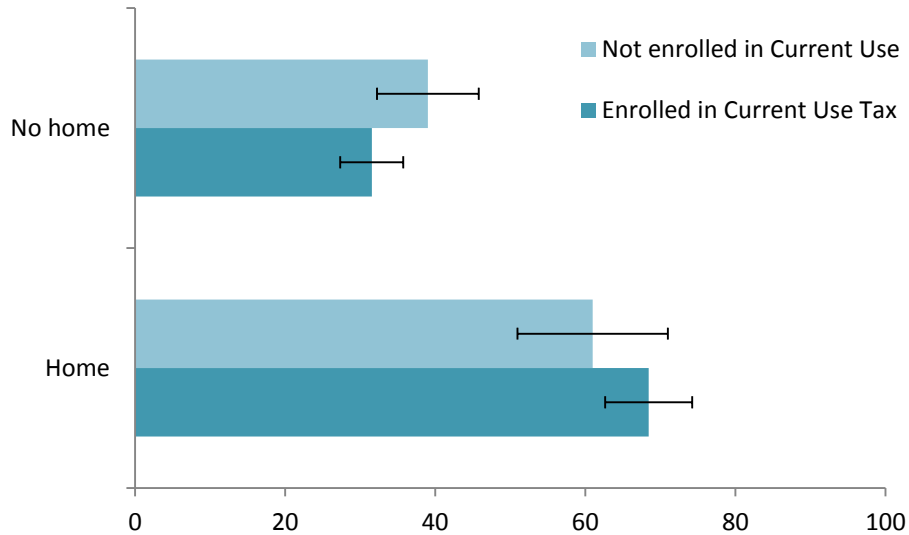
those not enrolled in the program. Approximately 73% of family forest land (62% of ownerships) with 25+ acres is owned by people who *report* they are enrolled in the state's property tax program. It should be noted that this is an estimate, with the state having more exact numbers. In addition, these statistics are based on self-reporting of enrollment and it is likely a small number of respondents enrolled did not report being enrolled and some not enrolled reported being enrolled. This could be due to a lack of knowledge or confusion by the respondent or other reasons.

Owners enrolled in Current Use tend to have larger forest holdings than those not enrolled in Current Use. The average size of forest holdings for family forest ownerships with 25+ acres enrolled in the Current Use program is 117 acres (SE=9.6), and the average of those not enrolled in the program is 69 acres (SE=6.4) (Figure 17). Owners with larger holdings have the most to gain (save) with the program and the enrollment of the larger holdings also means that more land is being enrolled to further the goals of the program.



**Figure 17. Percentage of family forest ownerships (with 25+ acres) enrolled or not enrolled in the Current Use program by size of forest holdings in Vermont**

There appears to be little difference in enrollment regardless of whether they live on their forested land. For ownership enrolled in Current Use, 68% live on their forested land versus 61% of the ownerships not enrolled, but these numbers are, statistically speaking, not substantively different (Figure 18).

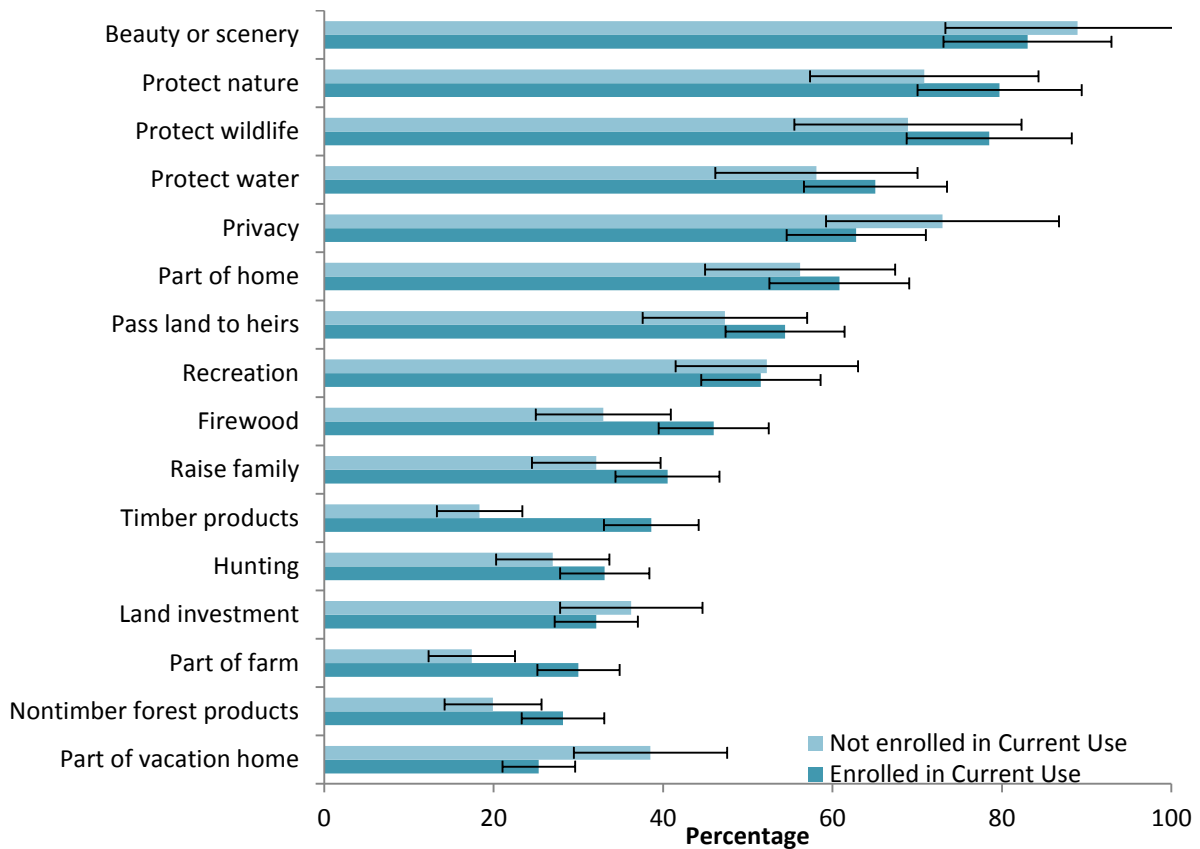


**Figure 18. Percentage of family forest ownerships (with 25+ acres) enrolled or not enrolled in the Current Use program by if their home is within a mile of their forested land in Vermont**

Many of the reasons for owning forested land are the same between enrolled and non-enrolled owners, but there were some interesting differences. In general, family forest ownerships, both enrolled in the tax program and not enrolled, rate the same types of amenity-based reasons for owning their land high, such as for beauty or scenery, to protect nature, wildlife and water, and for privacy (Figure 19).

However, family forest ownerships enrolled in the program rate timber harvesting as a reason for owning their land much higher than those not enrolled in the tax program. Those enrolled in the tax program also rate their land being part of their farm higher than those not enrolled in the program.

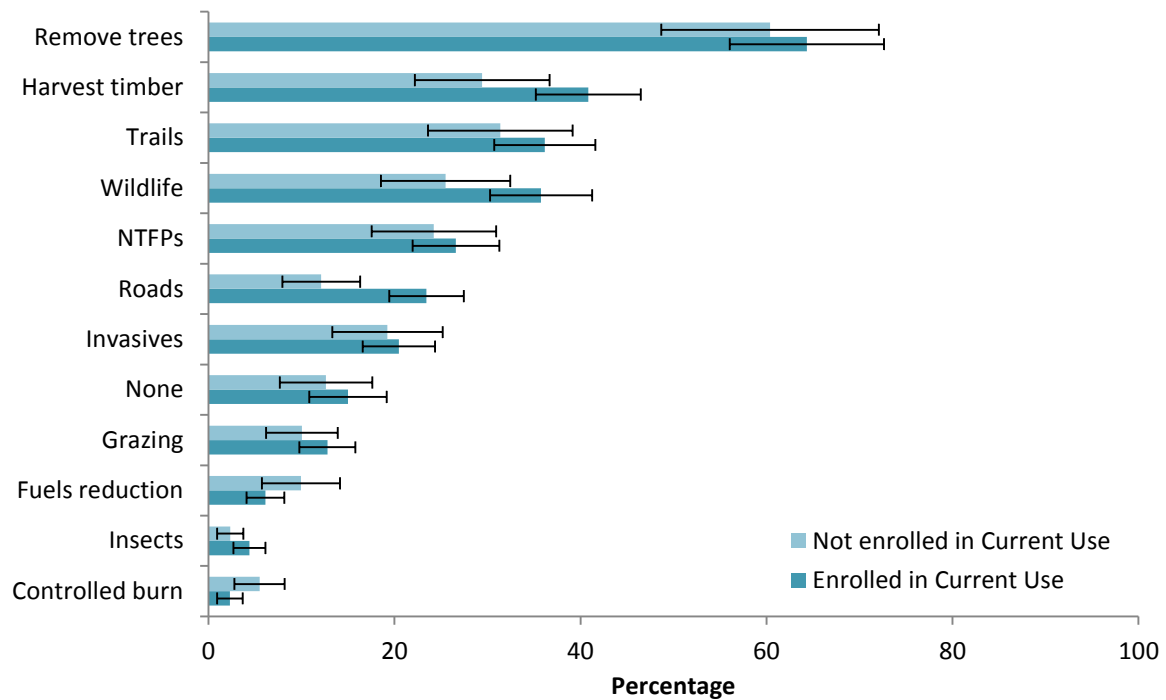
Family forest ownerships not enrolled in the tax program rate their land being part of their vacation home or cabin higher than those enrolled in the program (Figure 19).



**Figure 19. Percentage of family forest ownerships (with 25+ acres) enrolled or not enrolled in the Current Use program by reasons for owning their forested land in Vermont**

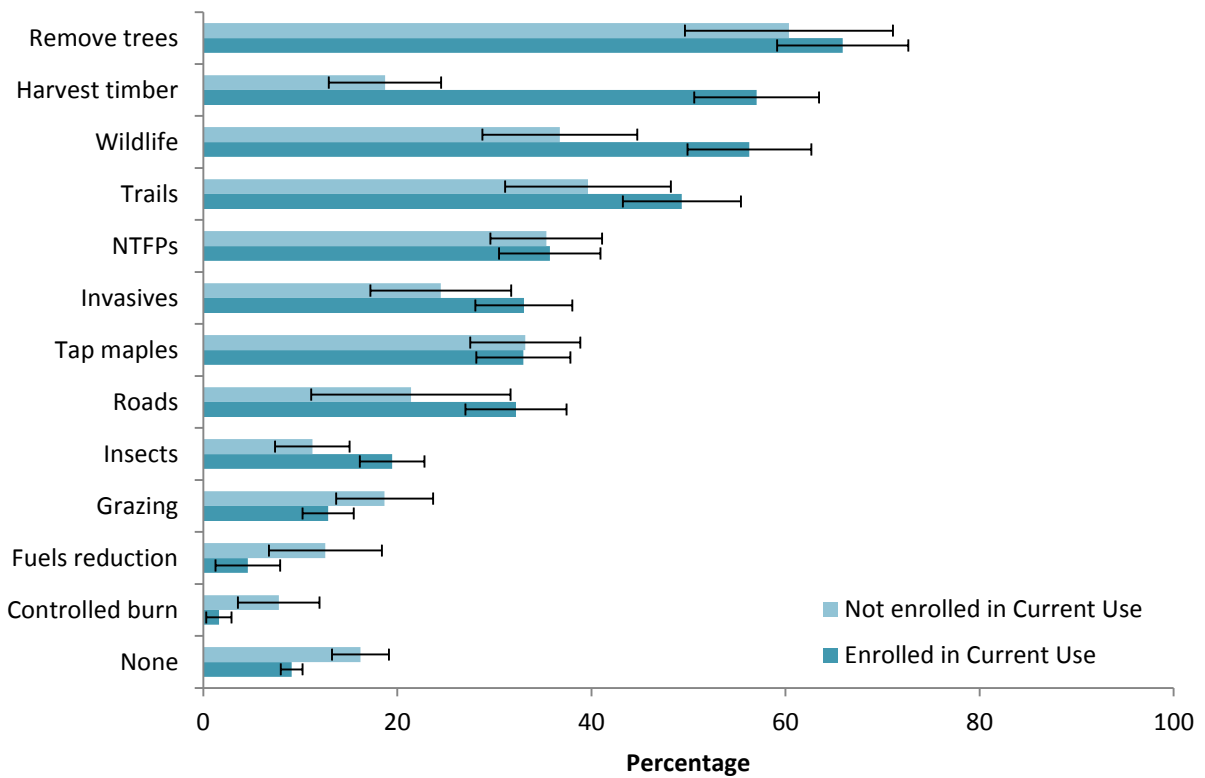
Most owners, enrolled and non-enrolled, have done one or more management or land enhancement activities, but the types of activities vary. The percentage of family forest ownerships with 25+ acres having done at least one management or land enhancement activity over the past five years based on whether or not they were enrolled in the current use tax program is similar (92% of those enrolled and 88% of those not enrolled) (Figure 20). The most common activity performed by both groups of owners is removing trees for personal use, most likely firewood. But forest owners enrolled in the tax program reported a higher percentage of timber harvesting in the past five years (41%) than those not enrolled in the program (29%). Family forest owners enrolled in the tax program also report a higher percentage of maintaining roads (23%) than those not enrolled in the program (12%). Other common activities for

both groups include maintaining trails and protecting or improving wildlife.



