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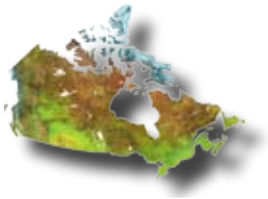

Public Views on Forest Management in New Brunswick: Report from a Provincial Survey

S. Nadeau, T.M. Beckley,
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Information Report M-X-222E

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by

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ABSTRACT

Forests are an important feature of New Brunswick's landscape and the backbone of a key sector of the province's economy. In recent years, a wide range of views have been expressed about the management of these forests, especially those on Crown lands. However, the voices that are most often heard are those of key stakeholder groups, and it is difficult to tell the degree to which they reflect the views of the general public. Seeking a clearer understanding of how New Brunswickers use and value forests, what they think about forest management and policy, and how they wish to be involved in the future, New Brunswick's Department of Natural Resources sponsored a survey of the general population of the province. Stratified random sampling was employed to ensure that respondents from four targeted geographic groups were equally represented. These groups are: major urban areas, and areas with low, moderate, and high economic forest dependency. More than 1500 New Brunswickers participated in a mail survey during the winter of 2007.

This report presents the first analysis of the survey results and serves two important functions. First, it partially fulfils the government's commitment to give the public more opportunity to express its views regarding forest management and policy in New Brunswick. Second, it provides policy makers and forest managers with a reliable snapshot of New Brunswickers' forest values in 2007. We hope this information will be useful in charting a way forward for how we manage and benefit from the province's Crown forests.

RÉSUMÉ

Les forêts sont un élément marquant du paysage néo-brunswickois ainsi qu'un pivot de l'économie provinciale. Au cours des dernières années, une large gamme d'opinions ont été articulées à propos de la gestion des ces forêts, et particulièrement pour les forêts des terres de la Couronne. Cependant, la plupart des voix entendues à ce sujet sont celles d'intervenants ayant des intérêts particuliers envers la forêt et il est difficile de dire à quel point leurs opinions reflètent celle du public en général. Ainsi le Ministère des Ressources naturelles du Nouveau-Brunswick a décidé de parrainer un sondage de la population provinciale afin de tracer un portrait plus précis des valeurs que les néo-brunswickois associent à la forêt, de leur utilisation de la forêt, de ce qu'ils pensent de la gestion et de la politique forestière, ainsi que du rôle qu'ils souhaitent avoir dans le futur. La sélection des participants à cette enquête repose sur un échantillonnage aléatoire stratifié assurant une égale représentation des quatre groupes cibles soit : les grands centres urbains, et les milieux ayant soit une faible, modérée ou forte dépendance économique envers la forêt. Plus de 1500 Néo-Brunswickois ont participé à cette enquête postale au cours de l'hiver 2007.

Ce rapport présente la première analyse des résultats de l'enquête et remplit deux importantes fonctions. Premièrement, il est un pas de plus dans la réalisation d'un engagement du gouvernement d'accroître les d'occasions pour le public d'exprimer ses opinions sur la gestion et la politique forestière au Nouveau-Brunswick. Deuxièmement, il fournit aux gestionnaires forestiers un aperçu fiable des attitudes et des préférences du grand public, et des valeurs qu'il attribue aux forêts en 2007. Nous espérons que cette information sera utile afin de tracer la voie à suivre en matière de gestion et d'utilisation des forêts publiques de la province.

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1 EXECUTIVE SUMMARY

Forests are an important feature of New Brunswick's landscape and the backbone of a key sector in the province's economy. As both public expectations from forests and the economic situation of forest industries evolve, debates about forest policy and management are inevitable. We consider the presence of debate to be a positive indicator that citizens and stakeholders wish to engage with policy makers to shape the future of management strategies for New Brunswick's Crown forest land. The participation of New Brunswickers in the hearings organized by the Select Committee on Wood Supply is evidence that a broad cross-section of citizens were willing to take the time to make their views and concerns about forest management known. Through the process of the public hearings, the Select Committee's report, and the government's response, there appears to be a consensus that the public wants an active voice in resource management issues and that, in the recent past, the "supply" of opportunities to participate in resource management issues has not met the demand for such opportunities. This report is one part of the commitment by the New Brunswick Department of Natural Resources (NBDNR) to follow up on the recommendations made by the Select Committee to develop a public participation strategy for the forest management planning period of 2012–2017.

Although the public hearings were considered to be quite successful in eliciting the views and values of many New Brunswickers on matters related to forests, participants sampled in that exercise were self-selected rather than random, so it is difficult to tell the degree to which the representation of views expressed in the hearings reflect the views of the general public. In order to get a more precise understanding of how New Brunswickers use and value forests, what they think about forest management and policy, and how they wish to be involved in the future, NBDNR sponsored a survey of the general population of the province. Stratified random sampling was employed to ensure that respondents from four targeted, geographic groups were equally represented. These groups are major urban areas, and areas with low, moderate, and high economic forest dependency. In the winter of 2007, more than 1500 New Brunswickers participated in a mail survey. This report presents the first analysis of the survey results.

Forest Values

Forest values give us a broad understanding of the aspects that New Brunswickers value most highly. Throughout the survey, environmental values routinely received the strongest support from respondents from all areas of the province. To a lesser degree, respondents across the province also supported economic and utilitarian values. These results suggest that New Brunswick residents expect that forest management in the province will give serious consideration to environmental values, but also maintain the use and harvesting of forest resources.

Forest Use

New Brunswick residents are strongly connected to the forest. An overwhelming majority (94%) of New Brunswick residents visit forests during the year. Over half the respondents spend time on a woodlot that they or their family own, or at a camp or cottage. Over 95% of respondents participate in forest-related activities such as hiking, bird watching, and four-wheeling, and nearly all respondents use non-timber forest products, such as fiddleheads and maple products.

Views on Forest Policy

Participants were asked to rate the importance of management goals that were taken from the NBDNR Vision Document for Crown Land Management (NBDNR 2005). Management goals related to environmental concerns (water quality, wildlife habitat, forest protection and biodiversity) were rated as very important by at least 70% of the respondents. The goal of ensuring that wood supply for the forest industry remains at current levels was the only goal that did not secure a score of "very important" from at least half the respondents. This goal was rated as important by 78% of respondents, but it received the lowest score among the total set of Vision Document goals listed in the survey. Overall, the Vision Document appears to be an accurate reflection of the goals that society would like to see as guidelines for forest management; although one-third of respondents still felt that goals were missing from this forest policy.

Views on Forest Management

Although respondents were fairly supportive of goals set for forest management of Crown land, they expressed more critical opinions on how these goals are translated at the "ground level." Respondents expressed a low level of satisfaction regarding forest management on Crown land and industrial freehold. Several indicators show that respondents do not have a positive view of forest-harvesting operations. Respondents were concerned about the environmental impacts of these

operations, and felt a need for increased control over timber harvesting and road density. With respect to NBDNR's efforts regarding the protection of biodiversity, management of deer habitat, support for management on woodlots, and promotion of economic development through the forest industry, participants were clustered toward the middle, with similar proportions expressing satisfaction and dissatisfaction. The lowest level of satisfaction and highest level of dissatisfaction with NBDNR's management effort were related to the degree to which they involve the public in resource management issues.

Views on Public Involvement

Throughout the survey, respondents expressed a desire for greater inclusion in forest policy and management. Over one-third of participants felt that the appropriate role for the public is to act as full and equal partners with the resource professionals. A smaller but substantial number prefered a more limited role for the public, one where the public should be allowed to review and comment on what the resource professionals present as the best way to manage the forest.

When asked to express their preference for a variety of tools or practices to involve the public in forest policy or management, participants expressed a lower preference for the tools that have been most commonly used for forest management plan reviews (stakeholder advisory committees) and in recent forest policy debates (presentations at public meetings). Most respondents preferred tools that they believed would be meaningful, but that require much less in terms of time, nerve, or expertise.

Regarding the willingness of respondents to engage in forest management and policy discussions, fewer than one-quarter of respondents were unwilling to provide any input at all, and over half were willing to participate once or twice a year. We must keep in mind, however, that many people refused to take part in this study, so it is likely that the proportion of New Brunswickers who do not want to be publicly involved is higher.

The high interest expressed for a public role in forest policy and management, but low willingness to commit substantial time to this endeavor, suggests a different suite of public involvement tools should be used than those that have traditionally been employed.

The survey also explored the idea that groups and organizations might be used to bring various points of view into discussions around forest issues, and this seems to appeal to respondents. The provincial departments (NBDNR and Environment) and organizations with environmental mandates were the most popular choices to represent the views of respondents on forest policy and management. The forest industry and other traditional stakeholders, such as recreation groups, were far less popular. Similarly, respondents were willing to see a greater diversity of stakeholders have responsibility in managing Crown lands. In the event that the government considers new approaches to managing Crown land, environmental organizations, local communities, and woodlot owners were the preferred choices of respondents for having a direct role in Crown land management. There were some significant differences between urban residents and residents from forest-dependent areas in their order of preferences for these three organizations. However, the desire for change is not an urban-centered minority view, but one that is shared by urban and forest-dependent areas in the province.

Participants' Familiarity with Forest Management and Forest Policy

Despite expressing a strong connection to New Brunswick's forests through the activities they engage in, respondents demonstrated a low level of formal knowledge regarding forest management and policy. The survey results show a fairly poor understanding of facts about forestry, as well as a low level of familiarity with specific forest policy initiatives. This poses a challenge for policy makers in relation to increasing the role of a public that lacks information about the issues at stake. The results show that we cannot assume that people already have shared understandings or assumptions about forests themselves or the values that determine what individuals view as "good" or "bad" management or policy.

This report serves two important functions. First, it is partial fulfilment of the government's commitment to give the public more opportunity to express its views regarding forest management and policy in New Brunswick. Second, it provides resource managers with high quality information on the general public's attitudes, preferences, and forest values in 2007. Policy makers and professional resource managers in the government are tasked with using the best available information to make decisions about acceptable practices, desired uses, and resource allocations to meet social, economic, and ecological objectives. The Task Force will supply detailed, high quality information about possible future forest conditions attainable through a range of treatments and activities. These survey results give policy makers and forest managers a reliable snapshot of New Brunswickers' forest values in 2007, and we hope this information is useful in charting a way forward for how we manage and benefit from the province's Crown forests.

2 INTRODUCTION

In September 2004, the bi-partisan Legislative Select Committee on Wood Supply recommended that the Department of Natural Resources of New Brunswick (NBDNR) develop a public participation strategy. These recommendations, and the recognition of the importance of public views concerning the management of forests on Crown lands, followed a particularly high level of public interest in hearings organized by the Select Committee. Over 450 communications were received from industry and environmental special interest groups, community leaders, and scores of ordinary citizens. Many observers were impressed by the numbers of New Brunswickers that felt strongly enough about the importance of forests in the province that they took the time to make their views and concerns known.

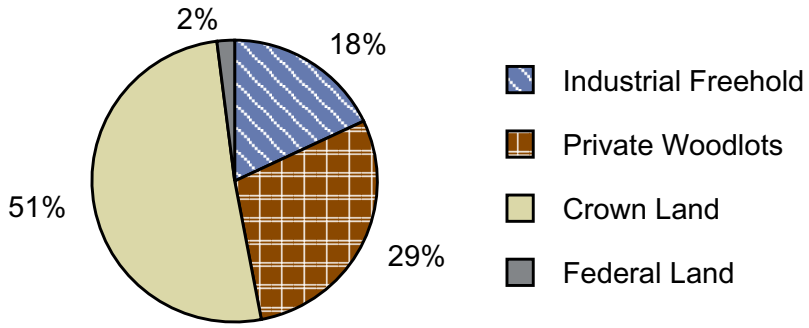
Although the public hearings were considered to be quite successful in eliciting the views and values of many New Brunswickers on matters related to forests, sampled participants in that exercise were self-selected rather than random, so it is difficult to tell to what degree the views expressed in the hearings reflect the views of the general citizenry. This report provides a broader examination of public interest in forest management. Data were obtained from a random survey of the general population. More than 1500 New Brunswickers (62% of those asked) responded to questions about how they use and value forests, what they think about forest management and policy, and how they wish to be involved in the future.

The broad spectrum of public values for forests, and the continual addition of new concerns, interests, uses, and values, pose serious challenges to policy makers and forest managers who are mandated to take account of public concerns in forest management decisions. This challenge is accentuated by the fact that public values regarding forests and their management are not well documented or well understood.

In 2005, the government of New Brunswick made a commitment to follow up on the Select Committee's recommendations. It established a task force, lead by Dr. Thom Erdle, to develop a broad set of realistic forest management alternatives for Crown land (NBDNR 2007). It also undertook to develop a public participation process for the 2012–2017 planning period (NBDNR 2005). A new political party formed the provincial government in 2006, and affirmed previous commitments to improve public engagement on forestry issues. Developing such a process is a complex task because effective public participation requires a broad range of activities to attain the perspectives of different groups. The tools used for public involvement must seek citizens' views on forest management practices, NBDNR objectives for Crown Lands, and specific guidelines and regulations. As public values change and evolve over time, public involvement should not be limited to only a single tool, nor should it be a one-time event. Rather, multiple tools should be used on a regular, periodic basis, in order to capture current values, and so that forest management and policy may evolve in step with the public's wishes (Beckley et al. 2006). In order to better understand New Brunswickers' views on forest values, NBDNR decided to undertake a public survey, one such tool for assessing public values for forests.

Key facts about New Brunswick's forests

- Forests cover 85% of New Brunswick, or an area of 6.1 million hectares. Forest ownership is divided between government and private interests (Martin 2003).



- Forest industry provided 17 700 direct jobs in 2005 (Atlantic Provinces Economic Council 2007), supporting approximately 13 000 in indirect employment (New Brunswick Forest Products Association 2007).

The survey was developed collaboratively by researchers from the Canadian Forest Service, the Université de Moncton, and the University of New Brunswick, and NBDNR staff. One of the first decisions made by the group was to design a sampling frame to ensure that the study reached people from areas of the province with different levels of economic forest dependency. The following map (Fig. 1) was created to show the geographical distribution of the four areas resulting from the sampling process, which is described in detail in Appendix 1.

The organization of this report does not follow the traditional way of displaying information, as we chose to begin with the most significant results and findings of the survey. Thus, in the following sections, readers will find out about forest values held by respondents, how respondents use the forests, and their views on forest policy, forest management, and public involvement, as well as their familiarity with forest management and policy. The Results section ends with a demographic profile of the respondents. The Results section is followed by the conclusions we drew from this first analysis. Details on the implementation of the survey, and the method of analysis, as well as extensive tables on findings for each of the survey's questions follow in Appendices 1 and 2. Our goal with this structure was to put the survey's results at the forefront of the report, without omitting the detailed information about the study and its results.

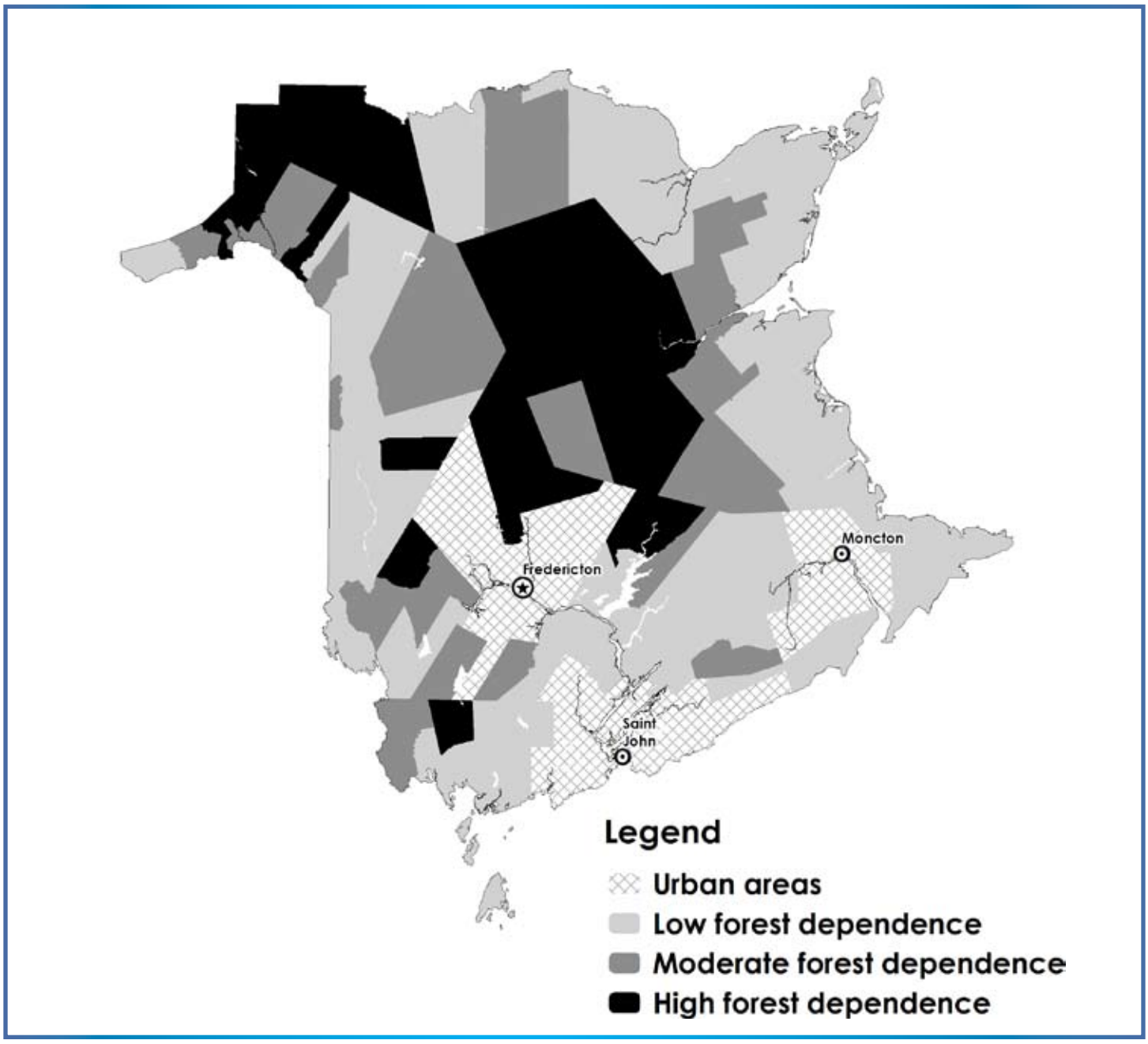


Figure 1. Areas from which survey participants were selected.

3 RESULTS

3.1 Forest values

In recent years, there has been increasing evidence that the values people associate with forests are shifting from a strong focus on the tangible (i.e., economic and utilitarian), to a combination of tangible and intangible (i.e., spiritual and aesthetic; McFarlane et al. 2003). In the survey, two questions were used to assess the values that New Brunswickers associate with forests. The first question asked respondents to rank five forest values (economic, recreation, environmental protection, species variety, and non-timber products).

3.1.1 New Brunswickers' priorities regarding forest values

The protection of water, air, and soil was overwhelmingly ranked as the most important forest value (Table 1). About 45% of respondents ranked it first. "For a place for a variety of animal and plant life" was overwhelmingly ranked as the second most important by 38%. Examining the mean ranking scores, the environmental aspects remain the two most important values. Clearly, New Brunswickers ranked environmental goods and services from the forest higher than other forest values.

Economic wealth and jobs were ranked third (M = 3.10). Recreation and non-timber products, such as meat, firewood, and berries, are ranked considerably lower than the environment and economic wealth, with mean rankings of fourth and fifth, respectively.

There were few differences among the residence categories (Table A2-1). Urban and low forest-dependent community residents ranked economic aspects lower than the moderate and high dependency groups. More of the urban group ranked protection of water, air, and soil first than the other groups. The low forest-dependent group ranked non-timber products as less important than urban and highly forest-dependent residents.

Concern for economic wealth and jobs increases relatively from urban respondents to respondents from highly forest-dependent communities. Only 13% of urban respondents ranked this item first, compared with 19%, 24%, and 31% of respondents from low, moderately, and highly forest-dependent communities, respectively.

About 18% of respondents gave equivalent ranking to several items. In most cases, it appears that they had difficulty placing one value above another, and considered some values to be of equal importance. We examined these respondents' rankings separately. Respondents from the moderately and highly dependent communities had more difficulty ranking these items, suggesting these groups might have more difficulty with trade-offs. In particular, people had difficulty choosing among the top ranked items. They would sometimes give more than one item a score of 1 or 2. There were fewer tied rankings for the 4th and 5th ranks. Despite the difficulty some respondents had in following the specified instructions, the overall trend among this 18% of respondents was similar, with environmental values ranked as more important than economic, whereas recreation and non-timber values received the lowest rankings.

Table 1. Ranks for specific values for New Brunswick's forests

	Percentage of respondents					Mean rank
	1st	2nd	3rd	4th	5th	
As a place for protection of water, air, and soil*[1]	44.5	18.0	11.0	6.3	2.3	1.83
As a place for a variety of animal and plant life*	12.4	38.3	18.0	11.0	2.5	2.43
As a source of economic wealth and jobs*	17.6	12.3	17.2	13.6	21.4	3.10
As a place for recreation and relaxation*	4.6	6.5	20.1	26.9	23.9	3.72
As a source of meat, firewood, berries, and other non-timber products*	3.0	7.0	15.8	24.3	32.1	3.91

[1] In the result section "*"' indicates results where a statistically significant difference was found between responses provided by respondents from the four areas that we compared (urban areas, low, moderate and high forest-dependent areas). More details on these differences are provided in the tables of Appendix 2.

3.1.2 Assessment of forest values

In addition to having New Brunswickers rank the key forest values described above, we assessed their forest value orientation using a forest values scale that has been used extensively in other North American jurisdictions. Forest value orientation reflects an individual's general beliefs about forests. Value orientations can help identify acceptable forest management policies and practices (Steel et al. 1994, McFarlane and Boxall 2000, McFarlane 2005). They have been used to categorize stakeholders sharing common value orientations (McFarlane and Boxall 1999, 2000). By understanding forest value orientations, managers can predict how the public might perceive changes in forest management policies and practices, and which groups might be affected by such changes. Forest value orientations have been represented by a dichotomy of biocentric and anthropocentric orientations. Biocentric values recognize that forests have a right to exist for their own sake regardless of their usefulness to humans (inherent worth), forests are valued for future generations and have value even if they are not used (existence values), and forests are recognized as having spiritual value by having sacred properties and rejuvenating the human spirit. Anthropocentric values emphasize the human benefits of forest whereby the products and services that forests provide to humans are considered the primary value. Typically, individuals exhibit a mix of biocentric and anthropocentric value orientations (Steel et al. 1994, McFarlane and Boxall 2000).