**Figure 20. Percentages of family forest land and ownerships (with 25+ acres) selected activities associated with their forest land that occurred in the previous five years.**

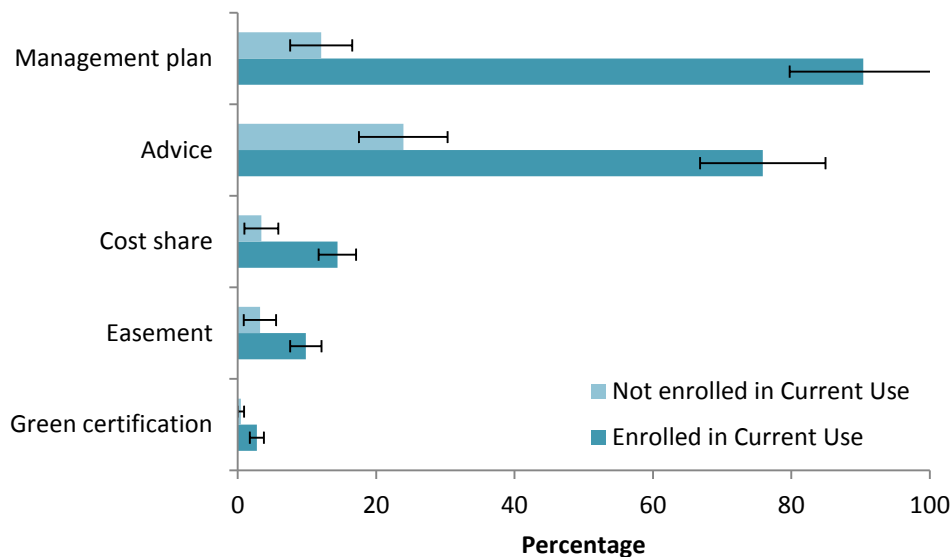
Intention for future activities in the *next* five years varied more between the two groups (Figure 21). A higher percentage of family forest ownerships with 25+ acres enrolled in the Current Use program plan on harvesting timber in the next five years (57%) than ownerships not enrolled in the program (19%). A higher percent of ownerships enrolled in the property tax program also plan to improve wildlife habitat (56%) and eliminate or reduce unwanted insects or diseases (19%) than those not enrolled in the program (37 and 11%, respectively). A higher percent of owners not enrolled in the program have no plans for the next five years (16%) than owners enrolled in the program (9%) (Figure 21).



**Figure 21. Percentages of family forest land and ownerships (with 25+ acres) by selected activities that are likely to occur in the subsequent five years. The percentages reported are population level estimates for those who responded that the activity was extremely likely or likely to occur in the next five years.**

Comparing the past and future timber harvesting activities can give us insight into the amount of planning that goes into a harvest (Figure 20Figure 21). While 29% of family forest ownerships not enrolled in the Current Use tax program reported performing a timber harvest on their land in the past five years, only 19% plan to harvest timber in the next five years. On the other hand, 41% of family forest ownerships enrolled in the tax program reported having harvested timber in the past five years, while 57% plan to do so in the future. These results suggest that there might be more unplanned timber harvests on unenrolled lands in the future.

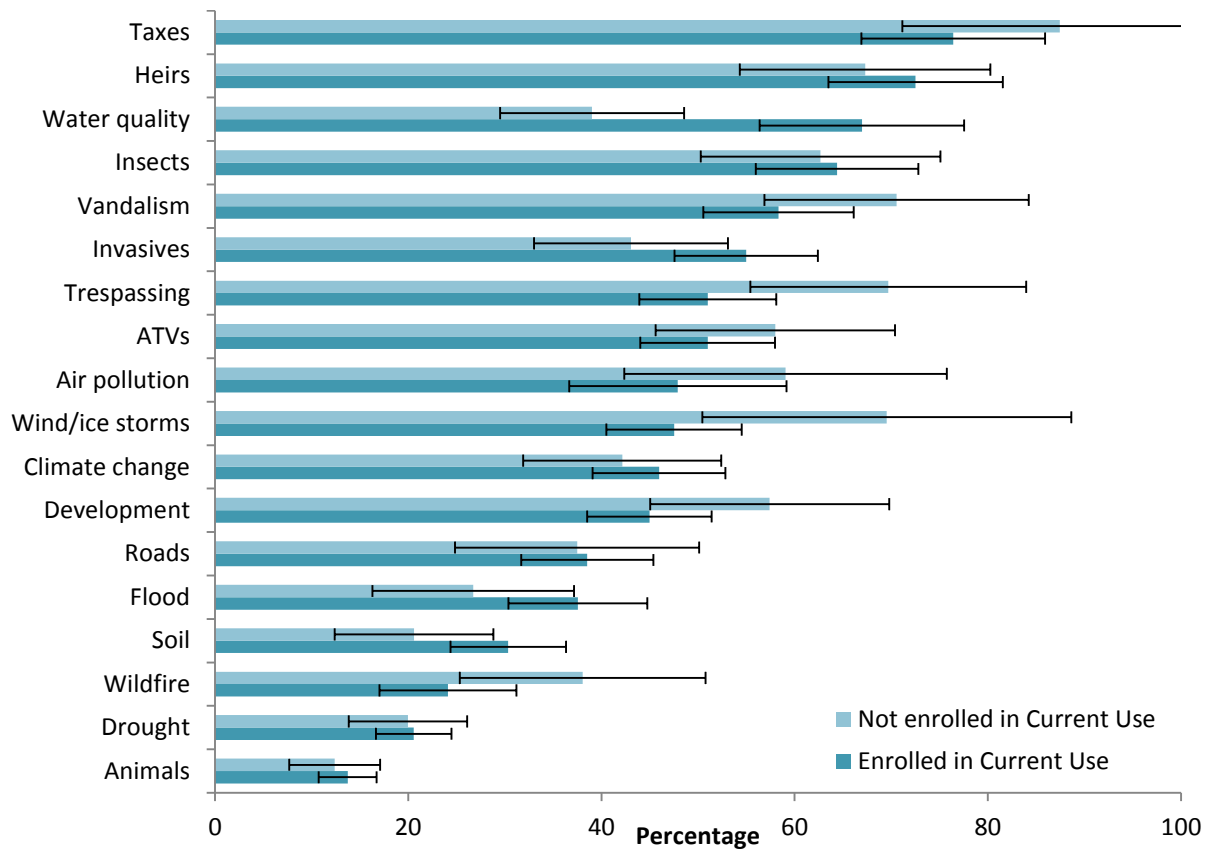
Family forest owners enrolled in the current use program tend to be more involved in other management programs or have received advice than those not enrolled in the program (Figure 22). This includes having a management plan (90% enrolled vs. 12% not enrolled), having received information or advice (76% enrolled vs. 24% not enrolled), participating in a cost-share program (14% enrolled vs. 3% not enrolled), having a conservation easement (10% enrolled vs. 3% not enrolled) and having green certified forest land (3% enrolled vs. less than 1% not enrolled). Having a management plan is required for the Current Use tax program, which explains why such a larger percentage of those enrolled in the program have a management plan (but interesting that it is not 100%); however, the other activities are also more common among family forest ownerships with 25+ acres enrolled in the tax program (Figure 22).



**Figure 22. Percentages of family forest land and ownerships (with 25+ acres) having a written forest management plan, having received forest management advice, having participated in cost-share or certification program, and having a conservation easement.**



There are interesting commonalities and differences among the threats reported by enrolled and non-enrolled owners, and this could help focus future outreach efforts. Both groups are most concerned about high property taxes (76% of enrolled ownerships, 87% of ownerships not enrolled) (Figure 23), which begs the question on why even more owners are not enrolled – a good topic for future research. The next highest rated concerns for those ownerships enrolled in the program include keeping land intact for future heirs, protecting water quality and unwanted insects and diseases. The next highest rated concerns for those ownerships not enrolled in the program include misuse of wooded land, such as vandalism or dumping, trespassing or poaching, and wind or ice storms (Figure 23).



**Figure 23. Percentage of family forest land and ownerships (with 25+ acres) by landowner concerns for their forest land. The percentages reported are population level estimates for those who responded that the topic was of great concern or concern.**

Owners enrolled in the Current Use program tend to have attained higher levels of formal education than non-enrolled owners. In general, owners enrolled in the program have had more education than those not enrolled in the program (Figure 24). Eighty-four percent of landowners enrolled in the program have had at least some college education, while 61% of those not enrolled have had at least some college (Figure 24). Understanding the educational background of family forest ownerships could be helpful for targeting efforts to get more people involved in the program.

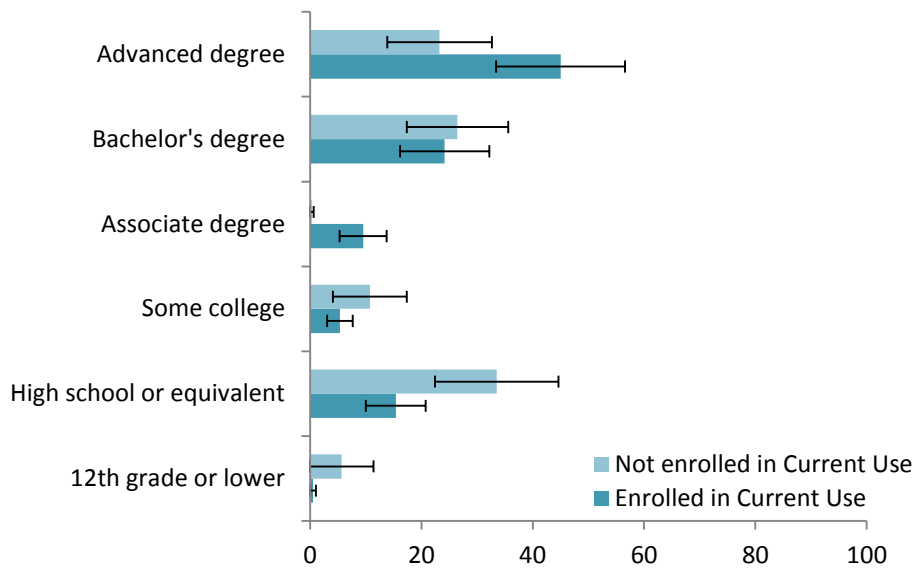


Figure 24. Percentage of family forest land and ownerships (with 25+ acres) by landowner educational background.

## Conclusions

This report provides information on the family forest owners with 10+ acres in Vermont – through both the National Woodland Owner Survey (2011-2013) and the intensified Vermont Woodland Owner Survey (2014). Understanding family forest owner characteristics, attitudes and behaviors is important

for understanding the forested landscape. This information is intended to help policy makers, resource managers, educators, service providers, and others interested in the forest resources to better understand the social context of forests in order to facilitate more informed opinions and decisions. The next step in gaining a better understanding of family forest ownerships in Vermont is to analyze trends in characteristics, attitudes, and behaviors through time. In future publications, we plan compare these results with previous iterations of the NWOS to better grasp these changes through time.

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## Tables

**Table 1. Estimated area of forest land\* in Vermont by ownership category, 2008-2012\*\***

Ownership Category	Totals		Percentages	
	Acres	SE <sup>a</sup>	Acres	SE <sup>a</sup>
<b>Private</b>	<i>Thousands</i>		<i>Percent</i>	
Family <sup>b</sup>	2857	124	62.2	4
Corporate	681	63	14.8	9
Tribal	--	--	--	--
Other private	133	29	2.9	22
<b>Total</b>	3671	4	79.9	<0.1
<b>Public</b>				
Federal	491	39	10.7	8
State	386	51	8.4	13
Local	47	17	1.0	36
<b>Total</b>	924	2	20.1	<0.1
<b>All ownerships</b>				
<b>Total</b>	4596	5	100	<0.1

\* Includes lands defined as "forest land" in Forest Resources of the United States, 2012 (GTR-WO-xxx in preparation). Forest land is defined as "land at least 120 feet (37 meters) wide and at least 1 acre (0.5 hectare) in size with at least 10 percent cover (or equivalent stocking) by live trees including land that formerly had such tree cover and that will be naturally or artificially regenerated" including land "recently having such conditions and currently regenerating or capable of attaining such condition in the near future." Other wooded land is defined as land that is "predominantly of stands of sparse woodland species...found in the arid to semi-arid regions of the interior western United States. These areas must span more than 1 acre (0.5 hectares), have sparse trees capable of achieving 16.4 feet (5 meters) in height in situ, and a tree canopy cover of 5-10 percent." Neither forest land nor other wooded land includes "land that is predominantly under agricultural or urban land use."