Among our respondents, there was strong agreement on statements related to the spiritual value and existence value of forests (Table 2). Results were more mixed for statements on the inherent or intrinsic worth of forests. Nearly three quarters of the sample agreed that other species have the right to exist, but less than one quarter agreed that forests should be left to succumb to nature without human intervention.

Table 2. Expression of existence, inherent worth, and spiritual values of the forest

Values	Agree (%)	Neither agree nor disagree (%)	Disagree (%)
Existence Values			
It is important to maintain forests for future generations	99.1	0.5	0.7
Whether or not I get to visit the forest as much as I like, it is important for me to know that forests exist in my province	97.8	0.9	0.7
Inherent Worth			
Forests should have the right to exist for their own sake and uses, regardless of human concerns*	72.5	12.2	13.9
Urban areas	74.2	12.9	11.6
Low forest dependence	72.3	11.7	15.3
Moderate forest dependence	72.7	9.8	14.4
High forest dependence	63.9	13.9	19.5
Forests should be left to grow, develop, and succumb to natural forces without being managed by humans	21.6	21.2	55.3
Spiritual Values			
Humans should have more respect and admiration for the forests	95.7	3.5	0.4
Forests let us feel close to nature	95.5	3.5	0.4
Forests give us a sense of peace and well-being	94.4	4	0.7
Forest rejuvenate the human spirit	82.0	14.7	1.6
If forests are not threatened by human actions, we should use them to add to the quality of human life	76.2	13.3	6.9
Wildlife, plants, and humans should have equal rights to live and develop	74.7	13.6	10.0
Forest are sacred places	55.1	25.8	15.7

Table 3. Expression of utilitarian and economic values of the forest

Item	Agree (%)	Neither agree nor disagree (%)	Disagree (%)
Utilitarian / Economic			
Forests can be improved through management by humans*	80.6	12.9	4.9
Urban areas	76.9	14.7	6.5
Low forest dependence	82.9	11.7	4.1
Moderate forest dependence	84.9	11.3	1.6
High forest dependence	84.3	10.2	4.6
Forests should be managed to meet as many human needs as possible*	67.4	11.0	20.4
Urban areas	64.3	10.4	24.5
Low forest dependence	68.3	12.4	18.1
Moderate forest dependence	72	10.6	15.9
High forest dependence	76.2	8.3	14.6
The primary function of forests should be for products and services that are useful to humans*	24.6	18.8	54.8
Urban areas	20.2	17.5	60.6
Low forest dependence	26	20.1	52.3
Moderate forest dependence	32.8	20.1	44.7
High forest dependence	33	18.3	46.8
Forests should exist mainly to serve human needs*	19.1	16.4	63.5
Urban areas	13.1	15.4	70.3
Low forest dependence	24.2	16.8	58.4
Moderate forest dependence	23.3	18.8	55.6
High forest dependence	22.2	17.6	59.3
Forests that are not used for the benefit of humans are a waste of our natural resources*	13.8	10.7	73.8
Urban areas	10.7	9.9	77.4
Low forest dependence	15.5	10.8	72.5
Moderate forest dependence	15.7	11.9	68.7
High forest dependence	19.5	13.0	66.6

Respondents disagreed with three of the five statements related to utilitarian values (Table 3). Although nearly two-thirds disagreed that forest should be used mainly for human needs and to supply products and services, two thirds agreed that forests should be managed, 80% agreed that forests can be improved by management, and that if forests are not threatened, we should use them to add to the quality of life. These results suggest that respondents have a strong biocentric orientation toward forests, but also feel that management can add value to forests. They do not agree with a completely ”hands-off” approach whereby forests are simply left to natural forces.

Although all groups either agreed or disagreed with the statements, the urban group had higher scores (less agreement) on most of the statements related to utilitarian values. For example, the urban group showed stronger disagreement that forests should exist to serve human needs, that the primary function of forests should be for products and services, and that forests should be managed to meet as many human needs as possible.

3.2 Use of the forest

The public’s perspectives on forests and forest management are sometimes discounted by experts who feel the public does not have much knowledge of, or experience in, forests. The survey asked questions about both experience in, and knowledge of, forests and forest dynamics. Four questions were used to find out about participants’ uses of the forest. We were interested in finding out about the types of forest that participants visit, the activities people engage in when visiting forests, and finally, the types of forest products they use.

3.2.1 Types of forest visited

Most participants (94%) visit a forest some time in the course of a typical year. Provincial parks and protected areas are the types of forests that are visited by the largest number of participants (61%), closely followed by private woodlots (59%) (Fig. 2). The types of forests used by respondents differ significantly among the range of resident categories in our sample (Table A2.2-1). Urban participants are more likely to visit provincial parks and protected areas, followed by forests that are within city limits, national parks, and private woodlots. Respondents from areas with low, moderate, or high forest dependency are most likely to visit private woodlots, followed by provincial parks and protected areas, other Crown lands, and land owned by forest companies.

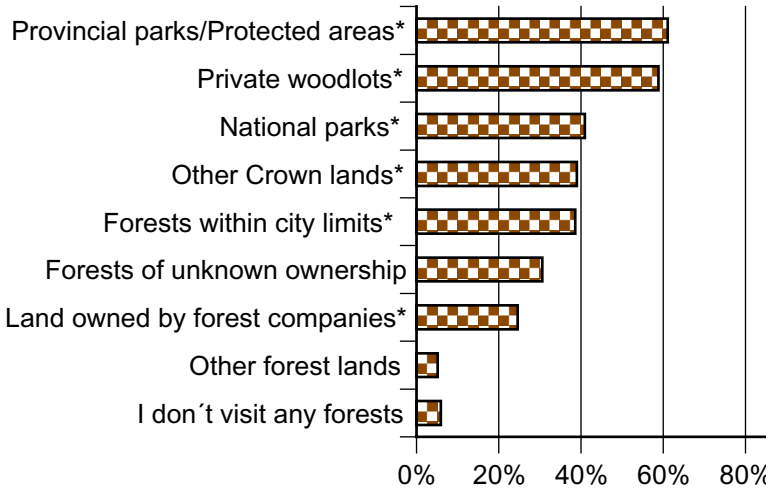


Figure 2. Types of forests visited by respondents in a typical year.

A majority of participants (53%) spend time in a woodlot owned by their family or themselves (Fig. 3). Participants from urban areas are less likely than others to access a family woodlot, but the numbers who do are still relatively high (43%), whereas respondents from other low forest-dependent areas are more likely to have access to a family woodlot (65%) (Table A2.2-2). What is clear is that most New Brunswickers do have direct experience with forests in the province, and many report visiting several different forest types.

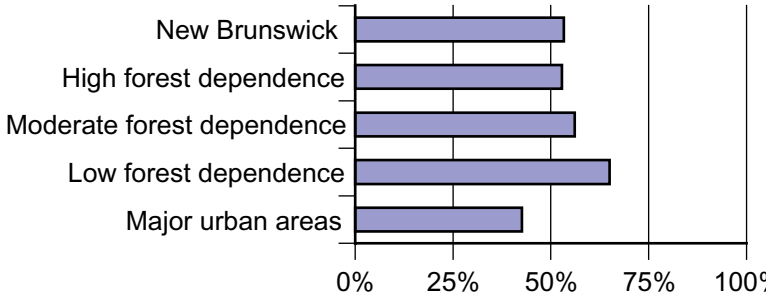


Figure 3. Respondents who spend time on a family woodlot.

3.2.2 Activities practised in the forests

We also asked about activities that people engage in when visiting forests. Taking a walk or hike was the most popular response, with 78% reporting that they do so in the course of a normal year (Fig. 4). A majority (55%) also visit a camp or cottage. Participants who live outside major urban centers are more likely to engage in a range of activities, such as fishing, canoeing/kayaking/boating, hunting, or ones that rely on motorized vehicles (Table A2.2-3). Only 5% of participants stated that they do not participate in any of these activities.

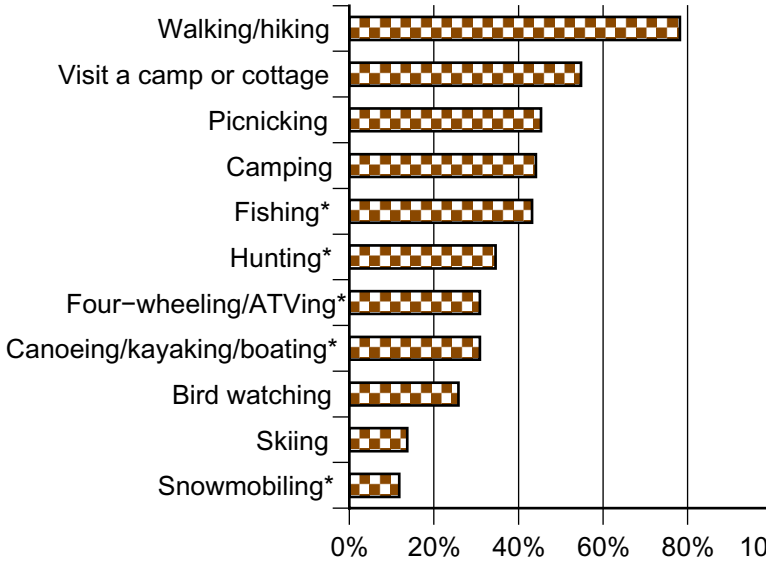


Figure 4. Activities done in New Brunswick's forests in a typical year..

3.2.3 Use of forest products

We asked respondents what sorts of products they used from the forest (Fig. 5). Only about 2% of respondents indicated that they do not use any of the products we listed, indicating that forests provide non-timber products to almost all New Brunswickers. Food products such as mushrooms, berries, and fiddleheads are the forest products used by the largest number of participants (77%) over the course of a normal year. A majority of respondents also use maple products (63%), firewood (59%), fish (59%), and Christmas trees or fir tips (54%). Twice as many respondents who reside outside urban areas use small game, big game, firewood, saw logs, and wood products (TableA2.2-4).

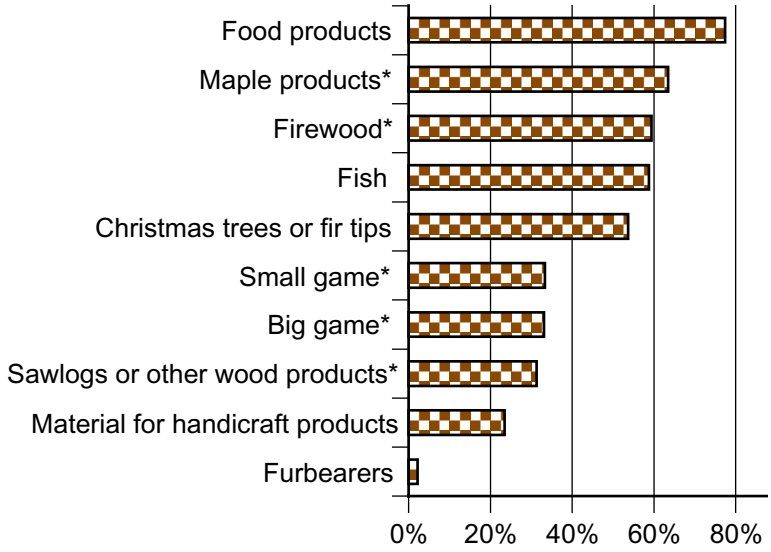


Figure 5. Forest products used in households in a typical year.

3.3 Views on forest policy

To assess participants' views on forest policy, we asked respondents to state their level of satisfaction regarding some of the management goals that are set out in the NBDNR Vision Document for Crown Land Management, which enunciates the goals for management of Crown land.

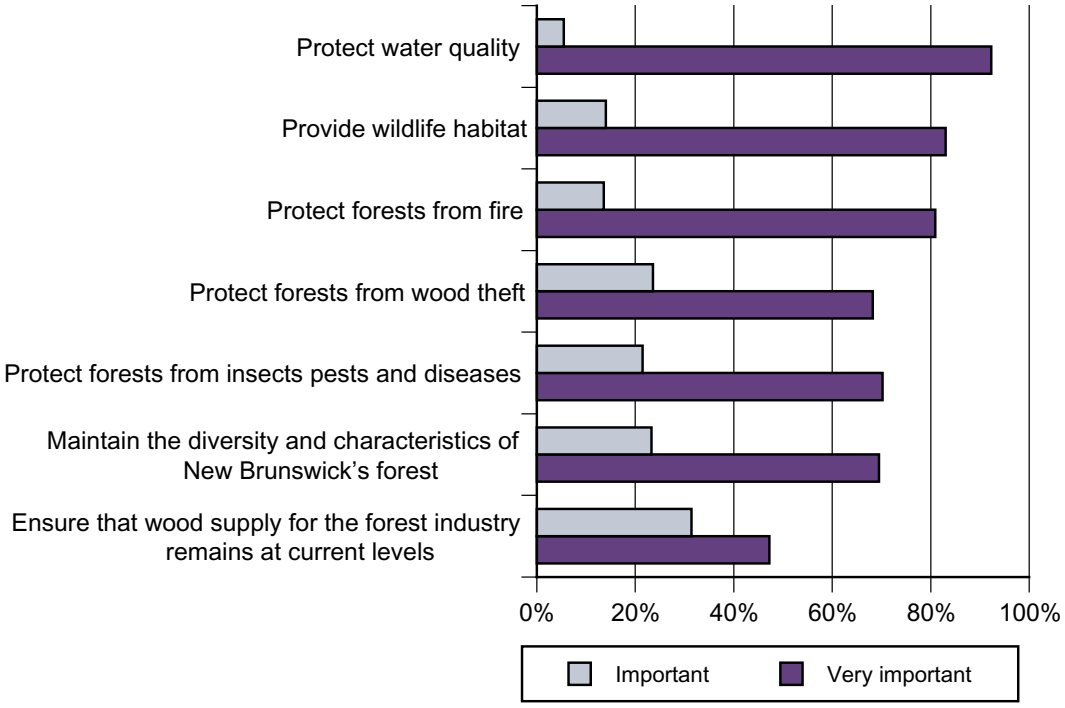


Figure 6. Assessment of NB government's management goals.

Nearly all the management goals that we took from the Vision Document for this study received very strong support (Fig. 6). Water quality has the greatest support from the public, with 92% rating it as very important. Provision of adequate wildlife habitat received the next highest public support (83%), followed by fire protection (81%), protection of forests from insects and disease (70%), and maintenance of the diversity and characteristics of New Brunswick's forests (70%); finally, protection from wood theft also received important support, with over two thirds of participants considering it very important. The only management goal that did not secure a score of "very important" from a majority of participants was ensuring that wood supply for the forest industry remains at current levels. Overall, 78% still support the goal, but it ranks last among the items outlined in the Vision Document. For several years, industry has been lobbying government to identify a defined timber objective. The results here suggest the current approach of allowing "what's left" to be available for timber harvest after water, wildlife, and diversity are looked after aligns well with the public's preferences. There were no statistically significant differences among urban residents and residents of forest-dependent areas in their assessment of the importance of all of these management goals (Table A2.3-1).

Overall, the Vision Document seems to be a good reflection of New Brunswickers' preferences for management goals. Most respondents had no opinion (38%) or said "no" (29%) when asked whether NBDNR missed any important management goals (Fig. 7). One out of three participants felt that some important goals were missing. A total of 437 respondents wrote comments about the goals that they thought were missing from the NBDNR goals for Crown land management that were listed in the survey. A first analysis of the content of these comments led us to classify them under eight themes. Most comments addressed more than one theme, thus the total for the frequency is higher than 100% (Table 4). By far the most common themes regarding potential improvement to NBDNR's goals relate to various aspects of environmental protection. About 28% of the respondents who made comments about environmental protection specifically expressed concerns about clearcutting. Considering that no other concern expressed under this theme was shared by more than 13% of the respondents, this value is quite high.

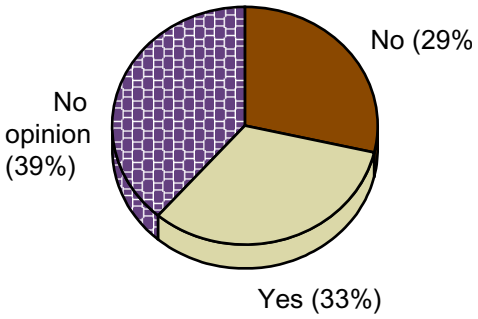


Figure 7. Are any goals missing from NBDNR's management strategy?

Table 4. Themes from comments related to deficiencies in NBDNR's goals for Crown land management

Themes	Types of concerns expressed	% of respondents
Environmental protection	Water, air, soil, wildlife, protected areas, biodiversity, reforestation, pesticides used, harvesting, clearcutting, fires, waste, machinery, climate change, aesthetics	51%
Public	Education, control motorized vehicles, access to information, access to Crown land, recreation, public involvement, aboriginal peoples	20%
NBDNR	Personnel, authority, native harvesting, act on objective, stricter legislation, better science/management/silviculture, wood supply, public goods, parks	19%
Industry	Control over Crown land, stricter monitoring of practices, fair pay for contractors	13%
Economics	Exports of raw timber, infrastructures, value-added products, sustainable balance, money as a driving force	9%
Enforcement	Supervision, wood theft, legal, camps	7%
Private woodlots	Increase enforcement/accountability, incentives for sustainable management, protection of property rights, fewer regulations, markets	5%
Other		3%

One out of five comments pointed to shortcomings in NBDNR's goals for public involvement, whereas a similar proportion of respondents commented on the deficiencies of NBDNR as an organization. A fair number of comments pointed out issues with the forest industry, and 80% of those comments voiced concerns about perception of control that the forest industry has over Crown land. Fewer comments dealt with economic aspects of forest management, enforcement of rules and regulations on Crown lands, and specific issues around private woodlots.

3.4 Views on forest management

To assess opinions regarding forest management, we asked a series of questions concerning participants' satisfaction with management of forests that are under different types of ownership and administration. We also solicited respondents' opinions about various issues that are related to forest management and their satisfaction with NBDNR's efforts on various aspects of forest management.

3.4.1 Satisfaction about forest management of forests under different ownerships

Respondents express a wide range of opinions in their assessment of current forest management on Crown lands, freehold, and private woodlots (Fig. 8). Overall, a fairly high proportion of respondents did not state an opinion, or chose to remain neutral. This proportion varied from 41% for private woodlots, to 32% for freehold and 30% for Crown lands. Crown land is where respondents were mostly likely to have an opinion. Respondents who did offer opinions expressed a higher level of satisfaction toward management on private woodlots compared with other types of land. Their level of satisfaction toward management of private woodlots reaches 40%, compared with 33% for Crown lands and only 22% for industrial freehold. There were no statistically significant differences in responses provided by participants from the four areas (Table A2.4-1).

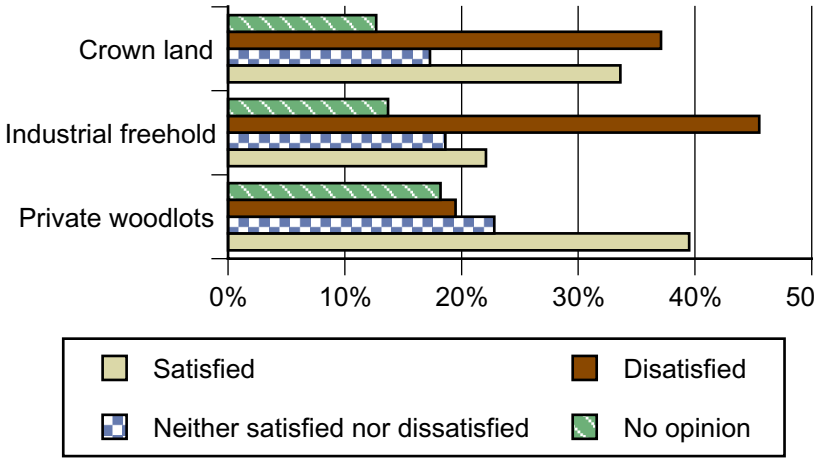


Figure 8. Satisfaction about forest management.

3.4.2 Views on specific issues related to forest management

To obtain respondents' views on a range of issues related to the management approach for New Brunswick's forests, we had respondents agree or disagree with six statements (Table 5). The majority of respondents in all groups disagreed that forestry practices have few long-term negative impacts on the environment (53%), that economic benefits from the forest industry outweigh negative environmental impacts (56%), and that there are enough protected areas in NB (57%). A majority agreed that too much timber is being cut (58%) and that the forest industry has too much control over forest management in the province (57%).

Table 5. Views on issues related to forest management

	Agree (%)	Disagree (%)
New Brunswick has enough protected areas*	23.0	56.9
Urban areas	17.7	62.1
Low forest dependence	26.2	54.9
Moderate forest dependence	27.6	52.6
High forest dependence	32.1	45.0
The forest industry has too much control over forest management in New Brunswick*	56.7	13.7
Urban areas	50.0	14.2
Low forest dependence	62.8	13.1
Moderate forest dependence	59.8	12.7
High forest dependence	61.8	15.4
Forest are being managed for an appropriate mix of values and uses*	35.1	31.7
Urban areas	30.2	34.0
Low forest dependence	39.4	29.7
Moderate forest dependence	35.6	29.5
High forest dependence	42.0	30.8
The economic contributions of the forest industry outweigh environmental impacts*	24.3	55.8
Urban areas	17.1	63.9
Low forest dependence	28.8	51.5
Moderate forest dependence	32.8	44.8
High forest dependence	32.7	43.9
The amount of timber cut in New Brunswick's forest is too high	58.1	10.2
Forest practices have few long-term negative effects on the environment*	30.7	54.0
Urban areas	22.9	60.7
Low forest dependence	37.5	48.6
Moderate forest dependence	35.1	48.5
High forest dependence	36.2	49.1

There were some differences between the major urban regions and forest-dependent areas. A higher proportion of urban respondents disagreed that there were few negative environmental effects from forest practices, that economic contributions from the forest industry outweigh environmental impacts, and that there is adequate provision of protected areas. Interestingly, the forest-dependent regions had a more negative assessment of some aspects of forest management than the urban group. A larger proportion of respondents in these areas felt that too much timber is being harvested and that the forest industry has too much control (Table A2.4-2).

3.4.3 Assessment of impact, acceptability, and need for control of activities and forest disturbances

The implementation of policy objectives and forest management goals translates into different types of activities taking place in the forests. Each of these activities is likely to have effects on forests, in addition to the natural disturbances that also change forest environments. A series of questions were designed to provide insight into how New Brunswickers perceived some of these activities and disturbances, both human and natural. In these questions, we distinguished respondents' perceptions in three different ways:

- Does the activity or disturbance have a positive or negative impact on the forest?
- Is this impact acceptable or not?
- Should the government control the activity or disturbance to change the impact?