\*\* Values for this table are based on data from the USDA Forest Service, Forest Inventory and Analysis program ([www.fia.fs.fed.us](http://www.fia.fs.fed.us)) plot data collected between 2008 and 2012. These forest area estimates were used as inputs for the 2011-2013 National Woodland Owner Survey results reported in tables 3 onwards.

<sup>a</sup>SE = Standard Error

<sup>b</sup>Includes ownerships with 1+ acres of forest or wooded land, while tables 3 onwards are for ownerships with 10+ acres.

Note: Data may not add to totals due to rounding



**Table 2. Sample size and cooperation rate for family forest land\* ownerships\*\* for the USDA Forest Service, National Woodland Owner Survey in Vermont, 2011-2014**

	Responses <sup>a</sup>					Cooperation Rate <sup>b</sup>
	Sent	Undeliverable	Mail	Phone	Online	
	-----		<i>Number</i>	-----		
<b>NWOS 2008-2013</b>	388	16	182	17	12	56.7
<b>Intensification 2014</b>	693	18	345	--	--	51.1
<b>Total</b>	1081	34	527	17	12	53.1

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*These numbers are for all family forest landownerships. The size of holdings is unknown for non-respondents and hence these statistics cannot be subset to just ownerships with 10+ acres of forest or other wooded land.

<sup>a</sup> Due to differences in the questions asked on different questionnaire forms, i.e., the phone questionnaire being a subset of the mail questionnaire, the effective sample sizes differ for some questions. This can cause the estimated totals to not be identical across tables and sub-tables.

$$^b \text{ Cooperation Rate} = \frac{\text{Responses}}{\text{Sent} - \text{Undeliverables}}$$

**Table 3. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by ownership category, 2011-2014**

Ownership category	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Individual	667	62	11	2	25.7	2.7	26.4	4.4	114
Joint	1300	86	24	2	50.0	4.0	57.9	7.3	222
Family partnership	381	47	4	1	14.6	1.9	10.3	2.2	65
Trust or estate	252	38	2	1	9.7	1.5	5.4	1.4	43
<b>Total<sup>b</sup></b>	2600	233	41	5	100	--	100	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup>SE = standard error

<sup>b</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 4. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by number of owners\*\*, 2011-2014\*\***

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
Number of owners	-----		Thousands	-----	-----		Percent	-----	
1	638	61	11	2	25.9	2.8	26.6	4.5	109
2	1405	89	25	2	57.0	4.6	62.6	7.8	240
3-5	328	44	3	1	13.3	1.9	8.5	1.9	56
6-10	88	23	1	<1	3.6	0.9	2.1	0.9	15
10+	6	6	<1	<1	0.2	0.2	0.2	0.2	1
No answer <sup>b</sup>	135	28	1	<1	--	--	--	--	23
<b>Total<sup>c</sup></b>	2600	122	41	3	100.0	--	100.0	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*An ownership is a legal entity that is composed of one or more individual owners. There are an estimated 41,000 owners (SE=3,000) of family forest land with 10+ acres in Vermont.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 5. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by percent of ownership's land that is forested/wooded, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Percent forested</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
<25	29	13	1	1	1.1	0.5	3.0	1.7	5
25-49	105	25	2	1	4.1	1.0	5.3	1.7	18
50-74	521	55	9	1	20.0	2.3	21.7	4.0	89
75-99	1382	88	23	2	53.2	4.2	55.8	6.9	236
100	562	57	6	1	21.6	2.4	14.2	2.8	96
No answer <sup>b</sup>	--	--	--	--	--	--	--	--	0
<b>Total<sup>c</sup></b>	2600	122	41	3	100.0	--	100.0	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 6. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by size of forest/wooded land landholdings\*\*, 2011-2014**

Size of forest holdings (acres)	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
10-19	193	34	14	2	7.4	1.3	33.7	6.5	33
20-49	398	48	13	2	15.3	2.0	30.9	4.5	68
50-99	545	56	8	1	20.9	2.4	19.1	2.5	93
100-199	615	60	5	<1	23.6	2.5	11.3	1.4	105
200-499	498	54	2	<1	19.1	2.2	4.2	0.6	85
500-999	176	32	<1	<1	6.8	1.3	0.7	0.1	30
1,000-4,900	141	29	<1	<1	5.4	1.1	0.2	<0.1	24
5,000-9,900	23	12	<1	<1	0.9	0.5	<0.1	<0.1	4
10,000+	12	8	<1	<1	0.5	0.3	<.01	<.01	2
<b>Total<sup>b</sup></b>	<b>2600</b>	<b>123</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>444</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The average forested/wooded holding is 63.1 acres (SE=5.4) for family forest land ownerships with 10+ acres in Vermont.

<sup>a</sup> SE = standard error

<sup>b</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 7. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by number of parcels owned, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Number of forested/ wooded parcels<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
1	1800	101	33	3	70.6	5.2	82.9	9.6	298
2-9	725	65	7	1	28.4	2.9	16.7	3.1	120
10-99	18	10	<1	<1	0.7	0.4	0.3	0.2	3
100+	6	6	<1	<1	0.2	0.2	0.2	0.2	1
No answer <sup>c</sup>	42	16	1	<1	--	--	--	--	7
<b>Total<sup>d</sup></b>	2591	122	41	3	100.0	--	100.0	--	429

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Defined on the questionnaire as “separate, unconnected properties with wooded land.”

<sup>c</sup> Excluded from percentages

<sup>d</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 8. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont that are near (within one mile) of ownerships' primary residences, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Near owner's primary residence</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	1610	95	25	2	62.2	4.6	62.1	7.4	275
No	978	75	15	2	37.8	3.4	37.9	5.6	167
No answer <sup>b</sup>	12	8	1	<1	--	--	--	--	2
<b>Total<sup>c</sup></b>	2600	121	41	3	100.0	--	100.0	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 9. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont that are near (within one mile) of ownerships' vacation homes, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Near vacation home owned by owner</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	820	69	12	2	31.7	3.0	30.6	4.8	140
No	1768	99	28	3	68.3	5.0	69.4	8.1	302
No answer <sup>b</sup>	12	8	<1	<1	--	--	--	--	2
<b>Total<sup>c</sup></b>	2600	121	41	3	100.0	--	100.0	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.



**Table 10. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont that are near (within one mile) of ownerships' farms, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Near farm owned by owner</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	685	63	7	1	26.5	2.7	17.3	3.0	117
No	1897	103	34	3	73.5	5.2	82.7	9.3	324
No answer <sup>b</sup>	18	10	<1	<1	--	--	--	--	3
<b>Total<sup>c</sup></b>	2600	121	41	3	100.0	--	100.0	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 11. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by reason for owning family forest land, 2011-2014. Numbers include ownerships that rated an objective as very important or important on a five point scale.**

Reason <sup>b</sup>	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
To enjoy beauty or scenery	2073	107	35	3	81.4	5.7	87.4	9.7	354
To protect nature or biological diversity	1856	101	28	2	73.0	5.3	69.0	8.1	317
To protect water resources	1563	94	24	2	61.8	4.7	60.2	7.5	267
To protect or improve wildlife habitat	1844	101	26	2	74.1	5.4	65.7	7.9	315
For land investment	1007	76	14	2	40.1	3.6	35.7	5.2	172
Is part of my home site/primary residence	1423	89	23	2	57.3	4.6	58.5	7.4	243
Is part of my cabin or vacation home site	785	67	12	2	31.5	3.1	30.5	4.8	134
Is part of my farm or ranch	720	64	8	1	29.2	3.0	19.7	3.4	123
For privacy	1610	95	27	3	63.8	4.8	68.0	8.3	275
To raise my family	972	74	16	2	39.2	3.6	41.5	6.1	166
To pass land on to my children or other heirs	1429	90	21	2	56.6	4.5	52.2	6.8	244
For firewood	1054	77	15	2	42.4	3.7	36.7	5.3	180
For timber products	1036	77	10	1	40.8	3.6	25.3	3.8	177
For nontimber forest products	662	62	8	1	26.3	2.8	19.6	3.3	113
For hunting	814	68	13	2	32.1	3.1	32.8	5.2	139
For recreation, other than hunting	1370	88	22	2	55.1	4.4	56.7	7.6	234
Other	176	32	3	1	--	--	--	--	30
No answer <sup>c</sup>	2225	110	35	3	--	--	--	--	380

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive

<sup>c</sup> Excluded from percentages

**Table 12. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by type and source of forest land and other wooded land acquisition, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Acquisition type<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Purchased	2054	107	35	3	79.4	5.5	85.0	9.7	335
Inherited	736	66	8	1	28.4	2.9	19.0	3.1	120
Received as a gift	135	29	2	1	5.2	1.1	5.7	1.8	22
Other	12	9	<1	<1	0.5	0.3	0.2	0.1	2
No answer <sup>c</sup>	6	6	<1	<1	--	--	--	--	1
<b>Acquisition source<sup>b</sup></b>									
My parents and/or my spouse's parents	730	98	8	2	29.1	4.2	19.1	5.3	46
My spouse	16	16	<1	<1	0.6	0.6	0.3	0.3	1
Another family member	206	56	2	1	8.2	2.3	5.8	2.4	13
Other individual(s)	1619	127	31	4	64.6	6.1	76.1	13.9	102
A business	238	60	1	<1	9.5	2.4	1.3	0.5	15
A government agency	16	16	<1	<1	0.6	0.6	0.3	0.3	1
Other	48	27	1	<1	1.9	1.1	1.5	1.2	3
No answer <sup>c</sup>	95	39	2	1	--	--	--	--	6

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive

<sup>c</sup> Excluded from percentages

**Table 13. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by ownership tenure\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Land tenure (years)</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
<10	304	42	7	1	12.7	1.9	17.0	3.7	52
10-24	849	70	16	2	35.3	3.4	40.3	5.9	145
25-49	1030	77	15	2	42.8	3.9	38.6	5.8	176
50+	222	36	2	<1	9.2	1.6	4.1	1.1	38
No answer <sup>b</sup>	193	34	2	1	--	--	--	--	33
<b>Total<sup>c</sup></b>	2600	122	41	3	100.0	--	100.0	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The average forested/wooded land tenure is 23.0 years (SE=1.8) for family forest landownerships with 10+ acres in Vermont.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See the footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 14. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by frequency of selling or giving away forest land and recipients of this land, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owner- ships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	
<b>Number of times sold or given away forest/wooded land</b>	----	<i>Thousands</i>	----	----	<i>Percent</i>	----			
0 (Never)	2027	107	37	3	79.0	5.6	89.4	10.2	320
1	323	45	3	1	12.6	1.8	8.3	1.9	51
2-5	165	32	<1	<1	6.4	1.3	1.9	0.6	26
6+	51	18	<1	<1	2.0	0.7	0.5	0.2	8
No answer <sup>b</sup>	19	11	<1	<1	--	--	--	--	3
<b>Total<sup>c</sup></b>	<b>2585</b>	<b>122</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>408</b>
<b>Recipient<sup>d</sup></b>									
My children	111	42	1	<1	18.9	9.2	12.1	17.5	7
Another family member	32	22	<1	<1	5.4	4.2	7.7	12.1	2
Other individual(s)	413	77	4	1	70.3	25.7	79.8	113.2	26
A business	32	22	<1	<1	5.4	4.2	1.1	1.8	2
A government agency	--	--	--	--	--	--	--	--	0
Other	63	32	<1	<1	10.8	6.4	4.9	7.3	4
No answer <sup>b</sup>	32	22	<1	<1	--	--	--	--	2
<b>Transferred in the last 5 years</b>									
Yes	175	52	1	<1	6.9	2.1	2.4	1.2	11
No	2365	130	41	5	93.1	7.1	97.6	15.6	149
No answer <sup>b</sup>	63	32	<1	<1	--	--	--	--	4
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>144</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>408</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

<sup>d</sup> Categories are not mutually exclusive

Note: Data may not add to totals due to rounding

**Table 15. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by decision maker, 2011-2014**

Decision maker <sup>b</sup>	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Me	2158	110	36	3	83.6	5.7	89.0	10.1	352
My spouse	613	61	12	2	23.8	2.6	28.3	4.8	100
My children	172	32	3	1	6.7	1.3	6.2	2.1	28
My parents	49	17	<1	<1	1.9	0.7	0.6	0.3	8
Another family member	141	29	1	<1	5.5	1.2	3.5	1.0	23
My business partner	31	14	<1	<1	1.2	0.5	0.7	0.5	5
My land manager or forester	901	73	7	1	34.9	3.3	17.6	2.4	147
Other	67	20	1	1	2.6	0.8	3.3	1.4	11
No answer <sup>c</sup>	12	9	<1	<1	--	--	--	--	2

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive

<sup>c</sup> Excluded from percentages

**Table 16. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by written management plan status, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	
<b>Has a plan</b>	-----		Thousands	---	-----		Percent	---	
Yes	1662	97	15	1	64.8	4.9	36.9	4.3	271
No	901	73	25	3	35.2	3.3	63.1	8.6	147
No answer <sup>b</sup>	31	14	1	1	--	--	--	--	5
<b>Total<sup>c</sup></b>	<b>2594</b>	<b>122</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>423</b>
<b>Has implemented a plan</b>									
Yes	1514	94	13	1	94.8	10.3	87.9	26.8	239
No	82	23	2	1	5.2	1.5	12.1	6.0	13
No answer <sup>b</sup>	101	25	1	1	--	--	--	--	16
<b>Total<sup>c</sup></b>	<b>1698</b>	<b>100</b>	<b>16</b>	<b>2</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>268</b>
<b>Who wrote the plan<sup>d</sup></b>									
I did	76	22	<1	<1	4.6	1.4	2.5	1.3	12
Private consultant forester	1318	88	11	1	79.7	8.6	77.8	24.7	208
Forest industry forester	114	27	1	<1	6.9	1.7	5.1	2.3	18
State or local government forester	89	24	1	<1	5.4	1.5	5.9	2.6	14
Federal government forester	19	11	1	<1	1.1	0.7	4.7	3.5	3
Other	38	16	1	<1	2.3	1.0	4.0	2.5	6
No answer <sup>b</sup>	38	16	2	1	--	--	--	--	6
<b>Total<sup>c</sup></b>	<b>1692</b>	<b>101</b>	<b>16</b>	<b>2</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>267</b>
<b>Reasons for no plan<sup>e</sup></b>									
I don't want/need one	302	67	8	3	43.2	15.2	41.8	19.4	19
Too busy	206	56	5	2	29.5	11.4	26.9	13.9	13
Too expensive	238	60	3	1	34.1	12.7	16.9	8.1	15
Too complicated	159	49	3	1	22.7	9.4	15.7	8.0	10
Other	190	54	6	2	27.3	10.8	33.2	16.8	12
No answer <sup>b</sup>	286	65	8	3	--	--	--	--	18
<b>Usefulness of the plan</b>									
Extremely useful	738	83	5	1	43.8	6.3	39.2	16.	70

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	
									6
Moderately useful	580	74	4	1	34.4	5.4	32.4	13.8	55
Somewhat useful	211	46	2	1	12.5	3.0	15.5	7.4	20
Slightly useful	148	39	1	<1	8.8	2.4	10.9	5.6	14
Not at all useful	11	11	<1	<1	0.6	0.6	2.1	2.2	1
No answer <sup>b</sup>	32	18	1	1	--	--	--	--	3
<b>Total<sup>c</sup></b>	<b>1719</b>	<b>128</b>	<b>15</b>	<b>2</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>163</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

<sup>d</sup> Includes only ownerships that have a written forest management plan.

<sup>e</sup> Categories are not mutually exclusive

Note: Data may not add to totals due to rounding.



**Table 17. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by timber harvesting activities\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Firewood<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
For personal use	1710	98	26	2	72.0	5.6	70.0	9.1	283
For sale	755	67	6	1	31.8	3.3	16.1	2.7	125
For other reasons	133	28	1	<1	5.6	1.2	3.6	1.1	22
Not harvested	314	43	8	2	13.2	2.0	20.5	4.5	52
No answer <sup>c</sup>	217	36	4	1	--	--	--	--	36
<b>Logs<sup>b</sup></b>									
For personal use	586	59	8	1	26.1	3.0	23.0	4.4	97
For sale	1540	94	15	2	68.5	5.7	45.8	6.7	255
For other reasons	85	23	2	1	3.8	1.0	6.2	2.6	14
Not harvested	453	52	13	2	20.2	2.6	39.7	7.2	75
No answer <sup>c</sup>	344	45	7	1	--	--	--	--	57
<b>Wood chips<sup>b</sup></b>									
For personal use	60	19	1	1	3.7	1.2	3.7	2.2	10
For sale	393	48	2	<1	24.0	3.6	8.1	2.1	65
For other reasons	18	10	<1	<1	1.1	0.6	0.7	0.5	3
Not harvested	1202	83	22	2	73.4	8.1	87.8	15.5	199
No answer <sup>c</sup>	954	75	15	2	--	--	--	--	158
<b>Unwanted trees<sup>b</sup></b>									
For personal use	683	63	14	2	35.5	4.1	44.6	8.2	113
For sale	417	50	3	1	21.7	3.0	9.4	2.3	69
For other reasons	429	51	5	1	22.3	3.1	15.7	3.4	71
Not harvested	538	56	10	2	28.0	3.5	33.0	6.3	89
No answer <sup>c</sup>	671	63	10	2	--	--	--	--	111
<b>Other timber products<sup>b</sup></b>									
For personal use	79	22	2	1	22.0	11.8	25.3	18.8	13
For sale	12	9	<1	<1	3.4	2.9	0.6	0.6	2
For other reasons	72	21	1	1	20.0	10.7	19.3	15.4	12
Not harvested	205	35	4	1	56.7	27.2	55.3	36.8	34
No answer <sup>c</sup>	2235	111	34	3	--	--	--	--	370

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive

<sup>c</sup> Excluded from percentages

**Table 18. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by use of professional foresters for timber harvesting\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Professional forester used</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	1238	119	15	3	57.8	6.9	44.3	11.5	78
No	873	105	18	3	40.7	5.7	55.0	13.6	55
Uncertain	32	22	<1	<1	1.5	1.1	0.7	0.5	2
No answer <sup>b</sup>	222	58	4	2	--	--	--	--	14
<b>Total<sup>c</sup></b>	2365	170	37	5	100.0	--	100.0	--	149

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

**Table 19. Estimated area and number of family forest land\* ownerships with 10+ in Vermont by activities related to nontimber forest products (NTFPs)\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Maple sap for sugaring<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
For personal use	683	77	8	2	27.9	3.5	22.6	4.9	70
For sale	439	63	4	1	17.9	2.7	10.2	2.4	45
Not collected	1512	106	27	3	61.8	5.4	71.5	10.8	155
No answer <sup>c</sup>	137	36	2	1	--	--	--	--	14
<b>Edibles<sup>b</sup></b>									
For personal use	1033	77	17	2	42.5	3.8	45.6	6.8	171
For sale	205	35	2	1	8.5	1.5	4.3	1.5	34
Not collected	1281	86	19	2	52.7	4.4	51.3	6.9	212
No answer <sup>c</sup>	163	31	3	1	--	--	--	--	27
<b>Medicinals<sup>b</sup></b>									
For personal use	115	26	1	<1	4.9	1.2	3.3	1.1	19
For sale	24	12	<1	<1	1.0	0.5	0.4	0.2	4
Not collected	2193	110	36	3	94.5	7.0	96.5	11.5	363
No answer <sup>c</sup>	272	40	4	1	--	--	--	--	45
<b>Landscaping<sup>b</sup></b>									
For personal use	423	50	8	2	18.0	2.3	22.7	4.6	70
For sale	36	15	<1	<1	1.5	0.6	0.7	0.4	6
Not collected	1903	103	29	3	81.2	6.2	77.1	9.5	315
No answer <sup>c</sup>	248	39	4	1	--	--	--	--	41
<b>Decorative<sup>b</sup></b>									
For personal use	483	54	8	1	20.5	2.5	20.5	4.3	80
For sale	91	23	1	<1	3.8	1.0	1.4	0.6	15
Not collected	1812	101	29	3	76.9	5.9	78.5	9.7	300
No answer <sup>c</sup>	236	38	4	1	--	--	--	--	39
<b>Other<sup>b</sup></b>									
For personal use	42	16	<1	<1	10.1	5.5	6.2	4.9	7
For sale	18	10	<1	<1	4.3	3.0	2.0	1.7	3
Not collected	375	47	6	1	88.6	35.6	93.1	62.2	62
No answer <sup>c</sup>	2175	110	34	3	--	--	--	--	360

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive

<sup>c</sup> Excluded from percentages

**Table 20. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by recent (past 5 years) forestry activity\*\*, 2011-2014**

Type of activity <sup>b</sup>	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Cut and/or removed trees for sale	1235	84	12	1	49.4	4.1	29.9	4.5	211
Cut and/or removed trees for own use	1604	95	24	2	64.2	4.9	62.6	7.9	274
Collected nontimber forest products	656	61	9	1	26.2	2.8	24.1	4.1	112
Reduced fire hazard	158	30	3	1	6.3	1.3	6.9	2.2	27
Controlled burn/prescribed fire	70	20	1	<1	2.8	0.8	2.0	0.8	12
Eliminated or reduced invasive plants	539	56	8	1	21.5	2.5	20.4	4.0	92
Eliminated or reduced unwanted insects or diseases	105	25	1	1	4.2	1.0	3.8	1.4	18
Road construction or maintenance	767	66	8	1	30.7	3.0	21.5	3.9	131
Trail construction or maintenance	984	75	13	2	39.3	3.5	33.6	5.1	168
Improved wildlife habitat	849	70	10	1	34.0	3.2	25.7	4.1	145
Livestock grazing	293	41	4	1	11.7	1.7	9.5	2.4	50
None of the above	240	37	6	1	9.6	1.6	14.5	3.3	41
No answer <sup>c</sup>	100	24	2	1	--	--	--	--	17

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive

<sup>c</sup> Excluded from percentages

**Table 21. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by future (next 5 years) forestry activity, 2011-2014. Numbers include ownerships that rated an activity as extremely likely or likely on a five-point scale.**

Type of activity <sup>b</sup>	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Cut and/or removed trees for sale	1256	85	10	1	51.0	4.3	25.7	3.4	208
Cut and/or removed trees for own use	1637	96	25	2	67.8	5.3	63.9	8.1	271
Collected nontimber forest products	876	72	12	2	38.7	3.8	33.6	5.2	145
Reduced fire hazard	175	52	2	1	8.3	2.5	4.5	2.0	11
Controlled burn/prescribed fire	72	21	1	<1	3.4	1.0	2.2	0.9	12
Eliminated or reduced invasive plants	737	66	10	2	33.0	3.5	27.8	4.8	122
Eliminated or reduced unwanted insects or diseases	387	48	6	1	17.7	2.4	15.5	3.4	64
Road construction or maintenance	864	71	9	1	37.3	3.7	24.4	4.1	143
Trail construction or maintenance	1190	83	16	2	51.4	4.5	42.4	6.3	197
Improved wildlife habitat	1269	85	19	2	54.3	4.7	48.5	6.9	210
Livestock grazing	314	43	4	1	14.3	2.1	12.1	2.9	52
Tap or lease maples for sugaring	809	83	9	1	34.6	4.0	24.8	4.8	83
None of the above	217	36	6	1	8.6	1.5	15.1	3.5	36
No answer <sup>c</sup>	127	28	3	1	--	--	--	--	21

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive

<sup>c</sup> Excluded from percentages

**Table 22. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by lease status\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Leased<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	199	34	3	1	7.7	1.4	6.8	2.1	34
No	2377	114	38	3	92.3	6.1	93.2	10.0	406
No answer <sup>c</sup>	23	12	<1	<1	0.9	0.5	0.6	0.3	4
<b>Total<sup>d</sup></b>	<b>2600</b>	<b>119</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>444</b>
<b>Lease use<sup>e</sup></b>									
Hunting	16	16	<1	<1	7.1	9.3	1.8	3.9	1
Recreation (other than hunting)	16	16	<1	<1	7.1	9.3	1.8	3.9	1
Graze/pasture livestock	63	32	1	<1	28.6	27.5	14.9	30.3	4
Land conservation	--	--	--	--	--	--	--	--	0
Carbon sequestration	32	22	--	--	--	--	--	--	2
Public water supply protection	--	--	--	--	--	--	--	--	0
Wildlife habitat/biodiversity	--	--	--	--	--	--	--	--	0
Other	16	16	<1	<1	7.1	9.3	1.8	3.9	1
No answer <sup>c</sup>	--	--	--	--	--	--	--	--	0
<b>Leased within past 5 years</b>									
Yes	159	49	3	2	6.2	1.9	7.0	3.7	10
No	2413	130	40	5	93.8	6.9	93.0	14.9	152
No answer <sup>c</sup>	32	22	<1	<1	--	--	--	--	2
<b>Total<sup>d</sup></b>	<b>2603</b>	<b>141</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Collecting money (other than from logging) for allowing people to use their forest/wooded land.

<sup>c</sup> Excluded from percentages

<sup>d</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

<sup>e</sup> Categories are not mutually exclusive

Note: Data may not add to totals due to rounding.