All of the potential disturbances (forest road density, herbicide use, amount of timber harvested, off-road vehicle use, spruce budworm, and forest fire) were rated similarly (Figs. 9,10,11). On average, all items were rated as having a slight negative impact on forest ecosystems, and impacts were rated as slightly unacceptable, and in need of slightly more government control.

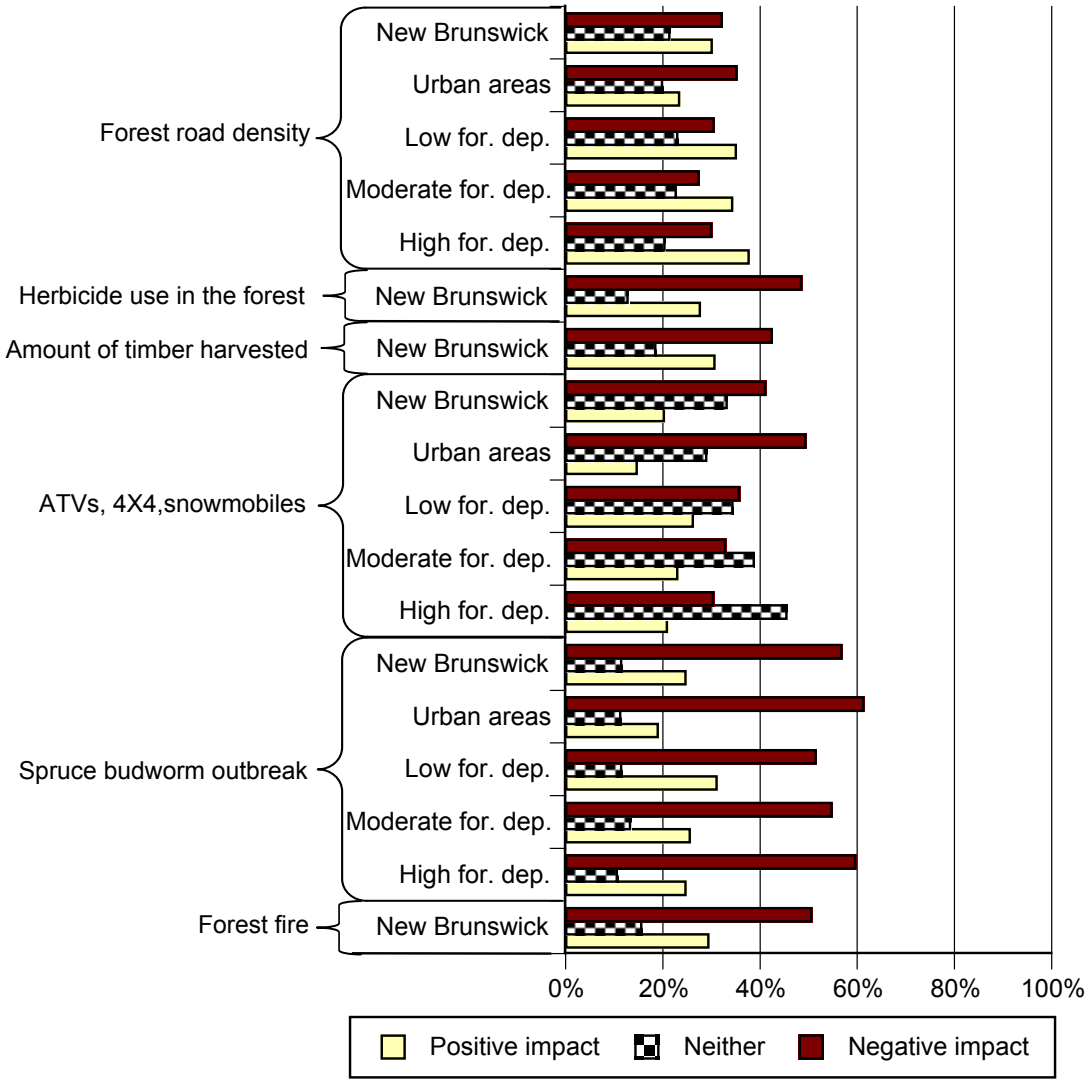


Figure 9. Impact of forest disturbances and forest activities.

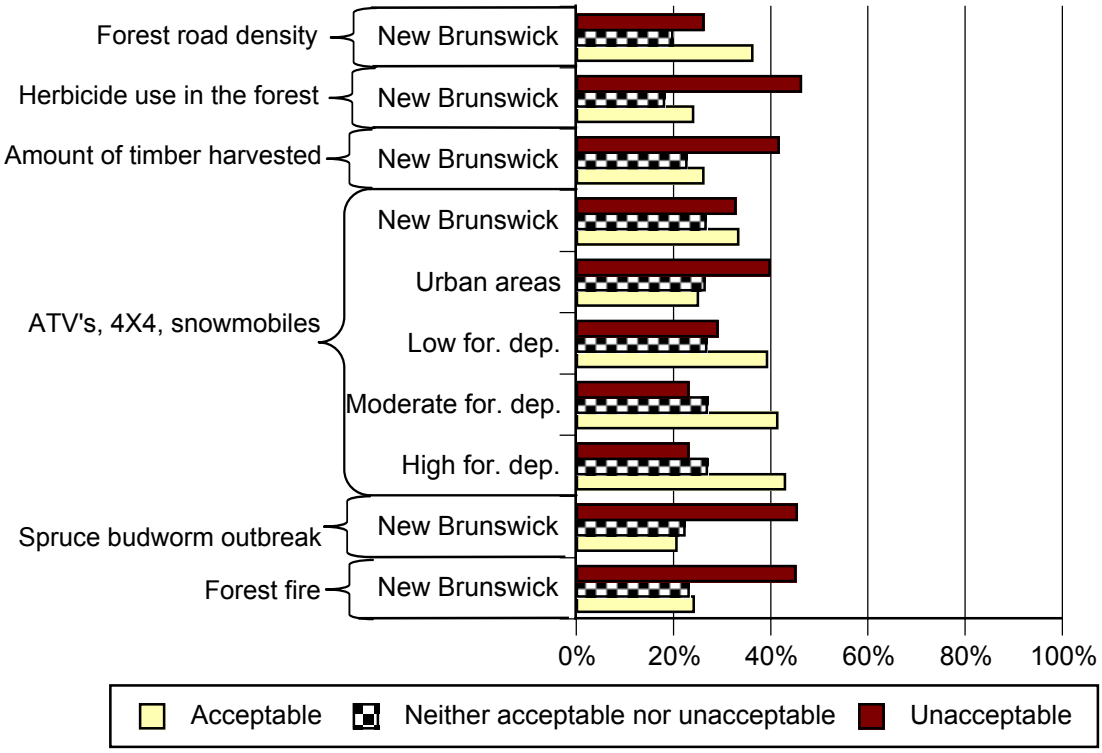


Figure 10. Acceptability of forest disturbances and forest activities.

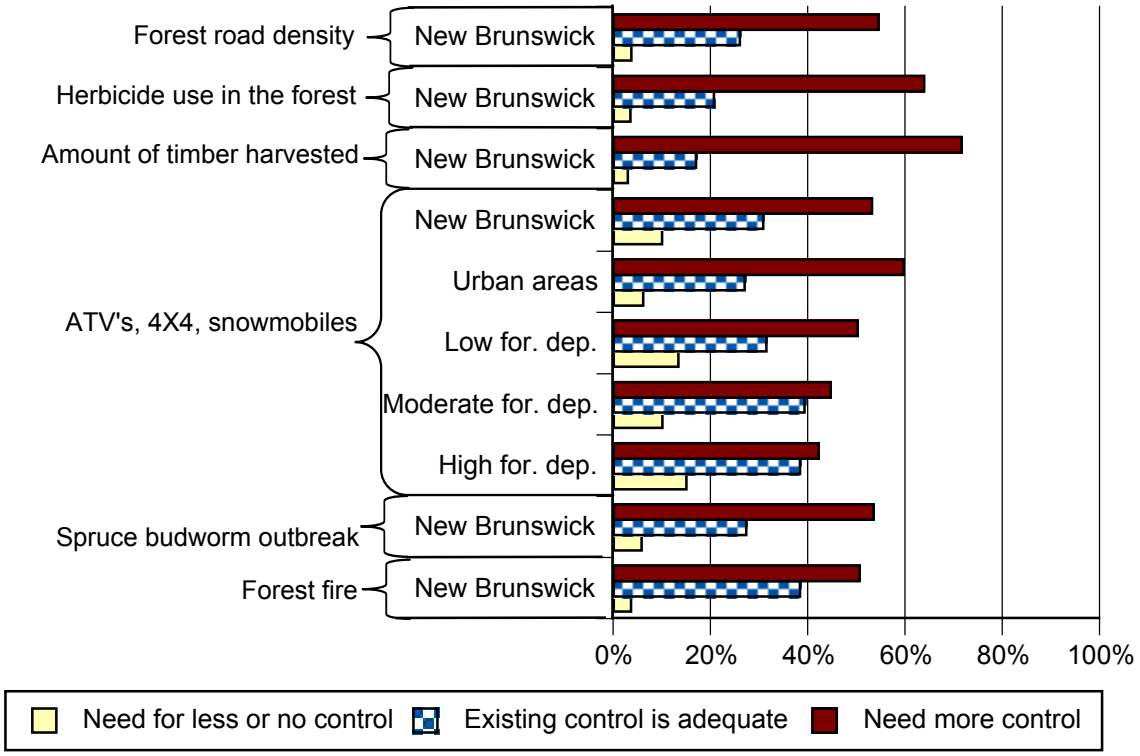


Figure 11. Level of control needed for forest disturbances and forest activities.

The two natural disturbance items (spruce budworm and forest fire) were viewed as having negative impacts on forest ecosystems, and their impacts were rated among the least acceptable. Spruce budworm was rated as having a significantly greater impact on forested ecosystems than the other items, and impacts from spruce budworm were considered among the least acceptable.

Forest industry activities (forest road density and the amount of timber harvested) were rated as having the least negative impacts. However, industry activities (herbicide use and amount of timber harvested) were also viewed as needing more government control than the other items.

There were few differences among the residence groups (Tables A2.4-3 to A2.4-5). Most notably, the urban group rated off-road vehicles as having a greater negative impact and the impacts as less acceptable, and they viewed the impacts as being in need of more government control than the other groups.

3.4.4 Assessment of NBDNR's efforts related to various aspects of forest management

One of the more notable things about participants' assessment of NBDNR's efforts is that the vast majority of responses across all categories cluster toward the middle (Fig. 12). That is, few people are totally satisfied with NBDNR's performance and few are totally dissatisfied. Public involvement is the topic on which participants express the highest level of dissatisfaction (47%), and the lowest level of satisfaction (22%). Other areas for which the level of dissatisfaction is higher than the level of satisfaction are: representing the public interest, enforcement of regulations, and protection of biodiversity. There are several areas where NBDNR is viewed as performing more favorably, namely: managing deer habitat, supporting management on private woodlots, and promoting economic development through forest industries. Once again, there were no significant differences among residence categories, although it is interesting to note that for every statement, respondents from highly forest-dependent areas had both stronger positive and negative responses than their urban counterparts (Table A2.4-6).

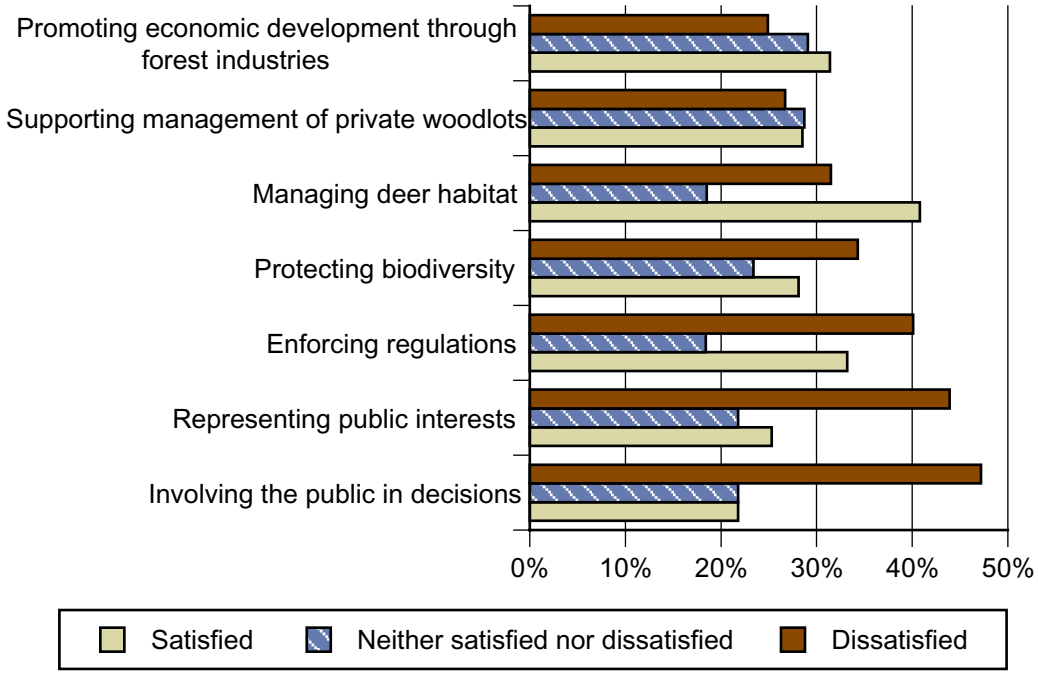


Figure 12. Satisfaction with NBDNR's current efforts.

3.5 Views on public involvement

There has been much discussion in recent years about the appropriate degree of public engagement in forest management, and appropriate approaches for obtaining citizens' perspectives on forestry. Following the report of the Legislative Select Committee on Wood Supply, the government made a commitment to review their approach to public involvement. This survey is part of NBDNR's effort to better understand public opinion about forest management and collect information to improve future public involvement activities. We asked our respondents a series of specific, targeted questions about their own preferences for making their views and forest policy preferences known to forest managers and government officials.

First, we were interested in finding out if people had concerns about forest management, with whom they discuss these concerns, and finally to what extend they consider that their concerns are being addressed. Then, a series of questions looked at the role that the public should have in conjunction with the experts, the preferences regarding public involvement tools, and the level of commitment that would suit respondents' situations. The final group of questions regarding public involvement were targeted at assessing the level of influence that respondents would like to see various stakeholders exert on forest policy in general and on managing tracts of Crown land.

3.5.1 Concerns about forest management

We found respondents had a low level of satisfaction with having their concerns regarding forest management addressed, but this is likely because only a very small proportion of the people who said they had concerns actually express their concerns to anyone. A majority reported having concerns (60%), but fewer than 16% expressed them to anyone (Table 6). Moreover, of the minority who did express concerns, few addressed them to people who are in a position to do anything about them. The most likely to hear concerns about Crown land management are the respondents' neighbors or family. In fact neighbors and family are two to three times more likely to hear concerns than anyone in an "official capacity" who might be able to address them. Fewer than 10% of the small proportion who expressed concerns to anyone chose to express them to forest company officials, NB government staff, or elected representatives. Other than family and neighbors, only recreational or hunting and fishing organizations received more than a 10% response to this question.

There are some significant differences among groups regarding with whom the respondents discussed their concerns. Respondents outside urban areas are more likely to discuss their concerns with industry officials, government staff, or someone from a recreational organization.

Table 6. Who people express their concerns to

	Urban areas (%)	**Low forest dependence (%)**	Moderate **forest dependence (%)**	**High forest dependence (%)**	**New Brunswick (%)**
Has expressed concerns to someone*	11.2	19.6	16.5	16.2	15.3
Expressed them to:					
A family or neighbor	37.7	40.5	41.7	42.9	39.5
Someone in a recreational or hunting and fishing organization*	8.9	15.7	12.8	16.2	12.5
An elected government representative	8.1	10.8	9.0	11.4	9.5
A staff member in a NB government department*	7.3	10.2	12.0	15.2	9.5
Someone in a woodlot owners' organization	8.1	9.3	9.0	16.2	9.3
A staff member in a forestry company*	6.1	9.9	12.8	18.1	9.1
Someone in an environmental or conservation organization	8.4	8.0	9.8	7.6	8.3
The public through the media	1.2	1.1	1.5	1.9	1.2
The public through the internet	0.5	1.1	0.8	1.0	0.8

These results suggests that there is significant concern among the general public about forest management, but very few take steps to even express their concerns, let alone have them addressed by someone in a position to do so. Taken with other results regarding public involvement, this suggests that people are not satisfied with the approaches and opportunities for public involvement that currently exist in New Brunswick.

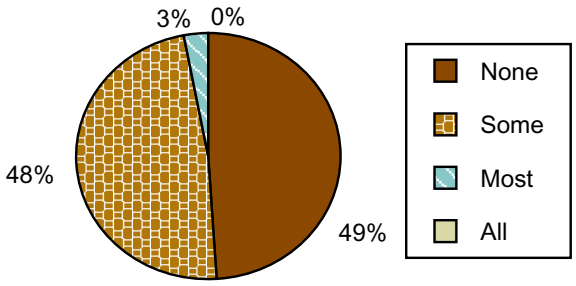


Figure 13. Concerns resolved to participants' satisfaction.

Among the majority of respondents who said that they had concerns with forest management in New Brunswick, very few felt that these concerns were entirely or even mostly addressed (Fig. 13). About half the respondents stated that none of their concerns were addressed (48.5%) and slightly fewer (48.1%) stated that only some of their concerns were addressed. There were no significant differences between geographic areas (Table A2.5-1).

3.5.2 Preferred role, level of involvement, and tools for public involvement

We asked, in general terms, what respondents felt was an appropriate role for the public in forest management. The more extreme response categories received the lowest response; fewer than 5% believe that the public should have no role, and fewer than 10% believe that the public should have primary authority for decision making (Fig. 14). The dominant response for all groups was for "Act as full and equal partners with the resource professionals." A third or more in each residence category preferred this option. The second most preferred option was to "Review and comment on what the resource professionals present as the best way to manage the forest."

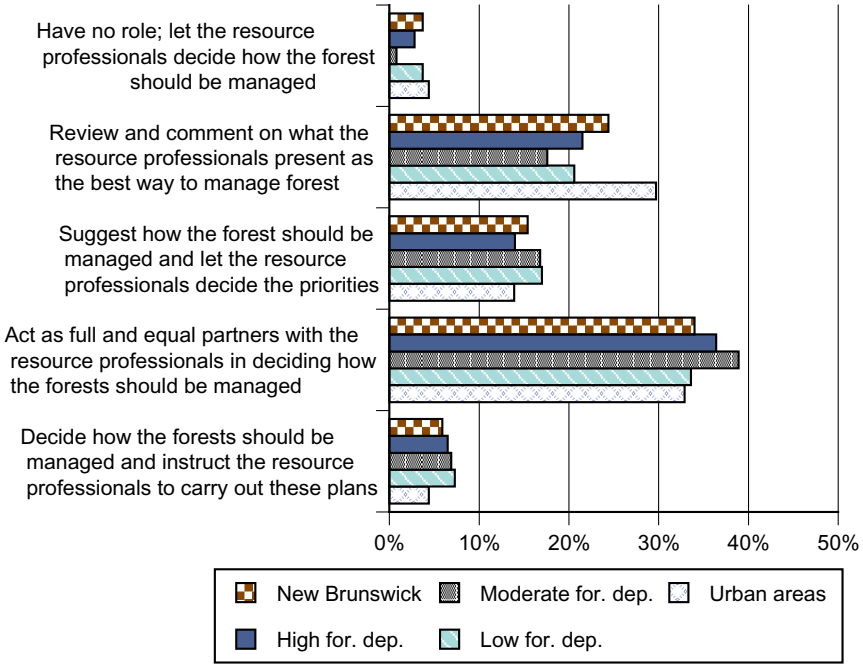


Figure 14. Appropriate role for the public in forest management and policy.

There are various tools or practices through which the public may have a say, express concerns, or have direct involvement in forest management and policy decisions. We asked respondents to tell us the likelihood of their taking the opportunity to use a variety of such tools (Table 7). Interestingly, two tools that have been the most commonly used for forest management plan reviews and in recent forest policy debates were rated lower than many other tools.

Stakeholder advisory boards are a requirement for Crown licenses. They are created and managed by industrial license holders, with NBDNR participation. Fewer than a third of respondents suggested that they would be likely to be involved in such a board, whereas 65% said that it was unlikely. In practice, recruitment and attendance of participants in stakeholder advisory boards has been a challenge for many license holders.

Respondents are even more unlikely to give a presentation at a formal public meeting. Only 11% said they would be likely to make such a presentation, whereas 83% said they would not. There were nearly twice as many people likely to do so from highly forest-dependent areas compared with urban areas. Both these tools, formal presentations at public meetings and participation in stakeholder advisory board meetings, require relatively high levels of commitment or considerable preparation and courage. In the Atlantic region, forest advisory committees meet on average 12 times a year, and this is

Table 7. Perception of opportunities for public involvement

	Likely	Unlikely
Vote in a province-wide referendum	77.7	16.7
Participate in future public surveys such as this one	76.2	18.9
Use toll-free phone numbers	57.6	36.9
Respond to request for public comments on a policy statement	56.1	37.5
Attend public sessions where information is presented and participants ask questions and provide feedback*	55.1	39.6
Urban areas	51.3	43.0
Low forest dependence	56.6	38.3
Moderate forest dependence	58.4	35.2
High forest dependence	65.4	30.8
Participate in a one-day workshop in which you and other citizens advise government on management of Crown forests*	39.1	54.1
Urban areas	32.6	59.6
Low forest dependence	42.0	51.5
Moderate forest dependence	45.2	50.0
High forest dependence	55.3	40.8
Be a member of an advisory committee composed of citizens who advise on how to manage Crown forests in your area*	28.8	64.9
Urban areas	22.9	71.9
Low forest dependence	31.5	61.0
Moderate forest dependence	33.6	59.0
High forest dependence	43.1	51.9
Give a presentation in a formal public meeting*	11.0	83.2
Urban areas	7.9	87.8
Low forest dependence	12.9	79.6
Moderate forest dependence	15.5	78.7
High forest dependence	14.0	80.0

quite higher than the average for committees in other regions of the country, which meet between four and nine times a year (Parkins et al. 2006). These meetings can last for several hours, and often include field trips. Past research has shown that public speaking is an extremely common fear, so it is not surprising that few express a preference for making formal presentations.

Tools that require much less in terms of time, nerve, or expertise are more highly preferred. Surveys, such as the one we administered, are one such example. Over 76% would likely respond to a similar survey in the future (although it is important to note that our sample is already predisposed to answer surveys). Referenda (voting directly on issues, or expressing policy or management preferences through voting) are another very popular public involvement tool, which also require little of participants. Over three quarters (78%) suggested that they would vote in province-wide referenda on forestry issues compared with only 17% who said they would not.

This pattern of preference for tools that require a low level of commitment did not hold consistently throughout the responses to this question. For example, calling a toll-free number requires little of a person, but considerably fewer expressed a preference for this tool (58%) compared with surveys and referenda. Interestingly, there is a province-wide toll-free number available now and it is rarely used.

We also asked about a couple of tools that involved interaction and feedback between the public and resource managers. The more popular among these was “attending public sessions where information is presented and participants ask questions and provide feedback.” About 55% stated that they would be likely to participate in such a meeting. When asked if they would participate in a one-day interactive workshop, fewer were willing to participate (39%), perhaps due to the greater commitment of time. Still, more preferred a one-day workshop than serving on a stakeholder advisory board.

On the whole, people from highly forest-dependent areas expressed a greater willingness to use most of these tools, particularly the ones that require a greater level of commitment, compared with residents from urban areas. This is not surprising, given the level of impact that forest policy and management have on highly forest-dependent areas, but it may also be a function of respondents already being somewhat familiar with NBDNR or industry staff in part of those areas.

To further gauge respondents' willingness to engage in forest management and policy discussions, we asked them how often they would be willing to participate in some form of public involvement activity. Fewer than a quarter are not willing to participate at all, and a majority (55%) are willing to participate once or twice a year (Fig. 15).

Fewer than 15% of respondents would engage more than three times a year and fewer than 7% would like to attend monthly meetings, which still represents tens of thousands of people across the province. Again, these results suggest a great desire to participate, as long as it does not require a great deal of time.

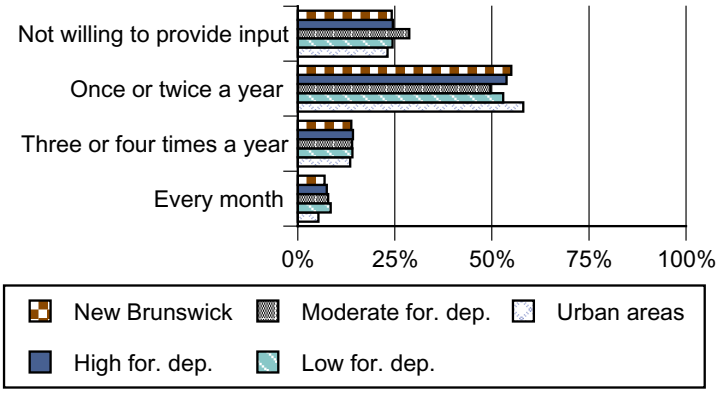


Figure 15. Frequency for providing input on forest issues.

3.5.3 Stakeholders' role in forest policy and management of Crown land

Most forest management and policy debates and discussions take place primarily between vested interests and stakeholder groups that feel highly affected by the outcomes of management actions and policy change. It is often difficult to discern where the sentiments of average citizens lie, and that is one of the main reasons for undertaking a survey such as this one.

We asked a couple of questions related to where the general public stands in relation to the constellation of existing institutional players in forest management and policy discourse. First, we asked them who they felt should have influence on forest policy and management. Second, using a similar list, we asked them which organizations best reflect their views on forest management on Crown land forests.

Table 8. Influence various groups should have on forest policy and management

	Should have:			
	A lot of influence (%)	**Moderate influence (%)**	**A little influence (%)**	**No influence (%)**
NBDNR	53.5	32.1	7.4	1.6
NB Department of Environment	53.4	32.3	6.5	1.8
Conservation Council of NB	43.2	36.6	9.5	1.9
Watershed management groups	43.0	31.1	11.0	1.7
Environmental organizations	39.1	35.8	16.2	2.5
Fish and game associations	28.1	41.1	22.4	2.6
NB public opinion	27.7	37.8	22.8	4.8
Woodlot owners' associations	27.4	42.1	20.5	2.9
Member of the Provincial Legislature	17.7	30.0	30.1	13.3
Forestry companies	17.7	34.0	27.6	14.9
Federal government	17.0	33.6	26.8	14.2
Local government representatives	16.3	35.9	31.5	8.5
Urban areas	12.8	36.2	34.5	8.8
Low forest dependence	19.2	36.1	28.4	7.9
Moderate forest dependence	18.5	33.1	33.9	7.3
High forest dependence	19.2	36.5	26.9	10.6
NB First Nations	14.4	31.2	27.7	6.9
Other recreational organizations	11.7	30.4	43.1	9.0
Media	10.3	21.6	28.1	31.9
Snowmobile and ATV clubs	6.3	18.2	41.5	27.8
Major urban areas	4.1	13.1	43.0	32.9
Low forest dependence	8.4	22.8	38.4	24.8
Moderate forest dependence	7.2	19.2	44.0	23.2
High forest dependence	6.7	23.8	45.7	19.0

For the question regarding who should have influence, respondents were allowed to choose from four responses, ranging from " a lot of influence" to "no influence" with intermediate choices of "moderate influence" and "a little influence." Survey respondents expressed the greatest preference for existing government bodies. Over 50% of respondents believe that NBDNR and the Department of Environment should have a lot of influence, and an additional 32% believe they should have a moderate influence on Crown forest management and policy (Table 8). Fewer than 10% felt these organizations should have little or no influence.

The next most common preferences were for the Conservation Council of New Brunswick, watershed management groups, and other environmental organizations. Around 40% of our respondents stated that these groups should have a lot of influence, and combined scores between a lot and a moderate influence were all at or above 75%. Fewer than 20% of respondents felt these groups should have little to no influence, and in the case of the Conservation Council, the number was closer to 10%. Interestingly, there was no significant difference for the Conservation Council between urban residents and those from moderately or highly forest-dependent areas.

Fish and game associations and woodlot owners associations received a relatively strong endorsement from survey respondents. Nearly 70% felt they should have a lot of or moderate influence on Crown forest policy and management. About two thirds of respondents felt that NB public opinion should have a lot or moderate influence.

Elected Members of the Provincial Legislature, forestry companies and local government representatives all were cited by more than 50% of our respondents, but 40% or more of our sample also suggested that these groups should have little or no influence. The media received more negative responses than positive, as did snowmobile and ATV clubs. There was considerable variation between urban respondents and respondents from forest-dependent areas on the latter group.

In a subsequent question, we asked respondents which organizations best reflect their views on Crown forest management and policy. The results were very similar to those for the question above, and are thereby internally consistent (Fig. 16). Again, the greatest number of respondents felt that the two government departments best reflect their views. The Conservation Council, watershed management groups, and other environmental organizations were the next most common responses. These were followed, in order, by woodlot owners' associations, fish and game associations, and forest companies. Media, provincial MLAs, federal government, and

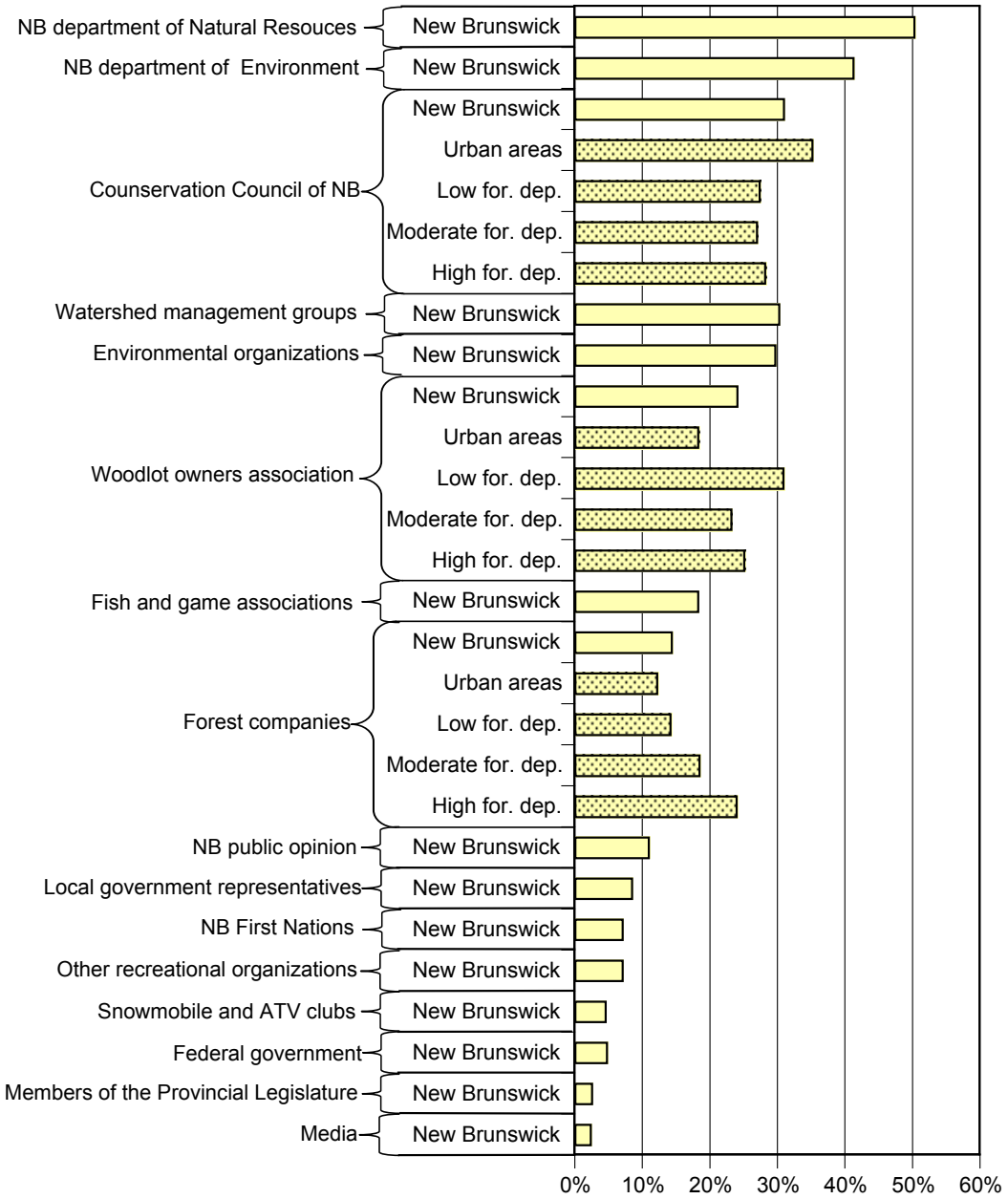


Figure 16. Organizations that best reflect participant's views about forest management on Crown forests.

snowmobile and ATV clubs were the groups that least reflect our respondents' views. Answers for this question did not follow the same pattern as for the previous one; we observed slight significant differences among groups for different organizations. There were some significant differences between residents from urban and forest-dependent areas regarding the degree to which woodlot owners' associations, forest companies, and the Conservation Council reflect their views. The latter organization was more likely to represent views of residents from urban areas, whereas the other two organizations were more likely to represent views of respondents from forest-dependent areas.

3.5.4 Stakeholders' role in management of Crown land

The current system for the allocation and management of Crown forest land has been in place for 25 years, since the enactment of the Crown Lands and Forests Act in 1982. Recently, there has been considerable turmoil in the forest industry in New Brunswick, and some companies are struggling to stay competitive in world markets. Two licensees have shut down major processing facilities for extended periods of time, and many are questioning the long-term viability of the status quo given current markets, currency rates, and energy costs. The conditions leading to the current crisis were building when we constructed the survey, and therefore, we asked respondents who they would like to see "*considered as potential managers"* of Crown land if the government decided to reform or revise the current management system for Crown land.

The top three responses to this question were all for groups or institutions that have not traditionally had management experience on Crown land (Table 9). Environmental groups received the greatest support, with over 60% of respondents stating they should be considered as managers of Crown land in the event of reform. Local communities were the next highest response category, followed by woodlot owner groups. Both were cited by more than 50% of our sample. We note slight significant differences for these three organizations, with respondents from urban areas expressing higher support for environmental organizations and local communities, and lower support for woodlot organizations than respondents from other areas.

Table 9. Groups that should be considered as possible managers of Crown lands

	Should be considered as potential managers of Crown lands (%)
Environmental organizations*	60.8
Urban areas	67.5
Low forest dependence	56.3
Moderate forest dependence	53.3
High forest dependence	54.1
Local communities*	53.2
Urban areas	57.8
Low forest dependence	48.8
Moderate forest dependence	50.4
High forest dependence	52.3
Woodlot owners*	52.2
Urban areas	47.9
Low forest dependence	56.6
Moderate forest dependence	52.6
High forest dependence	55.0
An agency managed by the provincial government	44.4
Forest companies that currently have rights to Crown wood	35.8
Individual small-scale harvesting contractors	35.0
First Nations	34.4
Private developers interested in creating major recreational facilities*	29.3
Urban areas	23.9
Low forest dependence	32.4
Moderate forest dependence	37.8
High forest dependence	34.9
Forest companies that do not currently have rights to Crown wood	25.8
I have no opinion on the subject	7.8
I think things are working fine the way they are	4.6

The next most popular response was an agency managed by government. We kept this intentionally vague. It could be interpreted as an existing department or a new agency specifically created to manage Crown forests. Individual contractors and small-scale harvesters received moderate support, as did existing forest license holders. These two groups were solidly in the middle of the range of choices offered. First Nations, private recreational developers, and existing forest companies without Crown forest allocations were toward the bottom of the list.

One of the more notable things about the response to this question is the very high response rate for this question (1509 respondents out of 1521), the very small number of people with no opinion (fewer than 10%), and the even smaller number of New Brunswickers who feel that things are fine just the way they are (about 6%). These results suggest that respondents have a considerable appetite for reform, and significant interest in offering non-traditional players the chance to manage Crown land.

The previous question asked who respondents would like to see *considered* as potential managers of Crown land. We also asked respondents to rank their top three preferences from the list we provided. The results, presented in Table 10, show that the ranked preferences are in exactly the same order, but with slightly lower percentages. Respondents from urban areas are slightly more in favor of including environmental organizations in the management of Crown Land and slightly less supportive of woodlot owners than respondents from other areas. Respondents from urban areas also show slightly less support for individual contractors and private developers than respondents from other areas.

Table 10. Favorite groups that should be considered as possible managers of Crown lands

	Favorite group to be consider as potential managers of Crown lands (%)
Environmental organizations *	56.0
Urban areas	64.0
Low forest dependence	51.2
Moderate forest dependence	47.5
High forest dependence	45.5
Local communities	45.8
Woodlot owners *	37.8
Urban areas	31.6
Low forest dependence	42.7
Moderate forest dependence	41.6
High forest dependence	43.2
An agency managed by the provincial government	36.8
Forest companies that currently have rights to Crown wood	21.1
Individual small-scale harvesting contractors	20.4
Urban areas	16.5
Low forest dependence	23.1
Moderate forest dependence	25.7
High forest dependence	23.0
First Nations	17.1
Private developers interested in creating major recreational facilities *	18.2
Urban areas	11.6
Low forest dependence	22.0
Moderate forest dependence	27.0
High forest dependence	26.1
Forest companies that do not currently have rights to Crown wood	11.8
I think things are working fine the way they are	2.3

3.6 Participants' familiarity with forest management and policy

As the level of knowledge about forest management and policy is often pointed out as a key challenge in conducting meaningful discussions on forestry issues, two series of questions were asked to find out about respondents' familiarity with these topics.

3.6.1 Familiarity with forest policy initiatives

To assess respondents' familiarity with forest policy initiatives, we asked them to state their level of knowledge about various policy initiatives. Although results throughout the survey suggest that people have fairly strong feelings about forest management issues, few were able to identify many policy issues by name. The policy initiative with which the participants were least familiar is the Jaako Pöyry report on wood supply (Table 11). This report, published in 2002, has made the headlines in the media many times since its publication, and it prompted the most recent public debate about timber management on Crown land. The Vision Document is also unknown to a large number of participants (69%), although they support its contents, as shown in the previous section. We were somewhat surprised to find that the NB Millennium forest project was not listed last in terms of familiarity by our respondents, as this was a fictitious initiative invented for this study. About 9% reported having a good knowledge of this initiative.

The initiatives for which participants claimed more knowledge are the New Brunswick protected natural area strategy (25%), the First Nations forest harvest agreements (22%), and Our Acadian Forest in Danger (19%). The first two are initiatives of the New Brunswick government, and the latter is an initiative of the Conservation Council of New Brunswick.

As for differences among the groups, participants outside major urban centers were slightly more knowledgeable than their urban counterparts about the Jaako Pöyry report, the Vision Document, and the First Nations forest harvest agreements.

Table 11. Familiarity with NB forest policy initiatives

	Never heard of it (%)	Heard of it but know nothing about it (%)	Have some knowledge (%)	Know a lot about it (%)
Jaako Pöyry Report on Wood Supply*	73.7	12.4	10.9	3.0
Urban areas	77.1	11.7	8.4	2.8
Low forest dependence	73.2	13.0	11.0	2.8
Moderate forest dependence	69.5	13.0	11.0	3.8
High forest dependence	61.9	12.4	21.0	4.8
The Vision Document: Our Shared Future*	68.5	21.1	8.3	2.1
Urban areas	69.9	21.1	6.9	2.0
Low forest dependence	70.0	19.8	8.4	1.7
Moderate forest dependence	64.0	22.4	10.4	3.2
High forest dependence	57.3	26.2	13.6	2.9
The NB Millennium forest project	62.0	28.9	8.0	1.1
Forest Management guidelines to protect native biodiversity in the Greater Fundy ecosystem	59.7	28.5	10.6	1.2
Our Acadian Forests in Danger	51.4	29.2	17.1	2.3
NB protected natural areas strategy	44.6	29.9	22.4	3.1
First Nations forest harvest agreements*	41.8	36.6	19.7	1.9
Urban areas	44.2	35.5	19.4	0.8
Low forest dependence	41.7	36.9	18.6	2.8
Moderate forest dependence	38.5	40.0	19.2	2.3
High forest dependence	32.0	36.9	28.2	2.9

* Indicates a significant ($p < 0.05$) difference in frequency distribution using a Chi-square test

3.6.2 Familiarity with forest management

The set of questions to assess respondents' familiarity with forest management was a series of true or false questions. We acknowledge that these questions do not provide a thorough evaluation of respondents' knowledge on all forestry issues, but they do provide some insights about their knowledge of a couple of basic facts.

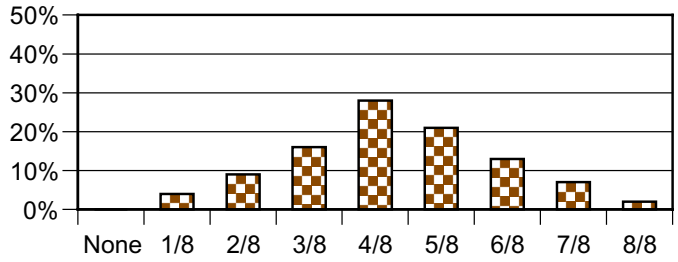


Figure 17. Total score for true/false questions.

When we look at the total score of the participants for these eight questions, we see that 44% of respondents answered at least five questions correctly (Fig. 17). The average score for all respondents is 54%. There were no significant differences in the total score of participants from various areas (Table A2.6-2).

When we take a closer look at the answering patterns, we see that, overall, participants were more successful identifying the statements that were true than the ones that were false (Fig. 18). More than three out of four respondents knew that forest companies are required to follow guidelines for timber harvesting on Crown land and also knew about rules regarding timber harvesting close to water bodies and wetland. The majority also knew that the Acadian Forest is made up of a mixture of tree species and that clearcutting is the most common harvesting practice in the province.

As for the statements that were false, although a majority of respondents knew that the forest industry makes a greater contribution to the provincial economy than the agricultural industry does, there was a significant difference between the answers provided by our four groups. A majority from the four groups provided the right answer, but about 20% more respondents from the group with high forest dependency had the correct answer, and the proportion of respondents who were not sure was much higher in the groups of urban, low, and moderate forest dependency.

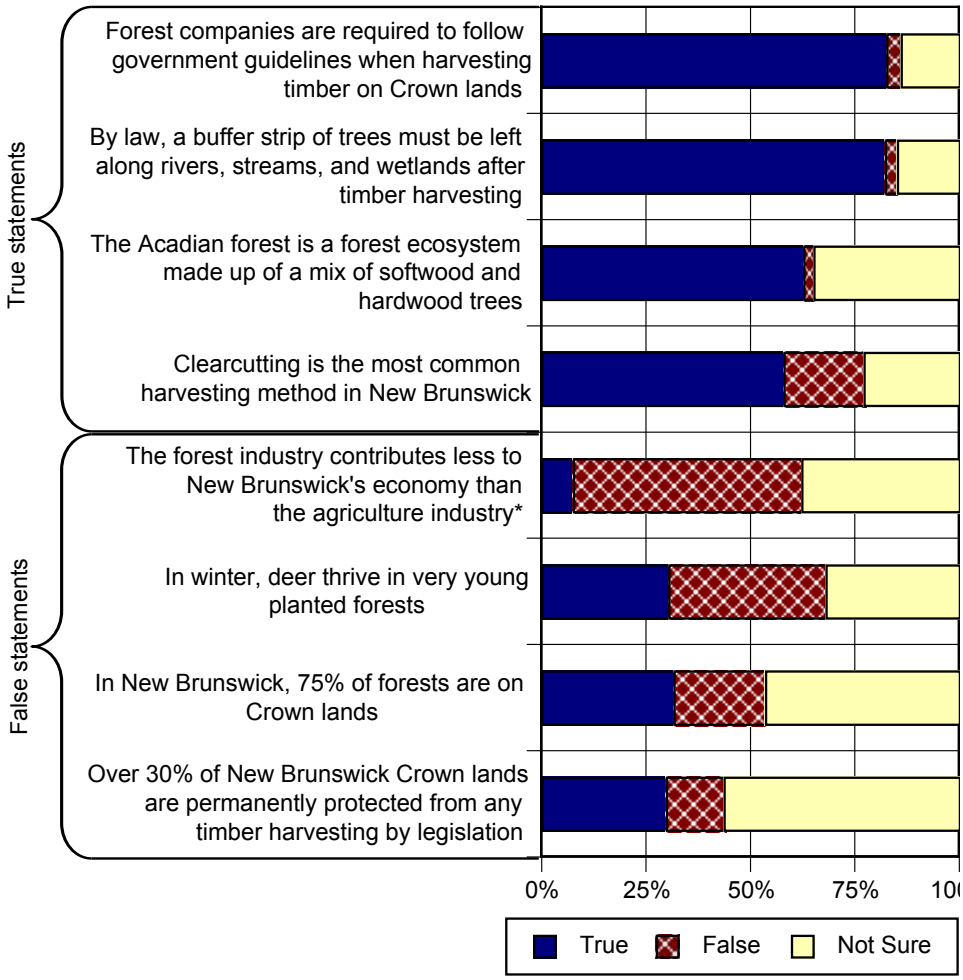


Figure 18. Response to true/false question on forest management.