**Table 23. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by familiarity with and participation in cost-share programs, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Familiarity</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Extremely familiar	169	32	1	<1	6.6	1.3	3.7	1.1	28
Moderately familiar	254	39	1	<1	9.9	1.6	3.1	0.7	42
Somewhat familiar	332	45	4	1	13.0	1.8	10.3	2.3	55
Slightly familiar	344	45	4	1	13.4	1.9	10.9	2.8	57
Not at all familiar	1462	91	29	3	57.1	4.4	71.9	8.7	242
No answer <sup>b</sup>	30	14	1	1	--	--	--	--	5
<b>Total<sup>c</sup></b>	<b>2591</b>	<b>123</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>429</b>
<b>Has ever participated</b>									
Yes	381	47	3	<1	15.0	2.0	6.6	1.3	65
No	2020	106	36	3	79.9	5.6	89.4	10.1	345
Uncertain	129	27	2	1	5.1	1.1	4.0	1.3	22
No answer <sup>b</sup>	70	20	1	1	--	--	--	--	12
<b>Total<sup>c</sup></b>	<b>2600</b>	<b>120</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>444</b>
<b>Has participated in the past 5 years</b>									
Yes	224	37	2	<1	8.9	1.5	3.8	0.9	37
No	2283	112	38	3	91.1	6.3	96.2	10.8	378
No answer <sup>b</sup>	85	23	1	1	--	--	--	--	14
<b>Total<sup>c</sup></b>	<b>2591</b>	<b>120</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>429</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 24. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by familiarity with and participation in green certification programs\*\*, 2011-2014**

Familiarity	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Extremely familiar	139	30	1	<1	5.4	1.2	2.2	0.8	22
Moderately familiar	285	42	3	1	11.1	1.7	6.7	1.7	45
Somewhat familiar	412	51	6	1	16.0	2.1	15.4	3.4	65
Slightly familiar	380	49	5	1	14.8	2.0	12.0	2.9	60
Not at all familiar	1349	89	26	3	52.6	4.2	63.6	8.0	213
No answer <sup>b</sup>	19	11	<1	<1	--	--	--	--	3
<b>Total<sup>c</sup></b>	<b>2585</b>	<b>125</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>408</b>
<b>Currently green certified</b>									
Yes	135	29	<1	<1	5.3	1.1	1.0	0.4	22
No	1864	103	32	3	72.9	5.3	78.2	9.1	304
Uncertain	558	58	9	1	21.8	2.5	20.8	3.8	91
No answer <sup>b</sup>	37	15	<1	<1	--	--	--	--	6
<b>Total<sup>c</sup></b>	<b>2594</b>	<b>122</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>423</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.



**Table 25. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by familiarity with and participation in forestry related property tax programs\*\*, 2011-2014**

Familiarity	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Extremely familiar	1087	79	10	1	42.5	3.7	23.9	3.2	180
Moderately familiar	586	59	8	1	22.9	2.5	19.4	3.6	97
Somewhat familiar	302	43	5	1	11.8	1.7	13.4	2.9	50
Slightly familiar	163	31	3	1	6.4	1.3	8.4	2.4	27
Not at all familiar	423	50	14	2	16.5	2.1	34.9	5.9	70
No answer <sup>b</sup>	30	14	<1	<1	--	--	--	--	5
<b>Total<sup>c</sup></b>	<b>2591</b>	<b>124</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>429</b>
<b>Currently enrolled</b>									
Yes	1692	97	15	1	66.0	4.9	36.1	4.0	289
No	779	67	23	3	30.4	3.0	57.6	7.9	133
Uncertain	94	23	3	1	3.7	0.9	6.3	2.4	16
No answer <sup>b</sup>	35	14	1	<1	--	--	--	--	6
<b>Total<sup>c</sup></b>	<b>2600</b>	<b>121</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>444</b>
<b>How much land is enrolled?</b>									
All	1141	96	10	1	44.8	4.3	24.4	3.8	117
Some	653	76	6	1	25.7	3.2	14.4	2.5	67
None	624	74	21	3	24.5	3.2	53.1	9.5	64
Uncertain	127	35	3	1	5.0	1.4	8.1	3.2	13
No answer <sup>b</sup>	39	19	1	<1	--	--	--	--	4
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>148</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 26. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by familiarity with and status of easements that restrict land use conversions\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Familiarity</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Extremely familiar	501	55	6	1	19.6	2.3	13.9	3.2	83
Moderately familiar	538	56	8	1	21.0	2.4	19.9	3.8	89
Somewhat familiar	447	52	6	1	17.5	2.2	14.1	2.5	74
Slightly familiar	375	47	6	1	14.7	2.0	14.1	3.1	62
Not at all familiar	695	64	16	2	27.2	2.8	38.2	5.8	115
No answer <sup>b</sup>	36	15	<1	<1	--	--	--	--	6
<b>Total<sup>c</sup></b>	<b>2591</b>	<b>124</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>429</b>
<b>Has an easement</b>									
Yes	316	43	3	1	12.4	1.8	6.2	1.8	54
No	2143	109	36	3	83.9	5.8	89.2	9.8	366
Uncertain	94	23	2	1	3.7	0.9	4.5	1.6	16
No answer <sup>b</sup>	47	17	<1	<1	--	--	--	--	8
<b>Total<sup>c</sup></b>	<b>2600</b>	<b>120</b>	<b>41</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>444</b>
<b>Likelihood of future easement</b>									
Extremely likely	30	14	<1	<1	1.4	0.7	0.7	0.4	5
Likely	48	17	1	<1	2.3	0.8	2.5	1.2	8
Undecided	501	55	8	1	24.0	3.0	22.1	4.4	83
Unlikely	646	62	9	1	30.9	3.5	25.1	4.7	107
Extremely unlikely	864	71	17	2	41.3	4.3	49.5	7.8	143
Not applicable	375	47	4	1	--	--	--	--	62
No answer <sup>b</sup>	127	28	3	1	--	--	--	--	21
<b>Total<sup>c</sup></b>	<b>2090</b>	<b>111</b>	<b>35</b>	<b>3</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>346</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 27. Estimated area and number of family forest landownerships with 10+ acres in Vermont by who recreated on the forest land and type of recreation, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Who has recreated<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Owner and/or spouse	1950	104	32	3	76.2	5.4	78.1	8.9	333
Owner's children	1534	93	24	2	60.0	4.6	58.3	7.3	262
Other family members	1522	92	24	2	59.5	4.6	57.8	7.0	260
Friends	1827	101	27	2	71.4	5.2	66.3	7.7	312
Neighbors	1797	100	28	3	70.3	5.1	69.4	8.1	307
The general public for free	1118	80	14	2	43.7	3.7	33.3	4.6	191
The general public for a fee	12	8	<1	<1	0.5	0.3	0.1	0.1	2
Other family members	182	33	2	1	7.0	1.3	4.7	1.4	31
None	82	22	2	1	3.2	0.9	4.9	1.9	14
No answer <sup>c</sup>	41	15	<1	<1	--	--	--	--	7
<b>How they recreated<sup>b</sup></b>									
Hunting	1993	105	27	2	81.5	5.9	71.6	8.7	330
Fishing	544	57	6	1	22.2	2.6	15.4	3.2	90
Hiking/walking	2078	107	32	3	84.9	6.1	84.6	10.1	344
Bicycling	501	55	5	1	20.5	2.5	13.9	2.6	83
Camping	489	54	7	1	20.0	2.4	19.4	4.0	81
Horseback riding	586	59	6	1	24.0	2.7	16.9	3.5	97
Skiing or snowmobiling	1359	88	17	2	55.6	4.6	46.0	6.2	225
Off-road vehicles such as ATVs or snowmobiles	1027	77	13	2	42.0	3.8	33.8	5.0	170
Other	85	23	1	<1	3.5	0.9	2.8	0.9	14
No answer <sup>c</sup>	60	19	1	<1	--	--	--	--	10

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive.

<sup>c</sup> Excluded from percentages.

**Table 28. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by whether the ownership posted to restrict public access to the forest and other wooded and type of restriction\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Has posted</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	1070	110	18	3	41.2	4.7	41.0	8.8	73
No	1524	122	25	4	58.8	5.5	59.0	10.3	104
No answer <sup>b</sup>	29	21	<1	<1	--	--	--	--	2
<b>Total<sup>c</sup></b>	2623	165	43	5	100.0	--	100.0	--	179
<b>Type of restriction<sup>d</sup></b>									
Trespassing	619	92	12	3	60.0	13.8	67.5	28.2	39
Hunting	746	99	11	3	72.3	15.9	63.6	26.2	47
Motorized vehicles	460	81	6	2	44.6	11.1	32.6	15.4	29
Other	127	44	3	1	12.3	4.8	14.2	9.2	8
No answer <sup>b</sup>	32	22	<1	<1	--	--	--	--	2

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

<sup>d</sup> Categories are not mutually exclusive.

Note: Data may not add to totals due to rounding.

**Table 29. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by management advice received in the preceding five years and advice source\*\*, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Received advice in the preceding five years</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	1593	94	17	2	62.4	4.7	42.7	5.2	272
No	960	74	23	3	37.6	3.4	57.3	7.7	164
No answer <sup>b</sup>	47	17	1	<1	--	--	--	--	8
<b>Total<sup>c</sup></b>	2600	121	41	3	100.0	--	100.0	--	444
<b>Advice topic<sup>d</sup></b>									
Insects of plant diseases	305	43	3	1	19.0	3.1	15.3	4.8	51
Wildlife or wildlife habitat	629	61	6	1	39.2	5.1	34.6	9.5	105
Timber production	1024	77	9	1	63.8	7.4	49.2	13.1	171
Land conservation	611	60	5	1	38.1	5.0	29.3	8.2	102
Fire safety	47	27	1	1	3.3	1.9	6.4	5.8	3
Enrolled in a property tax program	1024	92	10	1	59.3	7.4	56.7	16.4	105
Selling carbon credits	59	24	<1	<1	3.4	1.4	0.5	0.4	6
Invasive plant control	478	66	4	1	27.7	4.5	19.6	6.4	49
Erosion control	351	57	2	1	20.3	3.7	12.4	4.8	36
Maple sugaring	439	63	4	1	25.4	4.3	22.7	7.4	45
Other	108	25	2	1	6.7	1.7	11.5	4.8	18
No answer <sup>b</sup>	--	--	--	--	--	--	--	--	5
<b>How obtained<sup>d</sup></b>									
Talked to someone	947	108	10	2	67.0	11.2	56.5	23.2	61
Someone visited my land	776	100	9	2	54.9	9.8	51.3	21.6	50
Received a brochure or other written material	295	66	4	1	20.9	5.3	20.9	11.0	19
From the internet	109	41	1	<1	7.7	3.0	4.1	2.3	7
Attended a conference or workshop	202	55	1	<1	14.3	4.3	5.1	2.5	13
Other	109	41	<1	<1	7.7	3.0	19.7	13.4	7
No answer <sup>b</sup>	62	31	<1	<1	--	--	--	--	4
<b>Who was involved<sup>d</sup></b>									
State forestry employee	803	68	9	1	49.6	6.0	49.0	12.8	134
Federal employee	264	62	5	2	18.3	4.8	27.1	14.2	17
Private consultant	1222	84	12	1	75.6	8.4	67.4	17.0	204

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
Another landowner	246	38	2	<1	15.2	2.7	11.8	3.7	41
Family member or friend	347	45	3	1	21.5	3.4	17.9	5.3	58
Land trust representative	283	51	1	<1	16.4	3.3	5.4	2.1	29
Other	144	29	1	<1	8.9	2.0	5.0	1.9	24
No answer <sup>b</sup>	31	22	<1	<1	--	--	--	--	2

\*See the footnote under table 1 for an explanation of the terms forest land.

\*\*The acre values represent the estimated amount of forest land owned by people who have done the specific activity, not the total acres on which the activity has occurred.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

<sup>d</sup> Categories are not mutually exclusive.

Note: Data may not add to totals due to rounding.

**Table 30. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by type of advice desired by ownership, 2011-2014. Numbers include ownerships that rated an advice topic as very helpful or helpful on a five-point scale**

Topic <sup>b</sup>	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Advice on woodland management	1317	87	22	2	53.3	4.4	54.5	7.2	218
Advice on how to transfer land to the next generation	1160	82	18	2	47.4	4.1	46.0	6.7	192
Advice on selling or giving away development rights	574	58	8	1	23.8	2.7	21.1	3.9	95
Cost-sharing for woodland management	1015	77	14	2	41.8	3.8	36.7	5.6	168
More favorable tax policies	1778	129	29	4	70.0	6.3	68.0	12.6	112
Stronger timber markets	1081	79	13	2	44.6	4.0	35.0	5.2	179
Advice wildlife management	1346	102	21	3	55.2	5.1	53.9	8.4	138
Advice on how to contact and select a forester or logger	624	74	9	2	26.2	3.4	24.0	4.8	64
Advice on boundary lines, rights-of-way, or timber	839	84	14	2	35.5	4.1	37.0	6.9	86
Information on selling carbon credits	897	87	13	2	38.2	4.3	34.0	6.5	92
Advice invasive species control	1307	101	19	2	53.6	5.0	49.2	7.9	134
Other	79	35	1	1	55.6	75.1	38.6	74.8	5
No answer <sup>c</sup>	2460	130	39	5	--	--	--	--	155

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive.