Participants were almost equally split on the statement related to deer habitat. Only a slightly higher proportion correctly rated this statement as being false (38%) rather than true (30%), or were not sure (32%). Finally, regarding the two statements that provided specific numbers about the proportion of forests on Crown land and the proportion of forests that are legally protected from timber harvesting, about half the respondents declared they were not sure what the correct answer was, and of those who attempted to answer, more provided a wrong answer to these two questions than a right answer. A large proportion of respondents indicated they were "not sure" about many of the statements, suggesting a high level of uncertainty regarding the questions that were asked.

3.7 Participants' profile

3.7.1 Sociodemographic characteristics

With a survey like this, it is common practice to ask respondents a series of basic demographic questions. This helps determine whether the sample is indeed a good representation of the public whose views you are trying to characterize. Our respondents represent a higher proportion of men over 18 years of age (55.5%) than exists in the New Brunswick population (48%). The proportion of men is lower in urban areas (50.8%) than in the forest-dependent areas, where the proportion of male respondents ranges from 57.1% to 60.2% (Table A2.7-1). Only 1.8% of respondents self-identified as Aboriginal people. This proportion is highest in the moderate forest dependency group (3.1%).

The average age of participants is 53 years old (Fig. 19). The age group 18–39 years old is under-represented among survey participants compared with the real proportion of this age class in the New Brunswick population (Statistics Canada 2007).

There is a significant difference in the level of education between the geographic residence groups: participants from urban areas are more likely to have completed high school and more likely to have obtained a university degree than participants from other areas (Fig. 20).

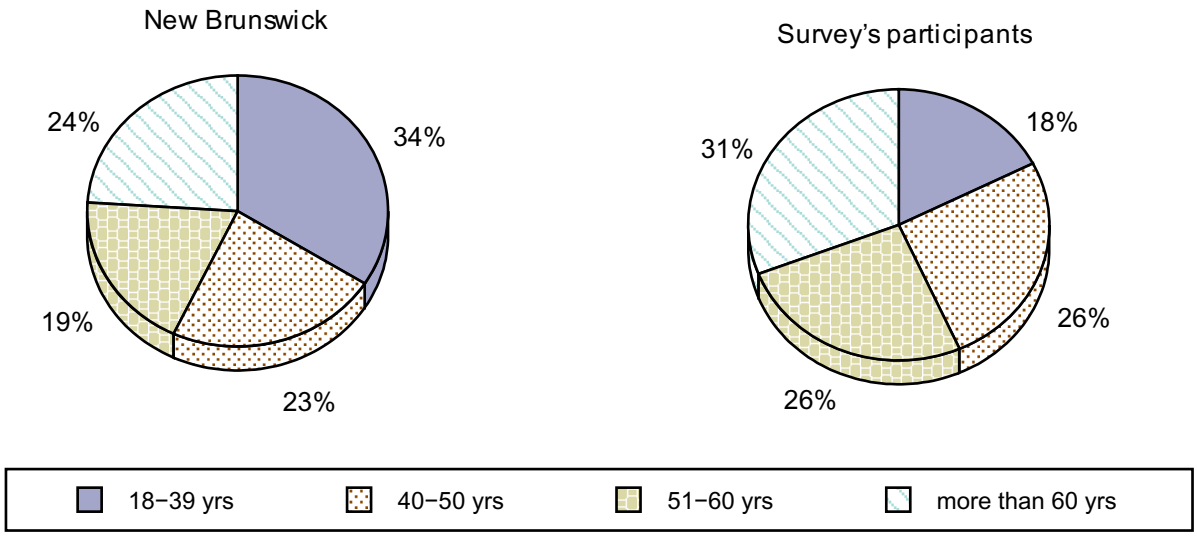


Figure 19. Distribution of participants per age group.

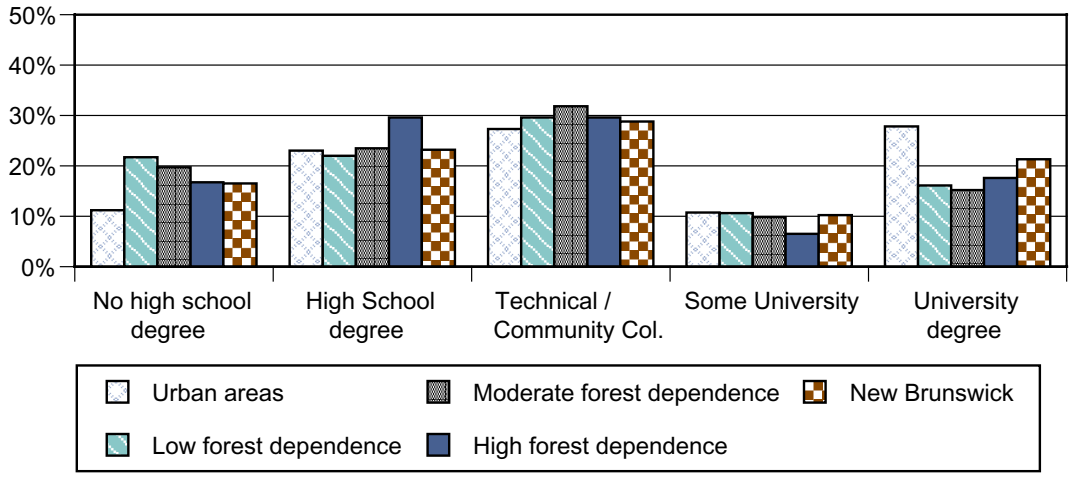


Figure 20. Level of education of participants.

3.7.2 Economic dependence on forest sector

As shown in Table 12, the likelihood of drawing a portion of the family income from the forest sector significantly increases as we move from urban centers to the groups with higher levels of forest dependency. Although just over four out of five participants from urban areas do not receive any income from the forest sector, this proportion falls to less than one out of two among respondents in highly forest-dependent areas. This fits with the formal definition of highly forest-dependent communities as places where 50% of the economic base is from forest-related economic activity. Overall, the most common source of income from the forest sector is from activities related to work in the woods (11%), followed by work in the mills (7%). In the groups with moderate and high forest dependency, these activities contribute to the family income of 16% to 25% of the participants.

Table 12. Income from the forest sector by forest dependence (n = 1485)

	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	New Brunswick
No one in my household obtains income from these activities*	85.2	71.6	57.1	48.6	74.4
Work in the woods (harvesting, tree planting, trucking, planning)*	4.4	15.1	15.8	22.2	11.1
Work in a mill that produces wood products*	2.3	6.0	20.5	25.0	7.2
Sugaring, Christmas tree production, fir tipping, or wreath making*	3.3	8.4	9.0	8.3	6.2
Trapping, guiding for hunting or fishing	3.3	6.2	5.3	6.5	4.8
Other forest-related activities	5.6	5.4	10.5	8.3	6.2

3.7.3 Membership in forest-related organizations

Fewer than one participant out of five is a member of an ATV, 4X4, or snowmobile club, or of fishing, hunting, or environmental organizations (Table 13). Membership in these organizations is higher among participants from highly forest-dependent areas.

Table 13. Membership in forest-related organizations by forest dependence (n = 1502)

	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	New Brunswick
I do not belong to any of these	86.1	81.8	78.9	72.5	82.7
An ATV, 4X4, or a snowmobile club *	5.2	9.4	10.4	13.8	8.0
A hunting organization	5.2	4.6	6.7	10.1	5.5
A fishing organization *	3.9	4.6	7.5	11.0	5.0
An environmental or conservation organization	4.8	4.8	3.7	5.6	4.8

3.7.4 Place of residence for different segments of respondents' lives

Aside from participants from urban areas, a majority of participants have spent all their lives in a rural environment. Participants from urban centers are more likely to have lived all their lives in an urban environment.

As the boundary established by Statistics Canada to delimit metropolitan areas around the three largest cities of New Brunswick goes well beyond the city limits and encompasses what many would consider as rural areas, it is not surprising to see that about 30% of the respondents from urban centers consider that they live in a rural community (Fig. 21). Similarly, participants from the low, moderately and highly forest-dependent areas can judge that their environment is an urban one because they live in a smaller urban center or close to one.

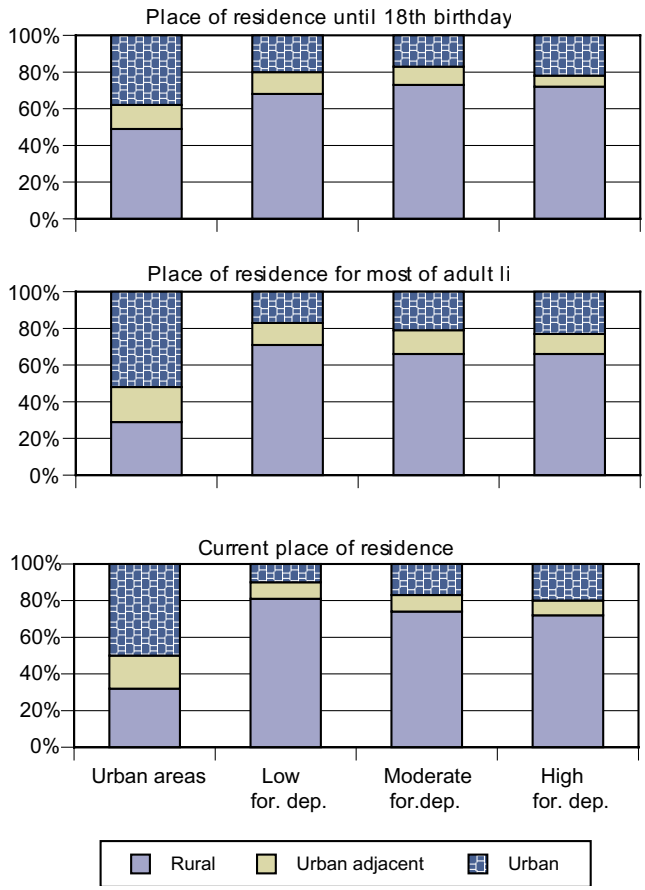


Figure 21. Place of residence of participants at different points in life.

4 CONCLUSIONS

The main goal of this survey was to develop a better understanding of the values New Brunswickers hold toward the forest, and their opinions regarding forest policy and forest management of Crown land. The high rate of participation in the survey is evidence that New Brunswick citizens are concerned and wish to share their opinions about forest issues, regardless of their level of economic dependency on the forest sector.

With only a few exceptions, the values expressed by respondents from urban areas and from forest-dependent areas were very similar. Throughout the survey, environmental values gathered strong support from respondents from all areas of the province, although the magnitude of this support was slightly stronger in urban areas than in forest-dependent areas. To a lesser degree, respondents across the province also supported economic and utilitarian values, although this set of values received stronger support among respondents from forest-dependent areas than from urban areas. However, value differences between the urban and forest-dependent areas are more a matter of degree than a matter of different or oppositional values. On the whole, the trends and priorities of urban and forest-dependent residents were very similar. The prevalence of environmental values over economic/utilitarian values replicates findings from a province-wide survey conducted in New Brunswick in 2004 (Smith and Lantz 2004) and reflects the findings observed in other surveys across the country (Bath 2006, Robinson et al. 1997, Kennedy et al. 2007, Ontario Forest Research Institute 1995).

A key challenge arising from these results is that participants strongly support environmental values, but also support use and harvesting of forests. New Brunswickers expect their government to establish a balance between different uses of the forest and seem generally supportive of NBDNR and the range of values outlined in the Vision Document. This support for the goals articulated by NBDNR contrasts with a low level of satisfaction with management of Crown land and industrial freehold. Several indicators show that respondents do not have a positive view of forest harvesting operations as they point out environmental impacts of these operations and a need for increased control over timber harvested and road density. Respondents also expressed a desire for an increase in protected areas. Given the on-going debate over wood supply in New Brunswick, it is noteworthy that the NBDNR wood supply goal received the lowest support of the broad goals listed in the survey.

Another important finding from the survey is the desire for inclusion in forest policy and forest management processes. Participants expressed dissatisfaction with current efforts of NBDNR to represent public interests and involve the public in decision making. There was strong support for the notion that the public should act as a full and equal partner in forest policy and management. A more limited role for the public, that of reviewing and commenting on plans prepared by professionals, received slightly less support. Moreover, not many expressed support for the status quo. However, respondents were rarely willing to make a personal commitment to addressing forest issues.

The high interest expressed for a public role in forest policy and management but low willingness to commit substantial time to this endeavor suggests a different suite of public involvement tools should be used than those that have traditionally been employed. Based on the high response rate to this survey, reluctance to commit time does not equate to lack of caring about the forest. The survey clearly indicates that the public does care. The challenge is to devise public involvement mechanisms in which individuals or groups would be willing to engage and provide input into meaningful debates.

We also have to keep in mind that, aside from deciding to devote personal time to volunteer for causes that are important to them, individuals often support organizations or groups that represent their views. The idea that groups might be used to bring various viewpoints into discussions about forest policy and management is one that seems to appeal to respondents. The provincial departments (NBDNR and Environment) and organizations with environmental mandates were the most popular choices to represent the views of respondents on forest policy and management. The forestry industry and other traditional stakeholder groups such as recreation groups were far less popular. Again, this challenges some of the traditional approaches to forest management, and suggests New Brunswickers want other stakeholders to have more input. Similarly, respondents are willing to see a greater diversity of stakeholders have responsibility in managing Crown lands, and develop alternative models for management of those lands. Environmental organizations, local communities, and woodlot owners are the preferred choices for all respondents in the event that government considers new approaches to managing Crown land. Although respondents from urban areas expressed a slight preference for environmental organizations and those from forest-dependent areas marginally preferred local communities and woodlot owners, their views were surprisingly similar, with support for environmental organizations varying 10% or less. This is also consistent with the values respondents expressed toward the forests. Thus, as was the case with environmental values, the desire for change is not an urban-centered minority view. These perspectives were shared by the urban and the most highly forest-dependent areas of the province.

The active use of the forest for a variety of purposes is another concern of respondents from across the province. A very high proportion of respondents report visiting different types of forests at least yearly. Parks and conservation areas were the most popular types, but a majority of respondents also have access to private woodlots. Most respondents from all areas of the province also engage in recreational activities on forest land and use non-timber forest products. Despite this connection to New Brunswick's forests, the public demonstrated a low level of formal knowledge regarding forest management and policy. Survey results show a relatively poor knowledge of simple facts about forestry or about specific forest policy initiatives. This creates a challenge for policy makers in relation to increasing the decision-making role of a public that lacks information about the issues.

Meaningful discussion about forest issues requires building a common understanding of key elements related to the issues that are being addressed. The results show that we cannot assume that people already have shared understandings or assumptions about forests themselves or the values that determine what individuals view as "good" or "bad" management or policy. Policy discussions and debates over management approaches should begin with a review of key concepts, and frank and open discussions about the facts that are agreed upon and facts or assertions that are in dispute. As well, the debate should bring in as much scientific, technical, and local knowledge as possible to build a common ground of understanding regarding the issue at stake.

Taken as a whole, the survey presents "what people think" about various aspects of forest policy and forest management. Some of this information will complement the Forest Management Task Force's work on different management scenarios for New Brunswick's forests. Understanding what New Brunswickers think about and want from their forests will assist not only the government, but other players in resource management in assessing the social acceptability of various scenarios. This information will also help determine which ones might best respond to the province's needs. As well, the observations described here should help NBDNR look at issues that are beyond the mandate of the Task Force, such as public involvement in forest policy making and forest management. So, whereas this report presents a first analysis of the survey results, more needs to be done to refine this understanding and to understand the rationale behind it and the role that sociodemographic factors play in shaping peoples views. Furthermore, although this study offers a snapshot of New Brunswick public perception of forest management in 2007, it would be beneficial to follow up this effort with additional periodic surveys to monitor how the situation evolves. The current pressure to make changes in forest policy and management is a clear demonstration that societal values and expectations toward the forests are not static. Their evolution can be documented and can be used to integrate a social dimension into decision making related to forest policy and management.

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APPENDIX 1: METHODS

A1.1 Survey methods

A1.1.1 Type of survey

There are a number of ways to collect information using a survey. For this study, we decided on a mail survey because it provides latitude in the type of questions that can be asked, and offers a convenient method for participants because they can choose to complete the survey at their own pace and at a time that is convenient for them.

A1.1.2 Selecting participants

The objective of the survey was to collect information about New Brunswick citizens' views regarding forest management and policy in the province. We wanted to be certain to have respondents from different areas of the province, to capture the diverse perspectives that residents might have on the issues addressed in the survey, and to be better able to understand the differences with respect to how they use, value, and hold management and policy preferences for the forest. Thus, rather than choosing people randomly from the entire New Brunswick population, we divided the province's population into four groups representing various levels of economic dependency on forests. The level of economic forest dependency for each of the 275 census subdivisions[1] (CSD) of New Brunswick was obtained from previous work conducted by White and Watson (2004). Their measure of forest dependency relies on the percentage of the economic base of a community that is associated with the forest industry. For the purpose of this study, all CSDs in New Brunswick were grouped under high (50% and more), moderate (25% to 49%), and low forest dependency (0 to 24%).[2] We also wanted to differentiate citizens in New Brunswick's three major urban centers: Fredericton, Saint John, and Moncton. The groups are summarized in Table A1-1. We created a map (Fig. 1) that shows the geographical distribution of the four groups of CSDs from which participants for this study were selected.

Table A1-1. Grouping of CSDs according to their level of economic forest dependency

Group's name	Level of forest dependency	CSDs included
Urban centers	0% to 24% of economic base from forest sector	CSDs within Moncton and Saint John Census Metropolitan areas and Fredericton Census Agglomeration. Those are larger areas than the city boundaries; they include other adjacent communities, e.g., Rothesay, Dieppe, and New Maryland.
Low forest dependence	0% to 24% of economic base from forest sector	All other CSDs with low forest dependence
Moderate forest dependence	25% to 49% of economic base from forest sector	All CSDs with moderate forest dependency
High forest dependence	50% and more of economic base from forest sector	All CSDs with high forest dependency

To calculate the number of participants needed from each group of CSDs, we used population data from the 2001 Census. As we knew that not every person contacted would be willing to participate in the survey, the sample size for each group was estimated based on an expected response rate of 50% and a maximum sampling error of 5% for the mail survey. Participants for the study were recruited by telephone. Telephone numbers were randomly selected from listed numbers obtained from the phone company. The list of phone numbers also displayed the CSD to which each number belonged. This facilitated ensuring that enough participants for each group of CSDs were recruited. Participant recruitment was contracted out to a call center; 7882 people were contacted during January and February 2007. The calls were made randomly over the weekdays, evenings, and weekends, and targeted people at least 18 years old. Of those contacted, 2502 people agreed to participate in the survey and provided their full mailing address. Of those who did not wish to participate, about half (51%) said that they were not interested and 22% just hung up the phone. Among other reasons for not participating, the most common were not feeling qualified to participate in the study (9%), and not having enough time (6%).

1 Census subdivision is a geographical unit established by Statistics Canada for collecting census data. A CSD is an area that is a municipality or an area that is deemed to be equivalent to a municipality by Statistics Canada for statistical reporting. Reference: http://www.census2006.ca/english/census01/products/reference/dict/geo012.htm

2 The geographic boundaries used to build the groups are the ones from the 2001 Census from Statistic Canada.

A1.1.3 Questionnaire design and administration

The questionnaire was designed by the research team, several of whom have extensive experience in this type of survey research. Initially, the team reviewed surveys from other studies that addressed issues in forest management and policy to see if they could build on existing work and adapt questions that had already been used. This would enable comparison of results from New Brunswick with other places (Smith and Lantz 2004, Bath 2006, McFarlane 2005, Robinson et al. 1997). However, as it was critical to tailor the questions to reflect New Brunswick's situation and address relevant and timely provincial issues, most of the questions included in the final version are new or adapted questions. Once a final draft was completed in English, the questionnaire was translated into French. Both versions were pre-tested with separate groups of English and French speakers. The comments from these two groups were integrated into the final version of the questionnaire that was sent to participants (see Appendix 3).

In March 2007, 2502 questionnaires were mailed out. We used a modified version of Dillman's method of mailing surveys (Dillman 2000). Two weeks after the initial mailing (which included a survey, a cover letter and a stamped return envelope), a postcard reminder was sent to all participants. Approximately 3 weeks after the postcard reminders were sent, we mailed a second copy of the questionnaire to all participants from whom we had not heard. Forty-five questionnaires were returned to us as undeliverable because of errors in the addresses and 20 individuals withdrew from the study because of a lack of knowledge about forestry. Thus, we estimate that questionnaires were delivered to 2437 participants who were recruited over the phone. Completed surveys were those that were returned and were at least partially filled in by the respondent. A total of 1521 participants (62%) returned their questionnaires. Answers from completed surveys were coded and entered into a database twice to check for errors in data entry.[3]

Aside from information on language and level of forest dependency, no other readily available information could be used to check for the presence of non-response bias. The response rates for the four groups of CSDs were very similar. We also had fairly similar rates of response from English (62%) and French (65%) participants. Table A1-2 summarizes some of the sample's characteristics, the response rate, and sampling errors. Information on sampling error provides guidelines on the reliability of the results for each group of CSDs and for the overall population of New Brunswick. Sampling error is 5% or less, suggesting that results are accurate within five percentage points19 times out of 20.

Table A1-2. Information about the mail survey and sampling error

	Major urban centers	Forest dependence			TOTAL
		low	moderate	high	
Population	321 751	281 503	69 619	56 569	729 442
Mailed surveys	627	624	625	626	2502
Undeliverable surveys	16	14	6	9	45
Delivered surveys	611	610	619	617	2457
Withdrawn by respondent	6	7	5	2	20
Completed surveys	372	378	378	393	1521
Response rate	61%	63%	62%	64%	62%
Sampling error (for a 95% confidence level)	0.05	0.05	0.05	0.05	0.03

3 Entering responses from each questionnaire two times in separate databases enables us to verify if the two databases contain the same information. When there are discrepancies, we go back to the paper questionnaire to fix errors made when the data were entered in one of the databases.

Table A1-3 Information about weighted sample

Areas	Population		Usable questionnaires		Weight factor
	Number	Proportion	Number	Proportion	
Major urban centers	321 751	44%	372	24%	1.69
Low forest dependency	281 503	39%	378	26%	1.45
Moderate forest dependency	69 619	10%	378	25%	0.36
High forest dependency	56 569	8%	393	25%	0.28
NB population	729 442		1521		

A1.2 Data analysis

In the results section, tables and graphs present results for the total (New Brunswick) and for each group of CSDs when statistically significant differences are observed. As the study sample was stratified to capture information from communities that have different levels of forest dependency, residents from each of the four groups of CSDs had differing chances of being chosen to participate in this study. For example, a quarter (25%) of all completed questionnaires came from residents of areas with high forest dependency, whereas this group comprises only 8% of the province's population (Table A1-3). To account for the unequal chances of selection of each group, weighting factors were used in the analysis so that results for the total NB population reflect the relative representation of each group within the overall population. Unless otherwise mentioned, all results for the total population are weighted distributions.

Please note that, occasionally, the frequencies do not add up to 100% because of rounding. Detailed results tables in Appendix 2 present more precise information on data distributions, and Chi-Square, analysis of variance (ANOVA), and Tukey's tests, which were used to assess the statistical significance of observed differences among groups.

Many respondents also wrote general comments about forestry issues in New Brunswick, but these comments are not part of this first analysis.

APPENDIX 2: DETAILED RESULTS

A2.1 Forest Values

Table A2.1-1. Details on ranks attributed to specific uses for New Brunswick forests by types of areas (n = 1468)

	Without "Answered but not ranked"						Answered but not ranked (%)
	Mean (SD)*	1st rank (%)	2nd rank (%)	3rd rank (%)	4th rank (%)	5th rank (%)	
As a place for protection of water, air, and soil							
Urban areas	1.70[a] (0.993)	49.6	18.4	9.6	6.0	0.8	15.3
Low forest dependence	1.93[b] (1.196)	42.6	15.3	12.6	6.6	3.8	19.2
Moderate forest dependence	1.97[ab] (1.152)	36.4	20.9	11.6	6.2	3.1	21.7
High forest dependence	1.99[ab] (1.107)	34.0	25.5	10.4	6.6	2.8	20.8
New Brunswick	1.83 (1.102)	44.5	18.0	11.0	6.3	2.3	17.9
As a place for a variety of animal and plant life							
Urban areas	2.28[a] (0.960)	14.8	44.0	14.7	8.8	2.3	15.5
Low forest dependence	2.48[b] (0.984)	10.9	36.3	19.4	12.2	1.9	19.2
Moderate forest dependence	2.68[b] (1.110)	10.1	28.7	20.9	14.0	4.7	21.7
High forest dependence	2.73[b] (1.036)	8.5	26.4	26.4	14.2	3.8	20.8
New Brunswick	2.43 (1.000)	12.4	38.3	18.0	11.0	2.5	17.8
As a source of economic wealth and jobs							
Urban areas	3.26[a] (1.405)	13.2	12.9	19.9	16.0	22.6	15.5
Low forest dependence	3.14[a] (1.542)	18.6	11.7	14.5	12.2	23.7	19.2
Moderate forest dependence	2.72[b] (1.474)	23.8	12.3	16.9	11.5	13.8	21.5
High forest dependence	2.47[b] (1.466)	30.5	12.4	16.2	8.6	11.4	21.0
New Brunswick	3.10 (1.485)	17.6	12.3	17.2	13.6	21.4	17.9
As a place for recreation and relaxation							
Urban areas	3.69 (1.086)	4.4	5.5	23.7	28.9	22.0	15.5
Low forest dependence	3.73 (1.175)	4.9	7.4	17.7	25.1	25.7	19.2
Moderate forest dependence	3.79 (1.141)	3.8	6.9	16.9	24.6	26.2	21.5
High forest dependence	3.73 (1.174)	4.8	7.6	15.2	27.6	23.8	21.0
New Brunswick	3.72 (1.131)	4.6	6.5	20.1	26.9	23.9	17.9
As a source of meat, firewood, berries, and other non-timber products							
Urban areas	4.07[a] (1.033)	2.4	3.6	16.8	24.8	36.9	15.5
Low forest dependence	3.73[b] (1.174)	3.8	10.2	16.4	24.6	25.9	19.2
Moderate forest dependence	3.83[ab] (1.217)	3.8	9.2	13.1	21.5	30.8	21.5
High forest dependence	4.08[a] (1.084)	1.9	7.5	10.4	22.6	36.8	20.8
New Brunswick	3.91 (1.119)	3.0	7.0	15.8	24.3	32.1	17.9

* Any two means that are not followed by the same letter are significantly different ($p < 0.5$, from Tukey's test). Mean exclude the no opinion category.

Table A2.1-2. Details on expression of values for the forest (1497<n>1416)

Item [1]	Mean (SD)* (%)	Strongly agree (%)	Agree (%)	Neither agree nor disagree (%)	Disagree (%)	Strongly disagree (%)	No opinion (%)
EXISTENCE VALUES							
It is important to maintain forests for future generations							
Urban areas	1.16 (0.421)	85.0	13.7	0.5	0.0	0.3	0.5
Low forest dependence	1.14 (0.442)	88.1	10.8	0.5	0.0	0.5	0.0
Moderate forest dependence	1.12 (0.337)	88.6	11.3	0.0	0.0	0.0	0.8
High forest dependence	1.17 (0.463)	85.2	13.0	0.9	0.9	0.0	0.0
New Brunswick	1.15 (0.425)	86.8	12.3	0.5	0.1	0.4	0.3
Whether or not I get to visit the forest as much as I like, it is important for me to know that forests exist in my province							
Urban areas	1.16 (0.391)	83.9	14.5	0.8	0.0	0.0	0.8
Low forest dependence	1.19 (0.544)	85.1	12.8	0.7	0.0	1.1	0.2
Moderate forest dependence	1.22 (0.604)	82.1	14.2	0.7	0.0	1.5	1.5
High forest dependence	1.24 (0.634)	81.5	13.9	1.9	0.9	0.9	0.9
New Brunswick	1.18 (0.498)	84.0	13.8	0.9	0.1	0.6	0.6
INHERENT WORTH							
Forests should have the right to exist for their own sake, regardless of human concerns and uses							
Urban areas	1.96[a] (1.029)	41.1	33.1	12.9	10.8	0.8	1.3
Low forest dependence	2.06[ab] (1.121)	39.1	33.2	11.7	12.5	2.8	0.7
Moderate forest dependence	2.03[ab] (1.128)	38.6	34.1	9.8	10.6	3.8	3.0
High forest dependence	2.25[b] (1.148)	29.6	34.3	13.9	16.7	2.8	2.8
New Brunswick	2.03 (1.086)	39.2	33.3	12.2	11.9	2.0	1.4
Forests should be left to grow, develop, and succumb to natural forces without being managed by humans							
Urban areas	3.29 (1.079)	7.6	15.8	22.9	43.5	8.2	1.9
Low forest dependence	3.42 (1.101)	7.7	12.5	20.8	45.4	11.8	1.7
Moderate forest dependence	3.40 (1.168)	9.8	12.0	17.3	45.1	12.8	3.0
High forest dependence	3.56 (1.108)	7.4	10.2	18.5	46.3	16.7	0.9
New Brunswick	3.37 (1.100)	7.8	13.8	21.2	44.6	10.7	1.9
SPIRITUAL VALUES							
Humans should have more respect and admiration for the forests							
Urban areas	1.44 (0.554)	58.9	37.2	3.0	0.0	0.0	0.8
Low forest dependence	1.39 (0.569)	65.1	30.6	4.2	0.0	0.0	0.0
Moderate forest dependence	1.38 (0.741)	70.1	23.9	2.2	0.7	2.2	0.7
High forest dependence	1.35 (0.662)	72.9	22.4	3.7	0.0	0.9	0.0
New Brunswick	1.41 (0.588)	63.4	32.3	3.5	0.1	0.3	0.4
Forests let us feel close to nature							
Urban areas	1.52 (0.591)	52.1	42.7	4.0	0.3	0.0	0.8
Low forest dependence	1.42 (0.555)	60.9	35.4	3.1	0.0	0.0	0.6
Moderate forest dependence	1.43 (0.644)	62.1	31.8	3.0	0.8	0.8	1.5
High forest dependence	1.41 (0.609)	63.9	32.4	2.8	0.9	0.0	0.0
New Brunswick	1.47 (0.585)	57.4	38.1	3.5	0.3	0.1	0.7
Forests give us a sense of peace and well-being							
Urban areas	1.47 (0.664)	59.6	34.6	3.8	0.3	0.8	0.8
Low forest dependence	1.41 (0.582)	62.9	32.4	4.0	0.2	0.0	0.5
Moderate forest dependence	1.40 (0.622)	65.2	28.0	4.5	0.0	0.0	2.3
High forest dependence	1.44 (0.646)	61.5	32.1	3.7	0.9	0.9	0.9
New Brunswick	1.44 (0.628)	61.5	32.9	4.0	0.3	0.4	0.8
Forest rejuvenate the human spirit							
Urban areas	1.82 (0.755)	36.5	45.5	14.7	1.3	0.3	1.7
Low forest dependence	1.73 (0.748)	41.2	40.4	12.5	1.7	0.0	4.1
Moderate forest dependence	1.71 (0.761)	43.8	38.5	13.1	0.8	0.0	3.8
High forest dependence	1.72 (0.790)	43.9	36.4	14.0	0.9	0.9	3.7
New Brunswick	1.77 (0.756)	39.6	42.1	13.7	1.4	0.2	3.0

Item [1]	Mean (SD)* (%)	Strongly agree (%)	Agree (%)	Neither agree nor disagree (%)	Disagree (%)	Strongly disagree (%)	No opinion (%)
If forests are not threatened by human actions, we should use them to add to the quality of human life							
Urban areas	2.06 (0.916)	25.0	50.9	13.2	5.2	2.4	3.3
Low forest dependence	1.95 (0.916)	32.8	43.4	12.9	5.2	1.7	4.1
Moderate forest dependence	1.90 (0.895)	36.1	39.8	14.3	4.5	0.8	4.5
High forest dependence	1.86 (0.887)	39.3	39.3	15.0	3.7	0.9	1.9
New Brunswick	1.99 (0.914)	30.2	46.0	13.3	5.0	1.9	3.6
Wildlife, plants, and humans should have equal rights to live and develop							
Urban areas	2.07 (1.011)	31.7	42.0	13.3	9.8	1.9	1.3
Low forest dependence	1.97 (0.991)	35.7	40.0	13.8	5.5	2.8	2.2
Moderate forest dependence	1.94 (1.027)	39.8	34.6	13.5	7.5	2.3	2.3
High forest dependence	2.00 (0.975)	33.9	41.3	14.7	7.3	1.8	0.9
New Brunswick	2.01 (1.002)	34.2	40.5	13.6	7.7	2.3	1.7
Forest are sacred places							
Urban areas	2.37 (1.066)	24.2	30.6	27.5	13.2	2.3	2.3
Low forest dependence	2.34 (1.149)	28.4	27.3	23.6	12.9	3.7	4.1
Moderate forest dependence	2.25 (1.110)	31.3	24.4	26.7	10.7	2.3	4.6
High Forest dependence	2.38 (1.152)	26.7	27.6	25.7	12.4	3.8	3.8
New Brunswick	2.35 (1.109)	26.6	28.5	25.8	12.8	2.9	3.3
UTILITARIAN/ECONOMIC							
Forests can be improved through management by humans							
Urban areas	2.05[b] (0.827)	23.5	53.4	14.7	6.0	0.5	1.9
Low forest dependence	1.84[ab] (0.803)	35.6	47.3	11.7	3.5	0.6	1.3
Moderate forest dependence	1.77[a] (0.757)	38.3	46.6	11.3	0.8	0.8	2.3
High forest dependence	1.78[a] (0.832)	41.7	42.6	10.2	3.7	0.9	0.9
New Brunswick	1.92 (0.819)	31.0	49.6	12.9	4.3	0.6	1.6
Forests should be managed to meet as many human needs as possible							
Urban areas	2.36[b] (1.217)	28.0	36.3	10.4	19.8	4.7	0.8
Low forest dependence	2.13[ab] (1.201)	39.9	28.4	12.4	14.4	3.7	1.3
Moderate forest dependence	1.99[a] (1.168)	45.5	26.5	10.6	12.9	3.0	1.5
High forest dependence	1.94[a] (1.107)	45.9	30.3	8.3	12.8	1.8	0.9
New Brunswick	2.20 (1.206)	35.6	31.8	11.0	16.5	3.9	1.1
The primary function of forests should be for products and services that are useful to humans							
Urban areas	3.57[b] (1.102)	3.9	16.3	17.5	40.9	19.7	1.6
Low forest dependence	3.32[ab] (1.226)	10.6	15.4	20.1	36.4	15.9	1.6
Moderate forest dependence	3.13[a] (1.276)	13.4	19.4	20.1	31.3	13.4	2.2
High forest dependence	3.15[a] (1.276)	12.8	20.2	18.3	33.0	13.8	1.8
New Brunswick	3.40 (1.192)	8.1	16.5	18.8	37.6	17.2	1.7
Forests should exist mainly to serve human needs							
Urban areas	3.79[b] (1.000)	2.4	10.7	15.4	47.3	23.0	1.1
Low forest dependence	3.46[a] (1.221)	8.9	15.3	16.8	38.6	19.8	0.6
Moderate forest dependence	3.42[a] (1.280)	12.0	11.3	18.8	35.3	20.3	2.3
High forest dependence	3.46[a] (1.180)	8.3	13.9	17.6	42.6	16.7	0.9
New Brunswick	3.60 (1.143)	6.3	12.8	16.4	42.5	21.0	1.0
Forests that are not used for the benefit of humans are a waste of our natural resources							
Urban areas	4.04[b] (1.025)	2.4	8.3	9.9	39.6	37.8	2.0
Low forest dependence	3.84[ab] (1.193)	7.1	8.4	10.8	38.8	33.7	1.1
Moderate forest dependence	3.80[ab] (1.174)	6.7	9.0	11.9	38.8	29.9	3.7
High forest dependence	3.65[a] (1.253)	10.2	9.3	13.0	40.7	25.9	0.9
New Brunswick	3.91 (1.131)	5.3	8.5	10.7	39.3	34.5	1.7

[1] Answers are rated on a scale of 1 to 5, where 1 = Strongly agree and 5 = Strongly disagree

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

A2.2. Use of the Forest

Table A2.2-1. Details on types of forest used (n = 1415)

	Percentage of respondents by group				New Brunswick
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Provincial parks and protected areas (e.g., Mt. Carleton) *	65.5	57.3	59.3	57.3	61.1
Private woodlots *	49.6	67.1	65.9	60.9	58.8
National parks (Kouchibouguac, Fundy) *	52.3	35.0	23.7	27.3	40.9
Other Crown lands *	29.8	44.1	48.9	53.2	39.0
Forests within city limits *	56.9	21.0	34.8	26.4	38.6
I visit forests but I'm not sure who owns them	27.5	34.7	30.4	27.3	30.6
Land owned by forest companies (freehold) *	17.6	25.5	40.0	40.9	24.6
Other forest lands	4.0	6.0	5.9	5.5	5.1
None of the above; I don't visit any forests	6.7	5.1	5.9	5.5	5.9

* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.2-2. Details on access to own woodlot or one owned by family (n = 1480)

	Percentage of respondents by group				New Brunswick
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Spend time on your own woodlot or one owned by a family member? *	42.6	65.0	56.1	52.8	53.3

* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.2-3. Details on activities done in New Brunswick forests (n = 1421)

	Percentage of respondents by group				New Brunswick
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Walking/hiking	79.3	78.6	75.7	72.7	78.2
Visiting a camp or cottage	52.1	54.4	62.5	61.8	54.8
Picnicking	46.7	43.2	44.4	48.2	45.3
Camping	44.0	43.2	48.5	42.7	44.1
Fishing *	37.7	47.0	51.1	46.4	43.2
Hunting *	23.1	43.5	43.4	45.5	34.6
Four-wheeling/ATVing *	19.9	37.9	41.9	45.5	30.9
Canoeing/kayaking/boating *	27.7	31.6	39.7	35.5	30.9
Bird watching	27.7	26.3	20.7	18.2	25.8
Skiing	15.6	11.9	14.1	10.9	13.7
Snowmobiling *	8.3	13.7	14.0	20.0	11.8
Other	11.6	11.4	10.3	9.1	11.2
I do not participate in any of these activities	5.6	4.0	5.1	5.5	4.9

* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.2-4. Details on forest products used (n = 1422)

	Percentage of respondents by group				New Brunswick
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Food products (e.g., mushrooms, berries, or fiddleheads)	79.6	74.1	78.1	80.0	77.4
Maple products (e.g., syrup, candy)*	70.1	56.0	64.0	61.8	63.5
Firewood*	50.0	68.8	62.5	62.7	59.4
Fish	57.6	57.1	66.9	64.5	58.8
Christmas trees or fir tips	53.5	54.2	55.9	50.0	53.7
Small game (e.g., rabbits, partridge)*	21.8	41.2	44.9	45.5	33.3
Big game (e.g., moose, deer, bear)*	21.5	42.5	42.6	40.5	33.1
Sawlogs or other wood products*	18.8	40.5	42.6	42.7	31.3
Material for handicraft products	25.0	21.7	25.7	21.6	23.5
Furbearers (e.g., mink, beaver)	1.6	2.9	2.2	1.8	2.2
I do not use any of these forest products	3.0	1.1	.7	1.8	2.0

* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

A2-3. Views on Forest Policy

Table A2.3-1. Details about assessment of NB Government's management goals (1485≤n≥1449)

	Mean (SD)[1,*]	Very important (%)	Somewhat important (%)	Neither important nor unimportant (%)	Somewhat important (%)	Not important at all (%)	No opinion (%)
To protect water quality							
Urban areas	1.08 (0.347)	91.4	5.4	0.5	0.5	0.0	2.2
Low forest dependence	1.09 (0.359)	93.0	6.1	0.7	0.0	0.2	0.0
Moderate forest dependence	1.06 (0.300)	92.6	4.4	0.0	0.7	0.0	2.2
High forest dependence	1.07 (0.295)	93.5	4.6	0.9	0.0	0.0	0.9
New Brunswick	1.08 (0.343)	92.3	5.5	0.6	0.3	0.1	1.3
To provide wildlife habitat							
Urban areas	1.19 (0.484)	81.9	13.7	1.3	0.8	0.0	2.3
Low forest dependence	1.18 (0.453)	84.6	13.9	1.3	0.0	0.2	0.0
Moderate forest dependence	1.19 (0.477)	82.6	14.4	0.8	0.0	0.0	2.3
High forest dependence	1.21 (0.504)	81.7	15.6	0.9	0.9	0.0	0.9
New Brunswick	1.19 (0.473)	83.0	14.0	1.2	0.4	0.1	1.3
To protect forests from fire							
Urban areas	1.27 (0.596)	76.6	16.0	3.5	0.8	0.3	2.7
Low forest dependence	1.21 (0.567)	84.7	10.8	2.9	1.1	0.2	0.2
Moderate forest dependence	1.18 (0.484)	82.8	13.4	0.7	0.7	0.0	2.2
High forest dependence	1.21 (0.519)	84.1	13.1	1.9	0.9	0.0	0.0
New Brunswick	1.23 (0.570)	80.9	13.6	2.9	0.9	0.2	1.5
To protect forests from wood theft							
Urban areas	1.42 (0.655)	63.2	27.2	4.8	1.3	0.0	3.5
Low forest dependence	1.37 (0.686)	71.5	21.3	4.6	1.3	0.6	0.7
Moderate forest dependence	1.30 (0.603)	73.9	19.4	3.0	1.5	0.0	2.2
High forest dependence	1.38 (0.767)	74.1	18.5	3.7	0.9	1.9	0.9
New Brunswick	1.39 (0.672)	68.2	23.6	4.5	1.3	0.4	2.1
To protect forests from insects pests and diseases							
Urban areas	1.38 (0.718)	69.2	21.5	3.8	1.6	0.8	3.0
Low forest dependence	1.39 (0.712)	69.9	22.4	4.6	1.3	0.7	1.1
Moderate forest dependence	1.35 (0.699)	72.1	19.1	3.7	2.2	0.7	2.2
High forest dependence	1.33 (0.664)	75.0	20.4	2.8	0.9	0.9	0.0
New Brunswick	1.38 (0.709)	70.2	21.5	4.0	1.5	0.8	2.0
To maintain the diversity and characteristics of New Brunswick's forest							
Urban areas	1.34 (0.623)	69.1	23.1	2.2	1.3	0.3	4.0
Low forest dependence	1.35 (0.640)	69.7	23.1	3.1	0.7	0.6	2.8
Moderate forest dependence	1.30 (0.536)	69.2	23.3	2.3	0.8	0.0	4.5
High forest dependence	1.31 (0.518)	71.0	25.2	2.8	0.0	0.0	0.9
New Brunswick	1.34 (0.614)	69.5	23.3	2.6	0.9	0.4	3.3
To ensure that wood supply for the forest industry remains at current levels							
Urban areas	1.87 (1.011)	42.9	34.5	10.4	6.8	2.3	3.1
Low forest dependence	1.82 (1.037)	49.4	28.9	10.9	6.6	2.4	1.8
Moderate forest dependence	1.71 (0.970)	51.9	29.3	7.5	5.3	2.3	3.8
High forest dependence	1.65 (0.894)	55.1	28.0	9.3	4.7	0.9	1.9
New Brunswick	1.82 (1.010)	47.2	31.4	10.2	6.4	2.2	2.6

[1] Rated on a scale of 1 to 5, where 1 = Very important and 5 = Not important at all

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test)

Table A2.3-2. Details about who thinks goals are missing from NBDNR's management strategy (n = 1499)

	No (%)	Yes (%)	No Opinion (%)
Urban areas	29.9	29.2	40.8
Low forest dependence	28.1	35.4	36.5
Moderate forest dependence	28.8	32.0	39.2
High forest dependence	26.7	38.6	34.7
New Brunswick	28.9	32.6	38.5

A2.4 Views on Forest Management

Table A2.4-1 Details about satisfaction with current forest management practices (1315≤n≥1204)