<sup>c</sup> Excluded from percentages.

**Table 31. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by preferred methods to receive forest/woodland management information, 2011-2014. Numbers include ownerships that rated a method as very useful or useful on a five point scale**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>How obtained<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Talk to someone	1003	76	16	2	40.5	3.7	38.9	5.6	166
Have someone visit my land	1015	77	16	2	41.0	3.7	38.5	5.6	168
Written materials, such as brochures or publications	1456	91	25	3	58.8	4.7	62.5	7.8	241
Internet	870	71	16	2	35.1	3.4	39.4	5.9	144
Conference or workshop	610	60	9	2	24.6	2.7	23.4	4.2	101
Other	42	16	<1	<1	1.7	0.7	1.2	0.6	7
Do not want/need advice or information	248	39	4	1	10.0	1.6	8.8	2.0	41
No answer <sup>c</sup>	121	27	1	<1	--	--	--	--	20

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive.

<sup>c</sup> Excluded from percentages.



**Table 32. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by ownerships' concerns, 2011-2014. Numbers include ownerships that rated an issue as very important or important on a five-point scale.**

Concern <sup>b</sup>	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owner -ships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	
	-----	Thousands	----	----	-----	Percent	----		
Air pollution	1318	121	24	4	51.6	5.4	56.3	11.5	83
Damage or noise from off-road vehicles	1438	91	21	2	57.8	4.6	54.5	7.2	238
Damage from animals	393	48	6	1	16.1	2.1	14.8	3.6	65
Development of nearby lands	1160	82	22	2	47.3	4.1	56.2	7.7	192
Drought or lack of water	520	56	9	2	21.1	2.5	23.7	4.6	86
Global climate change	1069	79	17	2	43.3	3.8	43.8	6.4	177
High property taxes	2060	107	34	3	82.0	5.8	85.0	9.8	341
Invasive plant species	1323	87	21	2	53.5	4.4	53.2	7.2	219
Keeping land intact for future generations	1903	103	30	3	76.1	5.5	75.3	9.0	315
Misuse of wooded land, such as vandalism or dumping	1607	95	27	3	64.6	5.0	67.6	8.4	266
Trespassing or poaching	1407	90	23	2	56.7	4.6	58.8	7.6	233
Unwanted insects or diseases	1649	97	26	3	66.1	5.0	65.3	8.1	273
Water pollution	1147	132	26	5	46.1	5.9	60.7	14.8	53
Wildfire	844	120	23	5	33.9	5.2	53.5	14.2	39
Wind or ice storms	1197	86	19	2	49.2	4.3	50.6	7.5	178
Water Quality	1638	109	26	3	67.7	5.8	70.0	10.3	168
Flood damage to woods or woodland roads	897	87	12	2	37.2	4.1	32.8	6.2	92
Road or trail usage	1082	94	16	2	44.2	4.5	42.7	7.5	111
Reduced soil productivity	741	80	12	2	30.8	3.7	30.9	6.4	76
Other	48	17	1	<1	--	--	--	--	8
No answer <sup>c</sup>	2513	117	39	3	--	--	--	--	416

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive.

<sup>c</sup> Excluded from percentages.

**Table 33. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by ownerships' likelihood of selling or giving away land in the next five years and who is likely to receive it, 2011-2014. Numbers include ownerships that answered extremely likely or likely on a five-point scale.**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owner- ships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	
<b>Likelihood of selling or giving away in next 5 years</b>	-----	<i>Thousands</i>	-----	-----	<i>Percent</i>	-----			
Extremely likely	146	29	2	1	5.7	1.2	4.2	1.4	25
Likely	328	44	5	1	12.9	1.8	12.7	3.0	56
Undecided	375	47	5	1	14.7	2.0	12.1	2.6	64
Unlikely	644	61	11	2	25.3	2.7	28.0	4.6	110
Extremely unlikely	1054	77	17	2	41.4	3.6	43.0	6.0	180
No answer <sup>b</sup>	53	18	1	<1	--	--	--	--	9
<b>Total<sup>c</sup></b>	2600	122	41	3	100.0	--	100.0	--	444
<b>Likely recipient<sup>d</sup></b>									
My children	157	31	2	1	34.7	14.1	33.8	24.7	26
Another family member(s)	18	10	<1	<1	4.0	2.7	3.1	3.0	3
Other individual(s)	187	34	3	1	41.3	16.5	48.5	34.5	31
A business	16	--	<1	--	--	--	--	--	1
A government agency	24	12	<1	<1	5.3	3.3	0.9	0.9	4
Trust for family members	68	26	1	1	13.5	6.8	16.8	17.1	7
Non-profit or conservation group	59	24	<1	<1	11.5	6.1	1.1	1.0	6
Don't know	91	23	1	<1	20.0	8.8	17.1	12.7	15
Other	24	12	<1	<1	5.3	3.3	4.3	4.7	4
No answer <sup>b</sup>	66	20	1	1	--	--	--	--	11
<b>Reason for selling or giving away<sup>d</sup></b>									
I am ready to give it away	66	20	1	<1	15.3	7.3	10.7	9.5	11
Too expensive to hold or maintain	211	36	4	1	48.6	19.8	59.3	45.8	35
I need the money	109	26	2	1	25.0	11.0	28.7	23.4	18
High market value	18	10	<1	<1	4.2	2.9	1.0	1.1	3
No longer interested in owning it	48	17	1	1	11.1	5.7	12.5	13.0	8
Part of my investment	115	26	1	<1	26.4	11.5	18.5	15.5	19

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owner -ships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owne- rships	SE <sup>a</sup>	
Other <sup>b</sup>	127	28	1	<1	--	--	--	--	21
No answer <sup>b</sup>	85	23	2	1	--	--	--	--	14

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

<sup>d</sup> Categories are not mutually exclusive.

Note: Data may not add to totals due to rounding.

**Table 34. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by ownerships' agreement/disagreement about statements related to keeping land forested/wooded and selling forest/wooded land, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Level of agreement with the statement "I want my wooded land to stay wooded"</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Strongly agree	773	67	12	2	31.5	3.1	32.0	5.2	132
Agree	515	55	8	1	21.0	2.5	19.6	3.5	88
Neither agree nor disagree	603	59	10	1	24.6	2.7	25.1	4.3	103
Disagree	345	45	5	1	14.1	2.0	12.8	2.9	59
Strongly disagree	217	36	4	1	8.8	1.5	10.5	2.8	37
No answer <sup>b</sup>	146	29	2	1	--	--	--	--	25
<b>Total<sup>c</sup></b>	2600	123	41	3	100.0	--	100.0	--	444
<b>Level of agreement with the statement "I would sell my land if I was offered a reasonable price"</b>									
Strongly agree	6	6	<1	<1	0.2	0.2	0.7	0.7	1
Agree	12	8	<1	<1	0.5	0.3	0.3	0.2	2
Neither agree nor disagree	258	39	4	1	10.2	1.6	9.8	2.4	44
Disagree	650	61	11	2	25.8	2.7	27.7	4.8	111
Strongly disagree	1593	94	25	2	63.3	4.8	61.5	7.5	272
No answer <sup>b</sup>	82	22	1	<1	--	--	--	--	14
<b>Total<sup>c</sup></b>	2600	121	41	3	100.0	--	100.0	--	444

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 35. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by primary and secondary owners' retirement statuses, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Primary owner is retired</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Yes	873	105	11	2	34.8	4.6	27.0	6.1	55
No	1635	127	31	4	65.2	6.2	73.0	13.4	103
No answer <sup>b</sup>	95	39	1	<1	--	--	--	--	6
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>170</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>
<b>Secondary owner is retired</b>									
Yes	476	82	6	1	30.3	6.2	23.0	7.7	30
No	1095	114	20	3	69.7	10.6	77.0	21.7	69
Not applicable <sup>b</sup>	683	96	13	3	--	--	--	--	43
No answer <sup>b</sup>	349	72	4	2	--	--	--	--	22
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>185</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 36. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by primary and secondary owners' occupation, 2011-2014**

	Totals				Percentages				n	
	Acres	SE <sup>a</sup>	Ownersh	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownersh	SE <sup>a</sup>		
	-ps				-ps					
<b>Primary owner occupation</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----		
Office or manager	238	60	5	2	15.6	4.3	19.4	8.8	15	
Professional	492	83	8	2	32.3	6.6	28.0	9.4	31	
Technician	63	32	2	2	4.2	2.1	7.9	6.3	4	
Sales worker	127	44	2	1	8.3	3.1	8.6	4.9	8	
Administrative support	63	32	<1	<1	4.2	2.1	1.8	1.3	4	
Craft worker	238	60	6	2	15.6	4.3	21.9	9.4	15	
Operative	63	32	1	1	4.2	2.1	4.7	2.6	4	
Laborer or helper	48	27	<1	<1	3.1	1.8	0.2	0.2	3	
Service worker	16	16	<1	<1	1.0	1.0	0.9	1.0	1	
Farmer	159	49	2	1	10.4	3.4	5.9	3.1	10	
Homemaker	16	16	<1	<1	1.0	1.0	0.6	0.6	1	
Other	--	--	--	--	--	--	--	--	0	
No answer <sup>b</sup>	1079	114	16	3	--	--	--	--	68	
<b>Total<sup>c</sup></b>	2603	189	43	5	100.0	--	100.0	--	164	
<b>Secondary owner occupation</b>										
Office or manager	95	39	1	<1	10.7	4.9	6.6	4.7	6	
Professional	556	88	9	2	62.5	16.9	73.1	41.2	35	
Technician	--	--	--	--	--	--	--	--	0	
Sales worker	--	--	--	--	--	--	--	--	0	
Administrative support	95	39	2	1	10.7	4.9	12.4	8.9	6	
Craft worker	16	16	<1	<1	1.8	1.8	0.6	0.7	1	
Operative	16	16	<1	<1	1.8	1.8	1.2	1.3	1	
Laborer or helper	--	--	--	--	--	--	--	--	0	
Service worker	16	16	<1	<1	1.8	1.8	2.0	2.2	1	
Farmer	32	22	<1	<1	3.6	2.6	3.3	3.5	2	
Homemaker	63	32	<1	<1	7.1	3.9	0.8	0.7	4	
Other	--	--	--	--	--	--	--	--	0	
Not applicable <sup>b</sup>	683	96	13	3	--	--	--	--	43	
No answer <sup>b</sup>	1032	112	17	3	--	--	--	--	65	
<b>Total<sup>c</sup></b>	2603	186	43	5	100.0	--	100.0	--	164	

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 37. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by primary and secondary owners' ages, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Primary owner</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
<45	95	39	3	2	3.8	1.6	7.0	3.7	6
45-54	492	83	12	3	19.7	3.5	28.5	8.1	31
55-64	1095	114	18	3	43.9	5.2	43.0	9.4	69
65-74	444	80	6	2	17.8	3.3	14.1	4.0	28
75+	365	73	3	1	14.6	3.0	7.4	2.3	23
No answer <sup>b</sup>	111	42	1	<1	--	--	--	--	7
<b>Total<sup>c</sup></b>	2603	187	43	5	100.0	--	100.0	--	164
<b>Secondary owner</b>									
<45	95	39	2	1	6.1	2.6	7.6	5.5	6
45-54	317	69	7	2	20.4	5.0	27.4	11.0	20
55-64	698	97	12	2	44.9	8.0	44.5	13.4	44
65-74	302	67	2	1	19.4	4.8	9.4	3.4	19
75+	143	47	3	1	9.2	3.2	11.0	5.1	9
Not applicable <sup>b</sup>	683	96	13	3	--	--	--	--	43
No answer <sup>b</sup>	365	73	4	2	--	--	--	--	23
<b>Total<sup>c</sup></b>	2603	149	26	4	100.0	--	100.0	--	164

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 38. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by primary and secondary owners' genders, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Primary owner</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Male	1984	131	32	4	80.1	6.9	75.7	13.0	125
Female	492	83	10	3	19.9	3.5	24.3	7.2	31
No answer <sup>b</sup>	127	44	1	<1	--	--	--	--	8
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>161</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>
<b>Secondary owner</b>									
Male	349	72	6	2	22.7	5.3	21.6	7.7	22
Female	1191	117	20	3	77.3	11.7	78.4	22.1	75
Not applicable <sup>b</sup>	683	96	13	3	--	--	--	--	43
No answer <sup>b</sup>	381	74	4	2	--	--	--	--	24
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>183</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.