	Mean (SD)[1,*]	Totally satisfied (%)	Somewhat satisfied\ (%)	Neither satisfied nor dissatisfied (%)	Somewhat dissatisfied (%)	Totally dissatisfied (%)	No Opinion (%)
Crown land							
Urban areas	3.11 (1.138)	2.8	30.8	16.0	23.1	11.1	16.3
Low forest dependence	3.12 (1.170)	5.9	27.6	18.0	27.4	11.5	9.6
Moderate forest dependence	3.24 (1.149)	3.8	24.6	20.8	26.2	13.8	10.8
High forest dependence	3.27 (1.180)	3.7	26.6	17.4	26.6	15.6	10.1
New Brunswick	3.14 (1.155)	4.2	28.6	17.3	25.3	11.8	12.7
Industrial freehold							
Urban areas	3.44 (1.161)	1.7	21.5	17.7	23.6	19.2	16.3
Low forest dependence	3.52 (1.165)	4.5	15.1	19.4	29.5	20.4	11.2
Moderate forest dependence	3.40 (1.178)	3.3	21.5	19.8	23.1	19.0	13.2
High forest dependence	3.36 (1.189)	4.0	21.8	18.8	24.8	17.8	12.9
New Brunswick	3.46 (1.166)	3.1	19.0	18.6	26.0	19.5	13.7
Private woodlots							
Urban areas	2.77 (1.033)	6.7	27.3	23.7	14.8	4.1	23.4
Low forest dependence	2.63 (1.138)	13.0	32.7	21.6	13.0	6.7	13.0
Moderate forest dependence	2.79 (1.160)	9.4	28.9	24.2	12.5	9.4	15.6
High forest dependence	2.65 (1.123)	11.3	31.1	21.7	13.2	5.7	17.0
New Brunswick	2.70 (1.097)	9.7	29.8	22.8	13.8	5.7	18.2

[1] Rated on a scale of 1 to 5, where 1 = Totally satisfied and 5 = Totally dissatisfied

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test)

Table A2.4-2 Details on agreement with statements about forest management (1259≤n≥1354)

	Mean (SD)*	Strongly agree (%)	Agree (%)	Neither agree nor disagree (%)	Disagree (%)	Strongly disagree (%)	No Opinion (%)
Forest practices have few long-term negative effects on the environment							
Major urban centers	3.64[b] (1.310)	8.3	14.6	9.9	30.6	30.1	6.6
Low forest dependence	3.23[a] (1.413)	13.1	24.4	10.7	24.4	24.2	3.1
Moderate forest dependence	3.20[a] (1.391)	15.7	19.4	13.4	28.4	20.1	3.0
Highforest dependence	3.26[a] (1.334)	9.3	26.9	12.0	26.9	22.2	2.8
New Brunswick	3.41 (1.375)	10.9	19.8	10.7	27.7	26.3	4.6
The amount of timber cut in New Brunswick's forest is too high							
Major urban centers	2.29 (0.962)	22.2	30.6	29.3	8.3	0.8	8.8
Low forest dependence	2.22 (1.037)	25.4	36.1	21.5	7.2	3.1	6.6
Moderate forest dependence	2.12 (1.024)	30.4	36.3	20.0	7.4	2.2	3.7
High forest dependence	2.25 (1.162)	31.1	29.2	17.0	14.2	2.8	5.7
New Brunswick	2.24 (1.015)	24.9	33.2	24.5	8.2	2.0	7.2
The economic contributions of the forest industry outweigh environmental impacts							
Major urban centers	3.80[b] (1.194)	4.6	12.5	12.7	30.9	33.0	6.3
Low forest dependence	3.38[a] (1.348)	10.9	17.9	14.4	27.4	24.1	5.3
Moderate forest dependence	3.15[a] (1.301)	13.4	19.4	17.2	30.6	14.2	5.2
High forest dependence	3.20[a] (1.317)	11.2	21.5	30.6	25.2	18.7	5.6
New Brunswick	3.53 (1.299)	8.4	15.9	25.2	29.1	26.7	5.8
Forests are being managed for an appropriate mix of values and uses							
Major urban centers	3.10[a] (1.005)	1.6	28.6	24.7	26.9	7.1	11.0
Low forest dependence	2.89[b] (1.118)	8.2	31.2	22.4	22.4	7.3	8.4
Moderate forest dependence	2.92[ab] (1.084)	7.6	28.0	27.3	22.7	6.8	7.6
High forest dependence	2.92[ab] (1.127)	5.6	36.4	20.6	21.5	9.3	6.5
New Brunswick	2.99 (1.071)	5.0	30.1	23.7	24.4	7.3	9.4
The forest industry has too much control over forest management in New Brunswick							
Major urban centers	2.38[a] (1.061)	20.6	29.4	24.1	11.9	2.3	11.7
Low forest dependence	2.19[b] (1.063)	27.5	35.3	16.3	10.9	2.2	7.8
Moderate forest dependence	2.21[ab] (1.122)	29.9	29.9	20.1	9.0	3.7	7.5
High forest dependence	2.17[ab] (1.177)	34.5	27.3	15.5	11.8	3.6	7.3
New Brunswick	2.27 (1.080)	25.2	31.5	20.1	11.2	2.5	9.5
New Brunswick has enough protected areas (e.g., provincial and national parks, conservation areas)							
Major urban centers	3.69[a] (1.054)	1.1	16.6	15.5	39.2	22.9	4.7
Low forest dependence	3.44[b] (1.228)	7.0	19.2	16.2	33.7	21.2	2.8
Moderate forest dependence	3.38[b] (1.246)	7.4	20.2	15.6	33.3	19.3	4.4
High forest dependence	3.21[b] (1.308)	11.9	20.2	20.2	25.7	19.3	2.8
New Brunswick	3.53 (1.173)	4.8	18.2	16.1	35.3	21.6	3.8

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

Table A2.4-3. Details on impact of forest disturbances and forest activities (1423≤n≥1404)

	Mean (SD)*	Very positive (%)	Positive (%)	Neither positive nor negative (%)	Negative (%)	Very negative (%)	No opinion (%)
Forest Road Density							
Urban centers	3.16[b] (1.078)	5.2	18.0	19.7	28.9	6.1	22.1
Low forest dependence	2.87[ab] (1.164)	12.7	22.2	22.8	24.7	5.6	12.0
Moderate forest dependence	2.85[ab] (1.123)	10.1	24.0	22.5	22.5	4.7	16.3
High forest dependence	2.82[a] (1.144)	12.5	25.0	20.2	26.0	3.8	12.5
New Brunswick	2.98 (1.132)	9.1	20.8	21.2	26.4	5.6	16.9
Herbicide use in the forest							
Urban centers	3.38 (1.250)	8.8	15.1	12.8	33.8	15.6	14.0
Low forest dependence	3.28 (1.330)	10.7	20.6	11.4	29.5	18.7	9.2
Moderate forest dependence	3.22 (1.290)	9.3	20.2	14.7	27.1	16.3	12.4
High forest dependence	3.32 (1.270)	8.7	19.2	15.4	30.8	17.3	8.7
New Brunswick	3.32 (1.287)	9.5	18.0	12.6	31.3	17.0	11.6
Amount of timber harvested							
Urban centers	3.24 (1.214)	11.3	11.1	20.9	32.6	11.1	12.9
Low forest dependence	2.95 (1.310)	16.9	22.0	15.0	30.1	10.7	5.3
Moderate forest dependence	3.05 (1.302)	14.8	18.0	18.0	29.7	11.7	7.8
High forest dependence	3.12 (1.273)	13.7	17.6	19.6	31.4	11.8	5.9
New Brunswick	3.10 (1.272)	14.0	16.5	18.3	31.2	11.1	9.0
ATVs, 4X4s, & snowmobiles							
Urban centers	3.49[b] (1.124)	7.4	7.1	28.8	31.5	17.7	7.6
Low forest dependence	3.10[a] (1.119)	10.0	16.0	34.2	25.8	9.7	4.3
Moderate forest dependence	3.14[a] (1.088)	7.6	15.2	38.6	21.2	11.4	6.1
High forest dependence	3.11[a] (1.003)	7.5	13.2	45.3	21.7	8.5	3.8
New Brunswick	3.27 (1.125)	8.4	11.7	33.0	27.6	13.3	5.9
Spruce budworm outbreak							
Urban centers	3.66[b] (1.298)	10.1	8.7	11.1	33.7	27.4	9.1
Low forest dependence	3.28[a] (1.469)	18.3	12.6	11.3	27.4	23.9	6.5
Moderate forest dependence	3.40[ab] (1.402)	14.6	10.8	13.1	30.8	23.8	6.9
High forest dependence	3.51[ab] (1.425)	15.1	9.4	10.4	31.1	28.3	5.7
New Brunswick	3.47 (1.396)	14.1	10.4	11.3	30.8	25.8	7.6
Forest fire							
Urban centers	3.47 (1.421)	14.1	9.8	18.1	20.9	30.3	6.7
Low forest dependence	3.19 (1.584)	25.4	9.0	13.1	20.6	28.5	3.5
Moderate forest dependence	3.29 (1.549)	20.6	11.5	13.0	19,8	30.5	4.6
High forest dependence	3.35 (1.537)	20.8	9.4	14.2	20.8	31.1	3.8
New Brunswick	3.33 (1.512)	19.6	9.6	15.4	20.7	29.7	5.1

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

Table A2.4-4. Details on acceptability of forest disturbances and forest activities (1479≤n≥1444)

	Mean (SD)*	Very acceptable (%)	Acceptable (%)	Neither acceptable nor unacceptable (%)	Unacceptable (%)	Very unacceptable (%)	No opinion (%)
Forest Road Density							
Urban centers	2.97 (1.008)	2.0	28.8	19.8	20.7	5.0	23.8
Low forest dependence	2.83 (1.068)	7.2	33.1	18.4	24.5	3.8	12.9
Moderate forest dependence	2.72 (0.993)	7.1	32.3	23.6	18.1	2.4	16.5
High forest dependence	2.72 (1.046)	6.7	38.5	19.2	17.3	4.8	13.5
New Brunswick	2.87 (1.038)	4.6	31.5	19.6	21.7	4.3	18.1
Herbicide use in the forest							
Urban centers	3.41 (1.052)	2.5	17.3	20.9	32.7	12.2	14.5
Low forest dependence	3.37 (1.178)	3.6	24.5	13.9	31.3	16.5	10.3
Moderate forest dependence	3.33 (1.153)	4.7	20.3	19.5	30.5	14.1	10.9
High forest dependence	3.36 (1.157)	3.8	21.7	18.9	30.2	16.0	9.4
New Brunswick	3.38 (1.120)	3.2	20.7	17.9	31.8	14.3	12.1
Amount of timber harvested							
Urban centers	3.23 (1.024)	3.3	20.1	25.3	31.1	8.1	12.2
Low forest dependence	3.24 (1.126)	5.7	21.5	20.3	33.5	10.9	8.0
Moderate forest dependence	3.24 (1.098)	3.9	24.4	18.9	33.1	10.2	9.4
High forest dependence	3.14 (1.157)	4.8	27.9	21.2	26.0	12.5	7.7
New Brunswick	3.23 (1.081)	4.4	21.6	22.5	31.8	9.7	10.0
ATVs, 4X4s, & snowmobiles							
Urban centers	3.28[b] (1.129)	4.1	20.8	26.3	24.2	15.4	9.1
Low forest dependence	2.89[a] (1.103)	8.2	30.9	26.6	21.0	7.9	5.4
Moderate forest dependence	2.81[a] (1.043)	6.1	35.1	26.7	16.0	6.9	9.2
High forest dependence	2.77[a] (1.062)	7.6	35.2	26.7	16.2	6.7	7.6
New Brunswick	3.05 (1.125)	6.1	27.1	26.5	21.6	11.0	7.6
Spruce budworm outbreak							
Urban centers	3.44 (1.099)	3.6	15.3	23.6	29.4	16.1	12.0
Low forest dependence	3.39 (1.195)	5.3	18.0	20.1	25.9	18.6	12.2
Moderate forest dependence	3.44 (1.081)	3.9	13.2	25.6	28.7	14.7	14.0
High forest dependence	3.53 (1.146)	4.9	14.6	19.4	29.1	21.4	10.7
New Brunswick	3.43 (1.082)	4.4	16.1	22.1	27.9	17.3	12.2
Forest fire							
Urban centers	3.47 (1.200)	4.7	16.3	26.2	20.3	24.2	8.3
Low forest dependence	3.34 (1.344)	10.7	16.5	21.2	19.5	24.9	7.3
Moderate forest dependence	3.50 (1.296)	6.9	16.2	18.5	22.3	26.2	10.0
High forest dependence	3.37 (1.322)	8.6	19.0	20.0	20.0	24.8	7.6
New Brunswick	3.42 (1.277)	7.5	16.5	23.0	20.2	24.7	8.0

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

Table A2.4-5. Details on level of control needed for forest disturbances, and forest activities (1485≤n≥1469)

	Mean (SD)*	No need for any control (%)	Need for less control (%)	Existing control is adequate (%)	Need for slightly more control (%)	Need for much more control (%)	No opinion (%)
Forest Road Density							
Urban centers	3.91 (0.832)	0.8	0.8	23.8	33.0	20.8	20.8
Low forest dependence	3.85 (0.961)	1.9	3.6	26.0	30.7	25.8	12.1
Moderate forest dependence	3.77 (0.936)	2.3	2.3	30.3	30.3	21.2	13.6
High forest dependence	3.70 (0.945)	2.9	1.9	32.4	32.4	19.0	11.4
New Brunswick	3.86 (0.907)	1.5	2.1	25.9	31.8	22.6	16.1
Herbicide use in the forest							
Urban centers	4.08 (0.878)	0.8	2.0	18.8	31.6	32.4	14.4
Low forest dependence	4.06(0.976)	1.7	2.8	22.1	25.0	37.5	10.9
Moderate forest dependence	4.11 (0.872)	0.8	0.8	21.5	30.0	35.4	11.5
High forest dependence	4.04 (0.978)	2.8	0.9	22.4	29.9	36.4	7.5
New Brunswick	4.07 (0.925)	1.3	2.1	20.6	28.8	35.0	12.3
Amount of timber harvested							
Urban centers	4.17 (0.808)	0.5	1.2	15.7	35.6	34.8	12.2
Low forest dependence	4.15 (0.949)	1.9	2.4	17.9	30.1	42.2	5.4
Moderate forest dependence	4.26 (0.846)	0.8	0.8	16.8	29.8	44.3	7.6
High forest dependence	4.10 (0.962)	2.9	1.9	19.0	31.4	39.0	5.7
New Brunswick	4.17 (0.883)	1.2	1.7	16.9	32.6	38.9	8.6
ATVs, 4X4s, & snowmobiles							
Urban centers	3.93[b] (1.029)	2.4	3.6	26.9	24.7	34.9	7.5
Low forest dependence	3.62[a] (1.128)	4.7	8.6	31.4	23.6	26.5	5.2
Moderate forest dependence	3.66[a] (1.029)	3.1	6.9	39.2	23.1	21.5	6.2
High forest dependence	3.44[a] (1.123)	5.6	9.3	38.3	21.5	20.6	4.7
New Brunswick	3.74 (1.089)	3.6	6.3	30.7	23.8	29.3	6.3
Spruce budworm outbreak							
Urban centers	3.82 (0.981)	1.6	4.9	25.8	28.5	25.0	14.3
Low forest dependence	3.84 (0.998)	1.9	4.1	27.1	25.7	27.5	13.8
Moderate forest dependence	3.89 (0.937)	0.8	1.5	32.3	23.1	29.2	13.1
High forest dependence	3.86 (0.951)	1.9	1.9	29.9	29.0	27.1	10.3
New Brunswick	3.84 (0.980)	1.7	4.0	27.2	26.9	26.5	13.6
Forest fire							
Urban centers	3.84 (0.946)	0.8	2.3	36.7	20.7	29.5	10.0
Low forest dependence	3.80 (1.024)	2.8	1.9	38.4	19.1	31.7	6.1
Moderate forest dependence	3.84 (0.934)	0.8	0.8	40.9	20.5	30.3	6.8
High forest dependence	3.78 (0.978)	2.8	0.0	43.5	19.4	29.6	4.6
New Brunswick	3.82 (0.978)	1.7	1.8	38.3	20.0	30.5	7.8

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

Table A2.4-6. Details on satisfaction with NBDNR's current efforts (1373≤n≥1240)

	Mean (SD)*	Totally satisfied (%)	Somewhat satisfied (%)	Neither satisfied nor dissatisfied (%)	Somewhat dissatisfied (%)	Totally dissatisfied (%)	No opinion (%)
Managing deer habitat							
Urban areas	2.90 (1.143)	6.7	34.2	18.6	20.9	8.9	10.8
Low forest dependence	2.90 (1.220)	10.6	31.3	19.0	20.9	11.0	7.3
Moderate forest dependence	3.03 (1.220)	7.6	29.0	18.3	22.1	13.0	9.9
High forest dependence	3.01 (1.277)	8.3	32.4	15.7	20.4	15.7	7.4
New Brunswick	2.92 (1.192)	8.4	32.4	18.5	20.9	10.6	9.1
Enforcing regulations							
Urban areas	3.24 (1.113)	2.5	26.9	18.9	28.1	12.5	11.2
Low forest dependence	3.11 (1.195)	6.7	29.3	18.6	26.3	13.2	5.9
Moderate forest dependence	3.10 (1.147)	5.3	30.1	18.8	27.8	10.5	7.5
High forest dependence	3.16 (1.245)	5.7	32.1	14.2	26.4	16.0	5.7
New Brunswick	3.17 (1.161)	4.6	28.6	18.4	27.3	12.8	8.4
Promoting economic development through forest industries							
Urban areas	2.90 (0.931)	3.1	27.5	29.2	18.7	3.3	18.2
Low forest dependence	2.96 (1.016)	4.1	28.3	30.0	19.3	6.8	11.4
Moderate forest dependence	3.02 (1.014)	3.0	27.1	29.3	19.5	7.5	13.5
High forest dependence	3.07 (1.090)	3.8	29.2	23.6	23.6	9.4	10.4
New Brunswick	2.95 (0.987)	3.5	27.9	29.1	19.4	5.5	14.6
Supporting management of private woodlots							
Urban areas	3.03 (0.974)	3.6	21.7	27.9	22.5	4.4	19.9
Low forest dependence	2.95 (1.051)	5.6	25.8	30.7	17.6	7.7	12.7
Moderate forest dependence	3.06 (1.066)	4.4	24.4	25.9	22.2	8.1	14.8
High forest dependence	2.99 (1.147)	7.4	25.0	27.8	17.6	11.1	11.1
New Brunswick	3.00 (1.029)	4.7	23.8	28.7	20.2	6.5	16.0
Protecting biodiversity							
Urban areas	3.20 (1.067)	2.0	25.1	22.6	24.8	10.6	14.9
Low forest dependence	3.14 (1.120)	4.2	24.6	24.2	21.7	11.7	13.5
Moderate forest dependence	3.12 (1.074)	3.9	23.3	24.8	24.0	8.5	15.5
High forest dependence	3.12 (1.163)	5.8	25.2	22.3	23.3	11.7	11.7
New Brunswick	3.16 (1.095)	3.3	24.8	23.4	23.4	10.9	14.1
Representing public interests							
Urban areas	3.33 (1.040)	2.3	20.6	22.7	32.3	11.0	11.0
Low forest dependence	3.24 (1.117)	4.6	23.9	21.3	31.5	11.9	6.7
Moderate forest dependence	3.36 (1.021)	2.3	20.6	21.4	35.9	9.9	9.9
High forest dependence	3.37 (1.136)	2.8	23.6	18.9	32.1	16.0	6.6
New Brunswick	3.30 (1.077)	3.2	22.1	21.8	32.3	11.6	8.9
Involving the public in decisions							
Urban areas	3.41 (1.022)	2.3	17.3	22.0	35.2	11.2	12.1
Low forest dependence	3.37 (1.089)	3.1	20.9	21.3	34.6	13.9	6.1
Moderate forest dependence	3.39 (1.073)	3.0	17.4	24.2	31.8	13.6	9.8
High forest dependence	3.41 (1.199)	4.7	19.6	20.6	27.1	20.6	7.5
New Brunswick	3.39 (1.067)	2.9	18.9	21.8	34.0	13.2	9.2

* Any two means that are not followed by the same letter are significantly different (p < 00.05, from Tukey's test). Means exclude the no opinion category. Rated on a scale of 1 to 5, where 1 = Totally Satisfied and 5 = Totally dissatisfied

A2.5 Views on Public Management

Table A2.5-1. Details on who people express their concerns to

	Percentage of respondents, by group				New Brunswick
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Has expressed concerns about forest management in the last 5 years* (n = 1457)					
No	45.5	36.1	37.1	32.4	40.1
Yes	54.5	63.9	62.9	67.6	59.9
Concerns resolved to respondent's satisfaction (n = 876)					
All resolved	0.0	0.0	1.2	1.5	0.3
Most resolved	3.2	2.8	3.7	4.4	3.2
Some resolved	46.0	51.5	45.7	44.1	48.1
None resolved	50.8	45.7	49.4	50.0	48.5
Has expressed concerns to someone* (n = 1465)					
No	88.6	80.4	83.5	83.8	84.6
Yes	11.2	19.6	16.5	16.2	15.3
Has expressed concerns to (n = 231)					
To family/neighbor	37.7	40.5	41.7	42.9	39.5
To someone in a recreational or hunting and fishing organization*	8.9	15.7	12.8	16.2	12.5
To an elected government representative	8.1	10.8	9.0	11.4	9.5
To staff in NB government department*	7.3	10.2	12.0	15.2	9.5
To someone in a woodlot owners' organization	8.1	9.3	9.0	16.2	9.3
To staff in a forestry company*	6.1	9.9	12.8	18.1	9.1
To someone in an environmental or conservation organization	8.4	8.0	9.8	7.6	8.3
To the public through the media	1.2	1.1	1.5	1.9	1.2
To the public through the internet	0.5	1.1	0.8	1.0	0.8
Other	2.0	1.3	1.5	1.0	1.6

* Indicates questions for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.5-2. Details on appropriate role for the public in forest management and policy (n = 1481)*

	Percentage of respondents, by group				New Brunswick
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Have no role; let the resource professionals decide how the forest should be managed	4.4	3.7	0.8	2.8	3.7
Review and comment on what the resource professionals present as the best way to manage forest	29.7	20.6	17.6	21.5	24.4
Suggest how the forest should be managed and let the resource professionals decide the priorities	13.9	17.0	16.8	14.0	15.4
Act as full and equal partners with the resource professionals in deciding how the forests should be managed	32.9	33.6	38.9	36.4	34.0
Decide how the forests should be managed and instruct the resource professionals to carry out these plans	4.4	7.3	6.9	6.5	5.9
Other	1.3	1.3	0.8	2.8	1.4
No opinion	7.9	7.9	9.2	6.5	7.9
Multiple answers	5.5	8.6	9.2	9.3	7.3

* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.5-3. Details about preferences for public involvement tools (1454≤n≥1390)