**Table 39. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by primary and secondary owners' highest levels of formal education attained, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Primary owner</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
12th grade or lower	32	22	1	1	1.3	0.9	1.7	1.5	2
High school equivalent	571	89	9	2	22.8	3.7	21.6	6.1	36
Some college	238	60	6	3	9.5	2.4	14.5	6.3	15
Associate degree	159	49	1	1	6.3	2.0	3.2	1.3	10
Bachelor's degree	619	92	12	2	24.7	3.9	27.9	6.7	39
Advanced degree	889	106	13	3	35.4	4.6	31.1	7.7	56
No answer <sup>b</sup>	95	39	1	<1	--	--	--	--	6
<b>Total<sup>c</sup></b>	2603	189	43	5	100.0	--	100.0	--	164
<b>Secondary owner</b>									
12th grade or lower	16	16	1	1	1.0	1.0	3.0	3.1	1
High school equivalent	270	64	3	1	17.3	4.5	12.2	4.6	17
Some college	206	56	3	1	13.3	3.9	13.3	5.1	13
Associate degree	127	44	1	1	8.2	3.0	4.9	3.1	8
Bachelor's degree	413	77	7	2	26.5	5.8	26.1	9.7	26
Advanced degree	524	86	11	3	33.7	6.7	40.4	14.0	33
Not applicable <sup>b</sup>	683	96	13	3	--	--	--	--	43
No answer <sup>b</sup>	365	73	4	2	--	--	--	--	23
<b>Total<sup>c</sup></b>	2603	193	43	5	100.0	--	100.0	--	164

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 40. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by primary and secondary owners' ethnicities and races, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owner- ships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owners -hips	SE <sup>a</sup>	
<b>Primary owner ethnicity</b>	-----		<i>Thousands</i>	----	----		<i>Percent</i>	---	
Hispanic or Latino	16	16	<1	<1	0.6	0.6	0.5	0.5	1
Non-hispanic/Latino	2445	130	42	5	99.4	7.6	99.5	16.0	154
No answer <sup>b</sup>	143	47	1	1	--	--	--	--	9
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>139</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>
<b>Secondary owner ethnicity</b>									
Hispanic or Latino	32	22	<1	<1	2.1	1.5	1.0	0.8	2
Non-hispanic/Latino	1476	124	25	4	97.9	14.2	99.0	26.9	93
Not applicable <sup>b</sup>	683	96	13	3	--	--	--	--	43
No answer <sup>b</sup>	413	77	5	2	--	--	--	--	26
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>176</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>
<b>Primary owner race</b>									
American Indian or Alaska Native	16	16	2	2	0.6	0.7	3.8	3.8	1
Asian	--	--	--	--	--	--	--	--	0
Black or African American	--	--	--	--	--	--	--	--	0
Native Hawaiian or other Pacific Islander	--	--	--	--	--	--	--	--	0
White	2429	130	40	5	99.4	7.7	96.2	15.3	153
Two or more races	--	--	--	--	--	--	--	--	0
No answer <sup>b</sup>	159	49	1	<1	--	--	--	--	10
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>140</b>	<b>43</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>
<b>Secondary owner race</b>									
American Indian or Alaska Native	--	--	--	--	--	--	--	--	0
Asian	--	--	--	--	--	--	--	--	0
Black or African American	16	16	<1	<1	0.7	0.7	0.2	0.2	1
Native Hawaiian or other Pacific	--	--	--	--	--	--	--	--	0

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owner- ships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owners -hips	SE <sup>a</sup>	
Islander									
White	1492	125	25	4	67.6	7.3	65.6	12.7	94
Two or more races	16	16	<1	<1	0.7	0.7	1.2	1.2	1
Not applicable <sup>b</sup>	683	96	13	3	--	--	--	--	43
No answer <sup>b</sup>	397	76	5	2	--	--	--	--	25
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>176</b>	<b>43</b>	<b>5</b>	<b>69.1</b>	<b>--</b>	<b>67.0</b>	<b>--</b>	<b>164</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 41. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by ownerships' annual household income, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Annual household income</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Less than \$25,000	159	49	2	476	6.7	2.1	4.2	1.7	10
\$25,000 - \$49,000	540	87	8	4962	22.7	3.9	20.0	5.8	34
\$50,000 - \$99,000	651	94	13	8253	27.3	4.3	31.2	7.8	41
\$100,000 - \$199,000	619	92	10	5538	26.0	4.2	24.6	6.3	39
\$200,000 or more	413	77	8	8255	17.3	3.4	20.1	7.3	26
No answer <sup>b</sup>	222	58	1	147	--	--	--	--	14
<b>Total<sup>c</sup></b>	2603	191	43	27630	100.0	--	100.0	--	164

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 42. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by ownerships' percent of household annual income derived from forest land owned, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Percent of annual household income from forest/wooded land</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
0	1476	124	31	4	64.1	6.7	76.9	14.2	93
1-4.9	365	73	6	2	15.9	3.3	16.1	6.1	23
5-19.9	317	69	2	1	13.8	3.1	5.9	1.9	20
20-49.9	48	27	<1	<1	2.1	1.2	0.7	0.5	3
50 or more	95	39	<1	<1	4.1	1.7	0.3	0.2	6
No answer <sup>b</sup>	302	67	3	2	--	--	--	--	19
<b>Total<sup>c</sup></b>	<b>2603</b>	<b>167</b>	<b>40</b>	<b>5</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>164</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 43. Estimated area and number of family forest landownerships with 10+ acres in Vermont by what activities are allowed on the ownerships' wooded land, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Allowed activity<sup>b</sup></b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Hunting	2077	117	29	3	81.9	6.1	73.9	10.2	213
Trapping	741	80	8	2	29.2	3.5	20.4	4.3	76
Snowmobiling	1199	98	14	2	47.3	4.5	34.6	5.8	123
ATVs	692	78	10	2	27.3	3.3	26.6	5.7	71
Skiing	1316	101	16	2	51.9	4.7	40.4	6.5	135
Other	390	60	4	1	15.4	2.5	11.2	2.9	40
None of the above	263	50	7	2	10.4	2.0	16.7	4.6	27
No answer <sup>c</sup>	49	22	1	<1	--	--	--	--	5

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive.

<sup>c</sup> Excluded from percentages.

**Table 44. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by likelihood of carrying out activities if owner received cost-share money land, 2011-2014**

Activity	Totals				Percentages				n	
	Acres	SE <sup>a</sup>	Owners-hips	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owners-hips	SE <sup>a</sup>		
	-----		Thousands	-----	-----		Percent	---		
<b>Invasive plant control</b>										
Extremely likely	575	72	8	2	23.8	3.2	21.9	5.4	59	
Likely	878	86	12	2	36.3	4.0	32.3	6.1	90	
Undecided	419	62	8	2	17.3	2.7	22.1	5.2	43	
Unlikely	234	47	4	1	9.7	2.0	11.5	3.6	24	
Extremely unlikely	312	54	5	1	12.9	2.3	12.1	3.5	32	
No answer <sup>b</sup>	166	40	2	1	--	--	--	--	17	
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>152</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>	
<b>Repair of roads or trails in woods</b>										
Extremely likely	595	73	8	2	24.6	3.3	21.1	5.3	61	
Likely	790	82	10	2	32.7	3.8	25.4	5.0	81	
Undecided	371	58	6	1	15.3	2.5	15.5	3.7	38	
Unlikely	293	52	6	2	12.1	2.3	16.8	4.8	30	
Extremely unlikely	371	58	8	2	15.3	2.5	21.1	5.3	38	
No answer <sup>b</sup>	166	40	2	1	--	--	--	--	17	
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>152</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>	
<b>Young woods habitat creation</b>										
Extremely likely	429	63	5	1	18.0	2.8	14.4	3.9	44	
Likely	770	81	13	2	32.2	3.8	35.0	7.1	79	
Undecided	488	66	7	1	20.4	3.0	19.6	4.3	50	
Unlikely	380	59	6	2	15.9	2.6	16.4	4.5	39	
Extremely unlikely	322	55	5	1	13.5	2.4	14.5	3.8	33	
No answer <sup>b</sup>	195	43	2	1	--	--	--	--	20	
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>153</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>	
<b>Wildlife habitat creation/maintenance</b>										
Extremely likely	663	76	8	2	27.6	3.5	22.6	4.8	68	
Likely	800	83	14	2	33.3	3.9	37.6	7.4	82	
Undecided	439	63	7	1	18.3	2.8	17.6	4.1	45	
Unlikely	263	50	5	1	11.0	2.2	12.2	4.0	27	

	Totals				Percentages				
	Acres	SE <sup>a</sup>	Owners-hips	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owners-hips	SE <sup>a</sup>	n
Extremely unlikely	234	47	4	1	9.8	2.0	10.2	3.2	24
No answer <sup>b</sup>	185	42	2	1	--	--	--	--	19
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>152</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>
<b>Family legacy planning</b>									
Extremely likely	351	57	4	1	14.6	2.5	10.0	3.0	36
Likely	741	80	13	2	30.9	3.7	34.4	7.0	76
Undecided	517	68	8	2	21.5	3.1	20.7	4.8	53
Unlikely	400	61	6	1	16.7	2.7	16.2	4.1	41
Extremely unlikely	390	60	7	2	16.3	2.6	18.6	4.6	40
No answer <sup>b</sup>	185	42	2	1	--	--	--	--	19
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>153</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>
<b>Management plans</b>									
Extremely likely	449	64	5	1	18.6	2.8	13.7	3.5	46
Likely	1004	91	16	3	41.7	4.4	43.2	8.0	103
Undecided	468	65	7	1	19.4	2.9	19.3	4.2	48
Unlikely	195	43	3	1	8.1	1.8	8.0	2.8	20
Extremely unlikely	293	52	6	1	12.1	2.3	15.8	4.2	30
No answer <sup>b</sup>	176	41	2	1	--	--	--	--	18
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>151</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>
<b>Other</b>									
Extremely likely	59	24	1	<1	20.7	15.1	16.3	17.5	6
Likely	10	10	<1	<1	3.4	4.0	0.3	0.4	1
Undecided	49	22	1	1	17.2	13.0	18.7	21.3	5
Unlikely	39	19	1	1	13.8	10.8	16.6	19.7	4
Extremely unlikely	127	35	2	1	44.8	29.8	48.0	50.7	13
No answer <sup>b</sup>	2301	120	35	3	--	--	--	--	236
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>131</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.



**Table 45. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by whether or not they used a professional forester to help carry out tasks during harvests.**

Activity	Totals				Percentages				n	
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>		
	-----		Thousands	-----	-----		Percent	-----		
<b>Timber sale planning</b>										
Yes	1014	91	7	1	47.5	5.3	24.7	4.9	104	
No	839	84	16	2	39.3	4.7	56.1	12.1	86	
Don't know	59	24	1	1	2.7	1.1	3.6	2.3	6	
Not applicable	224	46	4	1	10.5	2.3	15.6	4.9	23	
No answer <sup>b</sup>	380	59	10	2	--	--	--	--	39	
<b>Total<sup>c</sup></b>	<b>2516</b>	<b>147</b>	<b>38</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>258</b>	
<b>Marking trees for sale</b>										
Yes	1131	95	8	1	53.2	5.7	29.2	5.8	116	
No	751	80	15	2	35.3	4.4	53.9	11.8	77	
Don't know	29	17	<1	<1	1.4	0.8	1.5	0.9	3	
Not applicable	215	45	4	1	10.1	2.2	15.5	4.9	22	
No answer <sup>b</sup>	390	60	10	2	--	--	--	--	40	
<b>Total<sup>c</sup></b>	<b>2516</b>	<b>147</b>	<b>38</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>258</b>	
<b>Supervising the logger</b>										
Yes	1053	93	8	1	48.4	5.2	26.2	5.2	108	
No	897	87	17	3	41.3	4.8	58.3	12.0	92	
Don't know	29	17	<1	<1	1.3	0.8	1.2	0.8	3	
Not applicable	195	43	4	1	9.0	2.1	14.2	4.6	20	
No answer <sup>b</sup>	341	56	9	2	--	--	--	--	35	
<b>Total<sup>c</sup></b>	<b>2516</b>	<b>146</b>	<b>38</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>258</b>	

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 46. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by level of interest in participating in landscape-scale planning, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Owners -hips	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Owner- ships	SE <sup>a</sup>	
Level of interest	----	Thousands	---	----	Percent	-----			
Extremely interested	166	40	3	1	6.5	1.6	6.7	2.5	17
Moderately interested	497	67	6	1	19.6	2.8	16.3	3.9	51
Somewhat interested	585	72	7	1	23.1	3.1	18.4	3.8	60
Slightly interested	566	71	11	2	22.3	3.0	28.2	6.0	58
Not at all interested	722	79	12	2	28.5	3.4	30.3	6.3	74
No answer <sup>b</sup>	49	22	<1	<1	--	--	--	--	5
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>152</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 47. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by likelihood of allowing public access to activities if paid or given a property tax reduction, 2011-2014**

Activity	Totals				Percentages				n	
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>		
	-----		Thousands	-----	-----		Percent	-----		
<b>Hiking/skiing</b>										
Extremely likely	741	80	9	2	30.3	3.6	22.7	4.9	76	
Likely	673	77	10	2	27.5	3.4	27.1	5.2	69	
Undecided	302	53	4	1	12.4	2.3	10.8	3.1	31	
Unlikely	234	47	5	2	9.6	2.0	14.0	4.6	24	
Extremely unlikely	497	67	10	2	20.3	2.9	25.4	5.7	51	
No answer <sup>b</sup>	137	36	1	<1	--	--	--	--	14	
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>152</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>	
<b>Hunting</b>										
Extremely likely	556	70	7	2	23.2	3.2	19.7	4.8	57	
Likely	595	73	9	2	24.8	3.3	23.4	4.9	61	
Undecided	302	53	5	1	12.6	2.3	12.2	3.7	31	
Unlikely	312	54	5	2	13.0	2.4	14.5	4.2	32	
Extremely unlikely	634	75	11	2	26.4	3.4	30.2	6.4	65	
No answer <sup>b</sup>	185	42	2	1	--	--	--	--	19	
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>153</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>	
<b>Trapping</b>										
Extremely likely	380	59	4	1	16.7	2.8	9.8	2.9	39	
Likely	380	59	6	1	16.7	2.8	16.1	4.3	39	
Undecided	224	46	4	1	9.8	2.1	10.4	3.7	23	
Unlikely	478	66	9	2	20.9	3.1	25.0	6.0	49	
Extremely unlikely	819	84	14	2	35.9	4.2	38.7	7.3	84	
No answer <sup>b</sup>	302	53	4	1	--	--	--	--	31	
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>152</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>	
<b>Snowmobiling</b>										
Extremely likely	400	61	5	1	16.7	2.7	12.9	3.8	41	
Likely	468	65	5	1	19.6	2.9	14.6	3.5	48	
Undecided	234	47	3	1	9.8	2.0	9.0	2.9	24	
Unlikely	400	61	9	2	16.7	2.7	23.1	5.6	41	
Extremely unlikely	887	86	15	2	37.1	4.1	40.3	7.5	91	
No answer <sup>b</sup>	195	43	2	1	--	--	--	--	20	
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>152</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>	
<b>ATVs</b>										
Extremely likely	224	46	3	1	9.8	2.1	8.2	3.3	23	

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
Likely	293	52	4	1	12.8	2.4	11.7	3.3	30
Undecided	176	41	3	1	7.7	1.8	7.3	2.5	18
Unlikely	439	63	8	2	19.1	3.0	20.7	5.2	45
Extremely unlikely	1160	96	19	3	50.6	5.1	52.2	9.0	119
No answer <sup>b</sup>	293	52	3	1	--	--	--	--	30
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>150</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>
<b>Mountain biking</b>									
Extremely likely	419	62	5	1	17.7	2.8	14.8	4.1	43
Likely	400	61	5	1	16.9	2.7	14.7	3.8	41
Undecided	380	59	6	1	16.0	2.6	15.5	4.1	39
Unlikely	410	61	7	2	17.3	2.8	18.1	4.7	42
Extremely unlikely	761	81	14	2	32.1	3.8	36.9	7.3	78
No answer <sup>b</sup>	215	45	3	1	--	--	--	--	22
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>153</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>
<b>Other</b>									
Extremely likely	20	14	<1	<1	8.3	8.5	3.1	3.5	2
Likely	29	17	1	1	12.5	11.7	11.6	13.7	3
Undecided	29	17	1	1	12.5	11.7	11.9	14.5	3
Unlikely	49	22	1	1	20.8	17.9	25.3	25.7	5
Extremely unlikely	107	32	3	1	45.8	36.3	48.1	47.5	11
No answer <sup>b</sup>	2350	120	34	3	--	--	--	--	241
<b>Total<sup>c</sup></b>	<b>2584</b>	<b>129</b>	<b>40</b>	<b>4</b>	<b>100.0</b>	<b>--</b>	<b>100.0</b>	<b>--</b>	<b>265</b>

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 48. Estimated area and number of family forest land\* ownerships with 10+ acres in Vermont by familiarity with woodland owner groups, 2011-2014**

Familiarity	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Extremely familiar	263	50	2	<1	10.3	2.0	4.0	1.2	27
Moderately familiar	293	52	2	1	11.4	2.1	5.6	1.4	30
Somewhat familiar	351	57	4	1	13.7	2.3	10.4	3.1	36
Slightly familiar	429	63	6	1	16.7	2.6	14.2	3.5	44
Not at all familiar	1229	98	26	3	47.9	4.5	65.8	10.0	126
No answer <sup>b</sup>	20	14	<1	<1	--	--	--	--	2
<b>Total<sup>c</sup></b>	2584	149	40	4	100.0	--	100.0	--	265

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 49. Estimated area and number of family forest landownerships with 10+ acres in Vermont by level of interest in joining a woodland owner group, 2011-2014**

	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
<b>Likelihood of joining</b>	-----		<i>Thousands</i>	-----	-----		<i>Percent</i>	-----	
Extremely likely	273	51	2	1	11.0	2.1	6.1	2.0	28
Likely	332	55	4	1	13.4	2.3	10.2	3.0	34
Undecided	1121	95	19	3	45.3	4.5	49.2	8.2	115
Unlikely	371	58	7	2	15.0	2.5	18.6	4.8	38
Extremely unlikely	380	59	6	2	15.4	2.5	15.9	4.3	39
Not applicable <sup>b</sup>	78	27	1	1	--	--	--	--	8
No answer <sup>b</sup>	29	17	<1	<1	--	--	--	--	3
<b>Total<sup>c</sup></b>	2584	150	40	4	100.0	--	100.0	--	265

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Excluded from percentages.

<sup>c</sup> Totals may differ across tables and sub-tables. See footnote under table 2 for an explanation.

Note: Data may not add to totals due to rounding.

**Table 50. Estimated area and number of family forest landownerships with 10+ acres in Vermont by ownerships' concerns related to all forested land in Vermont - public and private - 2011-2014. Numbers include ownerships that rated an issue as very important or important on a five-point scale.**

Concern <sup>b</sup>	Totals				Percentages				n
	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	Acres	SE <sup>a</sup>	Ownerships	SE <sup>a</sup>	
	-----		Thousands	-----	-----		Percent	-----	
Parcellation	1580	108	24	3	63.5	5.4	62.1	9.2	162
Impact of invasive plants	1453	105	21	3	58.0	5.1	53.3	8.3	149
Impact of insects and diseases	1599	108	23	3	64.6	5.5	60.1	9.1	164
Too much government regulation of timber harvesting	1014	91	13	2	40.8	4.2	34.4	6.3	104
Too little government regulation of timber harvesting	439	63	9	2	17.9	2.7	22.2	5.2	45
Too much timber cutting occurring in Vermont	371	58	7	2	15.1	2.5	17.0	4.4	38
Too little timber cutting occurring in Vermont	322	55	4	1	13.2	2.3	9.7	2.7	33
Health of the woodlands	1824	113	24	2	72.5	5.7	61.3	8.6	187
Too much posted land (i.e. no hunting)	566	71	10	2	23.3	3.2	26.0	5.7	58
Strength of support for the Use Value Appraisal Program	1580	108	16	2	64.0	5.5	43.1	6.5	162
Too much deer/moose browsing	361	58	4	1	14.7	2.5	11.8	3.6	37
No answer <sup>c</sup>	224	46	3	1	--	--	--	--	23

\*See the footnote under table 1 for an explanation of the terms forest land.

<sup>a</sup> SE = standard error

<sup>b</sup> Categories are not mutually exclusive.

<sup>c</sup> Excluded from percentages.

## **Appendix 1**

### **Sampling**

This section discusses the sampling associated with 2014 VWOS implemented between May and August, 2014. Responses from landowners participating in the NWOS between 2011 and 2013 are included in the Results section of this report for questions which were asked in both surveys, or in the case of demographics, just in the base NWOS. The basic sampling methodology for the national survey is analogous to what is reported here, however the sampling intensity differs substantially. For detailed information on the sampling procedures of the base NWOS, please refer to Butler et al. (2014).

### **Sample Size**

As arranged in the agreement between the Vermont Department of Forests Parks and Recreation and the Family Forest Research Center, the target sample size for this study was 500 family forest ownerships. Due to particulars of the sampling design it was necessary to create a significantly higher number of points across the landscape as we knew many would fall on non-forestland or publically-owned land, while others would fall on land for which adequate ownership information would be unavailable. In the end, we were left with a list of approximately 700 ownerships, which we invited to take part in the survey (Table 2).

### **Sampling Design**

The ability to extrapolate the results of a survey of a subset of a population to the whole population requires the use of a probability-based sampling design. The sampling design used for the VWOS was patterned after the NWOS, which is built upon the sampling framework used for the plot-based FIA



forest resource monitoring (Bechtold and Patterson 2005, Dickinson and Butler 2013). The forest resource sampling procedure involves a complex, hexagonally tessellated, random sample of points and plots. For the Vermont survey a grid was created with hexagons of 2,378 ac in area, giving a spatial sampling intensity of roughly 1 point per 2,400 ac. Rather than taking as primary sampling units the hexagon centers as in a purely systematic design, sample points are randomly offset to “satellite locations” within each hexagon. The random offset is accomplished with random selection of azimuth and distance from the hexagon center, with probability inversely proportional to distance from center. Thus, these points are generally close to the hexagon centers.

#### **Sampling Frame**

Using the sample points generated from the approach outlined above, points which intersected state or federal land in the geospatial Protected Areas Database coverage were dropped, and the remaining points were then compared against aerial photography to determine land use at each sample point (Conservation Biology Institute, 2012). If it was deemed to be forested, i.e., “Land at least 120 feet wide and 1 acre in size with at least 10 percent cover (or equivalent stocking) by live trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated” (Smith et al. 2009, p. 142) or as further defined in the FIA field manual (USDA-FS 2010), the ownership was then determined from property tax records. The Family Forest Research Center staff performed an initial search for ownership information using spatial data obtained from the Vermont Center for Geographic Information and Vermont Agency of Natural Resources. When available digital source data had been exhausted, VT Forests and Parks took over the task of collecting ownership and contact information for forested plots not otherwise found. This entailed calling and visiting town offices across

the state. The ownerships that were determined to be private ownerships, as defined in the FIA field manual (USDA-FS 2010), were then contacted and invited to participate in the VWOS. Ownerships were asked to respond for all of the forest land they own within the state.

### **Data Collection**

The implementation of the self-administered, mail-back questionnaire was based on the Tailored Design Method developed by Dillman et al. (2014). Each forest-land ownership contacted by the VWOS received up to four mailings. All mailings were from, and returned to, the Vermont Department of Forests and Parks. First, a pre-notice postcard was sent alerting the potential respondents that a questionnaire would be arriving soon. The pre-notice briefly described the survey—why it is important, why their help is needed, and what they may gain from participating. Three to five business days later, forest-land ownerships then received a questionnaire with a cover letter that described, in greater detail, the purpose and importance of the survey and a pre-paid business reply return envelope. Seven to ten business days after the questionnaire was sent, a reminder/thank you postcard was mailed to thank those who responded and to encourage nonrespondents to respond. Finally, 12-15 days after the reminder/thank you postcard was mailed, a second questionnaire and cover letter with a pre-paid business reply envelope were sent to forest-land ownerships that had not responded. All mail was sent first-class via the U.S. Postal Service.

Responses to the mailings were monitored as they were returned. Tracking numbers displayed on the back of the questionnaires were used to track who responded and help ensure they were not contacted again. Approximately 7% of correspondences were returned by the Post Office and marked as undeliverable. This may have been due to an incomplete address, someone having moved, or a person

being deceased. Incomplete addresses were corrected where possible and, where available, new addresses were obtained and materials were mailed again. In the case of deceased owners, if mailing information was available for the new ownership, they were contacted; otherwise the correspondence was recorded as undeliverable. If a respondent did not own forest land, they were asked to indicate so on the questionnaire and return it and their records were duly updated. Overall response rate was 53% (Table 2).

The mail questionnaire was designed using special software (TeleForm by Verity Inc. 2010) to allow electronic data capture to increase data quality and data entry efficiency. Returned paper questionnaires (most of the responses) were scanned, and the software used optical character recognition (OCR) and optical mark recognition (OMR) technology to capture the data. The software was configured to flag all data entries that were indecipherable or indeterminate. A member of the research staff reviewed all entries to verify the data. The verified data were then exported to a comma delimited file.

### **Data Processing**

Once the data were electronically captured, a series of steps were performed to drop blank and other erroneous records, generate new variables, recode skipped questions and item-responses, validate text entries, run logic checks, and validate the entries (i.e., range check). For full details on data processing, see Butler et al. (2015).

## **Estimation**

Estimation procedures were then used to scale up the raw data to population-level estimates, both in terms of acres owned and number of ownerships. For more details on the estimation procedure, see Butler et al. (2015) and Dickinson and Butler (2013).