	Mean (SD)*	Very likely (%)	Likely (%)	Unlikely (%)	Very unlikely (%)	No opinion (%)
Vote in a province-wide referendum						
Urban areas	1.96 (1.039)	37.6	43.5	7.9	7.4	3.7
Low forest dependence	2.11 (1.166)	34.4	40.7	11.5	5.9	7.5
Moderate forest dependence	2.12 (1.160)	34.1	39.8	12.2	7.3	6.5
High forest dependence	2.12 (1.174)	35.0	39.8	9.7	8.7	6.8
New Brunswick	2.05 (1.112)	35.9	41.8	9.8	6.9	5.6
Participate in future public surveys such as this one						
Urban areas	2.06 (1.084)	34.4	41.8	11.3	8.0	4.4
Low forest dependence	2.11 (1.062)	29.7	46.2	12.7	6.1	5.3
Moderate forest dependence	2.12 (1.130)	32.5	43.7	11.1	6.3	6.3
High forest dependence	2.02 (1.024)	33.0	45.3	10.4	7.5	3.8
New Brunswick	2.08 (1.075)	32.3	43.9	11.8	7.1	4.9
Use toll-free phone numbers						
Urban areas	2.54 (1.070)	15.1	40.7	24.2	15.1	4.9
Low forest dependence	2.45 (1.060)	16.3	44.3	23.4	10.2	5.7
Moderate forest dependence	2.54 (1.130)	18.0	36.9	24.6	13.9	6.6
High forest dependence	2.55 (1.156)	18.0	38.0	22.0	15.0	7.0
New Brunswick	2.51 (1.078)	16.1	41.5	23.8	13.1	5.5
Respond to request for public comments on a policy statement						
Urban areas	2.57 (1.115)	16.0	39.0	22.5	16.8	5.7
Low forest dependence	2.56 (1.058)	11.5	46.0	24.7	10.7	7.1
Moderate forest dependence	2.57 (1.104)	14.4	40.8	24.8	12.8	7.2
High forest dependence	2.53 (1.082)	13.7	44.1	22.5	13.7	5.9
New Brunswick	2.56 (1.089)	13.9	42.2	23.6	13.9	6.4
Attend public sessions where information is presented and participants ask questions and provide feedback						
Urban areas	2.63[b] (1.029)	10.7	40.6	29.5	13.5	5.7
Low forest dependence	2.51[ab] (1.025)	13.4	43.2	27.1	11.2	5.1
Moderate forest dependence	2.49[ab] (1.087)	16.8	41.6	25.6	9.6	6.4
High forest dependence	2.33[a] (0.985)	17.3	48.1	22.1	8.7	3.8
New Brunswick	2.55 (1.032)	12.8	42.3	27.7	11.9	5.4
Participate in a one-day workshop in which you and other citizens advise government on management of Crown forests						
Urban areas	2.99[b] (1.044)	7.4	25.2	36.5	23.1	7.8
Low forest dependence	2.70[a] (1.063)	10.3	31.7	33.7	17.8	6.5
Moderate forest dependence	2.75[ab] (1.044)	9.7	35.5	30.6	19.4	4.8
High forest dependence	2.53[a] (1.065)	16.5	38.8	24.3	16.5	3.9
New Brunswick	2.85 (1.061)	9.4	29.7	33.9	20.2	6.7
Be a member of an advisory committee composed of citizens who advise on how to manage Crown forests in your area						
Urban areas	3.08[b] (0.966)	7.5	15.4	44.4	27.5	5.1
Low forest dependence	2.97[ab] (1.071)	10.0	21.5	37.6	23.4	7.5
Moderate forest dependence	2.92[ab] (1.050)	9.0	24.6	39.3	19.7	7.4
High Forest dependence	2.71[a] (1.074)	13.7	29.4	34.3	17.6	4.9
New Brunswick	2.99 (1.027)	9.1	19.7	40.5	24.4	6.2
Give a presentation in a formal public meeting						
Urban areas	3.51[b] (0.766)	2.4	5.5	35.7	52.1	4.3
Low forest dependence	3.39[ab] (0.867)	2.6	10.3	39.6	40.0	7.5
Moderate forest dependence	3.28[a] (0.921)	5.7	9.8	41.8	36.9	5.7
High forest dependence	3.33[ab] (0.893)	4.0	10.0	41.0	39.0	6.0
New Brunswick	3.43 (0.834)	2.9	8.1	38.2	45.0	5.8

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

Table A2.5-4. Details on frequency for providing input on forest issues (n = 1450)

	Percentage of respondents, by group				New Brunswick (%)
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Not willing to provide input	23.1	24.4	28.7	24.5	24.2
Once or twice a year	58.1	52.9	49.6	53.8	55.0
Three or four times a year	13.5	14.1	14.0	14.2	13.8
Every month	5.3	8.5	7.8	7.5	6.9

*Table A2.5-5. Details on influence that various groups **should have** on forest policy and management (1441≤n≥1421)*

	Mean (SD)*	A lot of influence (%)	Moderate influence (%)	A little influence (%)	No influence (%)	No opinion (%)
NBDNR						
Urban areas	3.46 (0.702)	53.7	32.0	7.3	1.3	5.6
Low forest dependence	3.42 (0.738)	51.9	33.1	7.8	2.3	4.9
Moderate forest dependence	3.54 (0.687)	59.8	25.2	7.9	0.8	6.3
High forest dependence	3.45 (0.684)	52.9	36.3	5.9	1.0	3.9
New Brunswick	3.45 (0.714)	53.5	32.1	7.4	1.6	5.3
NB Department of Environment						
Urban areas	3.50 (0.705)	57.2	28.5	6.5	1.7	6.2
Low forest dependence	3.41 (0.712)	49.0	37.2	5.6	2.3	5.8
Moderate forest dependence	3.46 (0.706)	53.7	30.1	8.9	0.8	6.5
High forest dependence	3.46 (0.693)	53.4	33.0	7.8	1.0	4.9
New Brunswick	3.46 (0.707)	53.4	32.3	6.5	1.8	6.0
Conservation Council of NB						
Urban areas	3.35 (0.708)	42.3	39.3	7.3	1.7	9.5
Low forest dependence	3.32 (0.791)	45.1	32.5	11.0	2.5	8.9
Moderate forest dependence	3.30 (0.731)	42.1	38.9	11.1	0.8	7.1
High forest dependence	3.25 (0.776)	40.2	38.2	12.7	2.0	6.9
New Brunswick	3.33 (0.748)	43.2	36.6	9.5	1.9	8.8
Watershed management groups						
Urban areas	3.35 (0.759)	43.8	31.3	10.1	1.7	13.1
Low forest dependence	3.34 (0.774)	43.5	30.2	11.2	1.7	13.5
Moderate forest dependence	3.28 (0.790)	40.5	31.0	12.7	1.6	14.3
High forest dependence	3.25 (0.787)	39.4	34.6	13.5	1.9	10.6
New Brunswick	3.33 (0.769)	43.0	31.1	11.0	1.7	13.2
Environmental organizations						
Urban areas	3.25 (0.788)	41.6	36.3	13.7	2.3	6.1
Low forest dependence	3.15 (0.830)	37.2	35.2	17.8	2.9	6.9
Moderate forest dependence	3.15 (0.810)	36.8	36.0	19.2	1.6	6.4
High forest dependence	3.13 (0.843)	37.5	35.6	19.2	2.9	4.8
New Brunswick	3.19 (0.812)	39.1	35.8	16.2	2.5	6.3
Fish and game associations						
Urban areas	2.97 (0.764)	23.7	45.9	22.4	2.3	5.7
Low forest dependence	3.04 (0.837)	32.2	36.4	22.4	2.9	6.1
Moderate forest dependence	3.04 (0.842)	32.5	36.5	23.0	3.2	4.8
High forest dependence	3.01 (0.797)	27.9	42.3	22.1	2.9	4.8
New Brunswick	3.01 (0.802)	28.1	41.1	22.4	2.6	5.7
NB public opinion						
Urban areas	2.93 (0.848)	26.1	38.3	24.6	4.1	6.9
Low forest dependence	2.96 (0.878)	28.5	37.1	21.5	5.4	7.5
Moderate forest dependence	2.96 (0.843)	26.8	39.8	22.0	4.1	7.3
High forest dependence	3.02 (0.916)	33.7	35.6	19.2	6.7	4.8
New Brunswick	2.95 (0.864)	27.7	37.8	22.8	4.8	7.0
Woodlot owners' association						
Urban areas	2.95 (0779)	23.2	43.4	22.4	2.5	8.5
Low forest dependence	3.06 (0.816)	30.6	41.1	18.8	3.2	6.3
Moderate forest dependence	3.06 (0.824)	31.2	39.2	19.2	3.2	7.2
High forest dependence	3.05 (0.815)	31.1	42.7	19.4	2.9	3.9
New Brunswick	3.01 (0.801)	27.4	42.1	20.5	2.9	7.1
Member of the Provincial legislature						
Urban areas	2.51 (0.927)	15.0	28.5	34.0	12.3	10.2

	Mean (SD)*	A lot of influence (%)	Moderate influence (%)	A little influence (%)	No influence (%)	No opinion (%)
Low forest dependence	2.61 (0.990)	19.4	31.8	26.2	14.6	8.0
Moderate forest dependence	2.62 (0.954)	18.7	30.9	30.9	11.4	8.1
High forest dependence	2.67 (1.030)	24.0	27.9	26.0	14.4	7.7
New Brunswick	2.57 (0.963)	17.7	30.0	30.1	13.3	8.9
Forestry companies						
Urban areas	2.52 (0.948)	15.0	34.4	29.4	15.5	5.7
Low forest dependence	2.57 (0.984)	18.3	32.4	27.5	15.5	6.3
Moderate forest dependence	2.74 (0.955)	22.4	36.8	24.0	11.2	5.6
High forest dependence	2.75 (0.992)	24.8	35.6	21.8	12.9	5.0
New Brunswick	2.58 (0.968)	17.7	34.0	27.6	14.9	5.9
Federal government						
Urban areas	2.54 (0.928)	14.5	34.0	29.2	13.4	8.9
Low forest dependence	2.63 (0.984)	18.7	34.6	23.5	14.8	8.5
Moderate forest dependence	2.56 (1.003)	19.4	29.0	29.0	15.3	7.3
High forest dependence	2.62 (0.997)	20.6	31.4	26.5	14.7	6.9
New Brunswick	2.58 (0.962)	17.0	33.6	26.8	14.2	8.4
Local government representatives						
Urban areas	2.57[a] (0.844)	12.8	36.2	34.5	8.8	7.7
Low forest dependence	2.73[b] (0.888)	19.2	36.1	28.4	7.9	8.4
Moderate forest dependence	2.68[ab] (0.885)	18.5	33.1	33.9	7.3	7.3
High forest dependence	2.68[ab] (0.933)	19.2	36.5	26.9	10.6	6.7
New Brunswick	2.65 (0.874)	16.3	35.9	31.5	8.5	7.9
NB First Nations						
Urban areas	2.53 (0.957)	15.3	32.3	28.2	14.9	9.2
Low forest dependence	2.40 (0.999)	13.6	31.1	26.1	21.1	8.1
Moderate forest dependence	2.42 (0.973)	13.9	28.7	31.1	18.0	8.2
High forest dependence	2.32 (1.007)	12.7	28.4	28.4	23.5	6.9
New Brunswick	2.46 (0.980)	14.4	31.2	27.7	6.9	8.5
Other recreational organizations						
Urban areas	2.43 (0.804)	10.5	27.8	47.3	8.5	5.8
Low forest dependence	2.54 (0.855)	13.6	32.6	38.7	8.8	6.3
Moderate forest dependence	2.45 (0.849)	11.1	31.7	40.5	11.1	5.6
High forest dependence	2.42 (0.808)	9.5	32.4	43.8	10.5	3.8
New Brunswick	2.47 (0.829)	11.7	30.4	43.1	9.0	5.8
Media						
Urban areas	2.05 (0.966)	7.6	22.4	28.9	33.4	7.6
Low forest dependence	2.12 (1.035)	11.5	20.0	27.0	32.5	8.9
Moderate forest dependence	2.29 (1.055)	15.1	22.2	29.4	26.2	7.1
High forest dependence	2.25 (1.043)	13.6	24.3	27.2	27.2	7.8
New Brunswick	2.11 (1.009)	10.3	21.6	28.1	31.9	8.1
Snowmobile and ATV clubs *						
Urban areas	1.88[a] (0.812)	4.1	13.1	43.0	32.9	6.9
Low forest dependence	2.16[b] (0.914)	8.4	22.8	38.4	24.8	5.6
Moderate forest dependence	2.12[b] (0.872)	7.2	19.2	44.0	23.2	6.4
High forest dependence	2.19[b] (0.833)	6.7	23.8	45.7	19.0	4.8
New Brunswick	2.03 (0.870)	6.3	18.2	41.5	27.8	6.2

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

Table A2.5-6. Details on organizations that best reflect participants' views about forest management on Crown forests (1441≤n≥1421)

	Percentage of respondents, by group				New Brunswick
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
NBDNR	49.3	49.3	54.8	53.9	50.2
NB Department of Environment	42.2	41.9	39.4	34.1	41.2
Conservation Council of NB*	35.1	27.3	26.9	28.1	30.9
Watershed management groups	32.4	28.0	26.2	32.6	30.2
Environmental organizations	31.9	28.4	27.9	23.9	29.6
Woodlot owners' association*	18.2	30.8	23.1	25.0	24.0
Fish and game associations	16.9	19.1	22.1	17.0	18.2
Forestry companies*	12.1	14.1	18.4	23.9	14.3
NB public opinion	8.4	12.3	13.6	14.8	10.9
Local government representatives	7.1	8.6	10.6	12.5	8.4
NB First Nations	8.1	6.8	2.9	6.7	7.0
Other recreational organizations	8.1	6.4	5.8	5.7	7.0
Snowmobile and ATV clubs	4.6	4.3	5.8	3.4	4.5
Federal government	3.3	6.6	4.8	3.4	4.7
Member of the Provincial legislature	1.9	2.3	4.8	4.5	2.5
Media	2.7	1.6	2.9	3.4	2.3

* Indicates items for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.5-7. Details on favorite groups that should be considered as possible managers of Crown lands (n = 1189)

	Percentage of respondents, by group				New Brunswick (%)
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Environmental organizations *	64.0	51.2	47.5	45.5	56.0
Local communities	49.5	41.7	45.0	46.6	45.8
Woodlot owners*	31.6	42.7	41.6	43.2	37.8
An agency managed by the provincial government	38.4	36.3	33.0	34.1	36.8
Individual small-scale harvesting contractors*	16.5	23.1	25.7	23.0	20.4
Forest companies that currently have rights to Crown wood	20.9	19.0	25.7	27.3	21.1
First Nations	18.9	16.6	14.9	12.5	17.1
Private developers interested in creating major recreational facilities *	11.6	22.0	27.0	26.1	18.2
Forest companies that do not currently have rights to Crown wood	11.0	12.2	10.0	15.9	11.8
I think things are working fine the way they are	1.4	3.4	2.0	2.3	2.3

* Indicates items for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

A2.6 Familiarity with forest management and policy

Table A2.6-1. Details on familiarity with NB forest policy (1465>n<1425)

	Mean (SD)[1*]	Never heard of it (%)	Heard of it but know nothing about it (%)	Have some knowledge (%)	Know a lot about it (%)
Jaako Pöyry Report on Wood Supply					
Urban areas	1.37[a] (0.753)	77.1	11.7	8.4	2.8
Low forest dependence	1.43[a] (0.793)	73.2	13.0	11.0	2.8
Moderate forest dependence	1.52[ab] (0.870)	69.5	13.0	11.0	3.8
High forest dependence	1.68[b] (0.957)	61.9	12.4	21.0	4.8
New Brunswick	1.43 (0.801)	73.7	12.4	10.9	3.0
The Vision Document: Our Shared Future					
Urban areas	1.41[a] (0.707)	69.9	21.1	6.9	2.0
Low forest dependence	1.42[a] (0.714)	70.0	19.8	8.4	1.7
Moderate forest dependence	1.52[ab] (0.797)	64.0	22.4	10.4	3.2
High forest dependence	1.63[b] (0.841)	57.3	26.2	13.6	2.9
New Brunswick	1.44 (0.731)	68.5	21.1	8.3	2.1
The NB Millennium forest project					
Urban areas	1.48 (0.661)	60.3	31.5	7.7	0.5
Low forest dependence	1.48 (0.714)	63.0	27.3	8.0	1.7
Moderate forest dependence	1.48 (0.727)	63.8	25.2	9.4	1.6
High forest dependence	1.44 (0.668)	65.0	26.2	7.8	1.0
New Brunswick	1.48 (0.688)	62.0	28.9	8.0	1.1
Forest Management guidelines to protect native biodiversity in the Greater Fundy ecosystem					
Urban areas	1.52 (0.712)	60.7	27.6	11.2	0.5
Low forest dependence	1.55 (0.739)	58.6	29.7	10.0	1.7
Moderate forest dependence	1.52 (0.757)	61.2	27.1	9.3	2.3
High forest dependence	1.55 (0.733)	58.7	28.8	11.5	1.0
New Brunswick	1.53 (0.728)	59.7	28.5	10.6	1.2
Our Acadian Forests in Danger					
Urban areas	1.65 (0.798)	53.4	29.5	15.5	1.7
Low forest dependence	1.72 (0.857)	51.5	27.9	17.6	3.0
Moderate forest dependence	1.79 (0.859)	46.2	30.8	20.0	3.1
High forest dependence	1.79 (0.837)	45.2	32.7	20.2	1.9
New Brunswick	1.70 (0.831)	51.4	29.2	17.1	2.3
NB protected natural areas strategy					
Urban areas	1.78 (0.856)	48.0	28.0	22.0	2.0
Low forest dependence	1.86 (0.886)	43.5	30.5	22.3	3.6
Moderate forest dependence	1.92 (0.900)	40.2	33.1	22.0	4.7
High forest dependence	1.98 (0.889)	36.6	33.7	25.7	4.0
New Brunswick	1.84 (0.876)	44.6	29.9	22.4	3.1
First Nations forest harvest agreements					
Urban areas	1.66[a] (0.786)	44.2	35.5	19.4	0.8
Low forest dependence	1.82[ab] (0.825)	41.7	36.9	18.6	2.8
Moderate forest dependence	1.85[ab] (0.904)	38.5	40.0	19.2	2.3
High forest dependence	2.03[b] (0.852)	32.0	36.9	28.2	2.9
New Brunswick	1.82 (0.810)	41.8	36.6	19.7	1.9

[1] Rated on a scale of 1 to 4, where 1 = Never heard of it and 4 = Know a lot about it

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$, from Tukey's test). Means exclude the no opinion category.

Table A2.6-2. Details on familiarity with forest management (1465<n>1425)

	Percentage of respondents by group				New Brunswick
	Major Urban centers	Low forest dependence	Moderate forest dependence	High forest dependence	
Forest companies are required to follow government guidelines when harvesting timber on Crown lands					
True	81.0	83.6	81.1	88.7	82.6
False	3.3	3.5	5.3	2.8	3.5
Not sure	15.7	12.9	13.6	8.5	13.9
By law, a buffer strip of trees must be left along rivers, streams, and wetlands after timber harvesting					
True	79.3	83.5	85.0	89.7	82.3
False	3.6	2.2	3.0	1.9	2.9
Not sure	17.1	14.3	12.0	8.4	14.9
The Acadian forest is a forest ecosystem made up of a mix of softwood and hardwood trees					
True	64.1	62.0	62.6	59.8	62.8
False	2.8	2.2	2.3	1.9	2.4
Not sure	33.2	35.8	35.1	38.3	34.8
Clearcutting is the most common harvesting method in New Brunswick					
True	55.0	58.9	64.9	61.9	58.0
False	19.1	18.5	19.1	23.8	19.2
Not sure	25.9	22.6	16.0	14.3	22.8
The forest industry contributes less to New Brunswick's economy than the agriculture industry*					
True	5.6	10.2	7.6	5.7	7.6
False	53.9	53.7	50.0	70.8	54.7
Not sure	40.6	36.1	42.4	23.6	37.7
In winter, deer thrive in very young planted forests					
True	29.4	32.0	29.8	29.2	30.4
False	36.1	38.9	36.6	41.5	37.7
Not sure	34.5	29.1	33.6	29.2	31.9
In New Brunswick, 75% of forests are on Crown lands					
True	32.0	29.7	31.5	40.6	31.7
False	20.1	23.7	20.8	24.5	21.9
Not sure	47.9	46.6	47.7	34.9	46.4
Over 30% of New Brunswick Crown lands are permanently protected from any timber harvesting by legislation					
True	30.2	29.3	28.2	34.0	29.9
False	13.9	13.0	14.5	16.0	13.8
Not sure	55.9	57.8	57.3	50.0	56.3

* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

A2.7 RESPONDENTS' PROFILE

Table A2.7-1. Details on demographic characteristics of respondents

	Percentage of respondents, by group				Total respondents
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Gender* (n = 1493)					
Men	50.8	59.5	57.1	60.2	55.5
Women	49.2	40.4	42.9	39.8	44.5
Age (n = 1471)					
18–39	16.6	19.2	18.5	13.1	17.5
40–50	27.0	23.9	24.6	30.8	25.9
51–60	25.3	25.2	24.6	30.8	25.7
>60	31.0	31.7	32.3	25.2	30.9
Mean* (SD)	53.17 (14.43)	52.92 (14.16)	52.78 (13.83)	52.59 (12.44)	52.94 (14.11)
Self-identified as an Aboriginal (n = 1477)	1.6	1.6	3.1	1.9	1.8
Highest level of education* (n = 1490)					
Less than high school diploma	11.2	21.7	19.7	16.7	16.5
High school graduate	23.0	22.0	23.5	29.6	23.2
Technical school or community college	27.3	29.6	31.8	29.6	28.8
Some university	10.7	10.6	9.8	6.5	10.2
University degree	27.8	16.1	15.2	17.6	21.3
Household income from forest sector (n = 1485)					
No one in my household obtains income from these activities**	85.2	71.6	57.1	48.6	74.4
Work in the woods**	4.4	15.1	15.8	22.2	11.1
Work in a mill that produces wood products**	2.3	6.0	20.5	25.0	7.2
Sugaring. Christmas tree production, fir tipping or wreath making**	3.3	8.4	9.0	8.3	6.2
Trapping. guiding for hunting or fishing	3.3	6.2	5.3	6.7	4.8
Other forest-related activities	5.6	5.4	10.5	8.3	6.2

* Any two means that are not followed by the same letter are significantly different ($p < 0.05$. from Tukey's test).
** Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.7-2. Details on membership in clubs and organizations (n = 1502)

	Percentage of respondents, by group				Total respondents
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
I do not belong to any of these*	86.1	81.8	78.9	72.5	82.7
Member of an ATV, 4X4, or snowmobile club*	5.2	9.4	10.4	13.8	8.0
Member of a hunting organization	5.2	4.6	6.7	10.1	5.5
Member of a fishing organization*	3.9	4.6	7.5	11.0	5.0
Member of an environmental or conservation org.	4.8	4.8	3.7	5.6	4.8

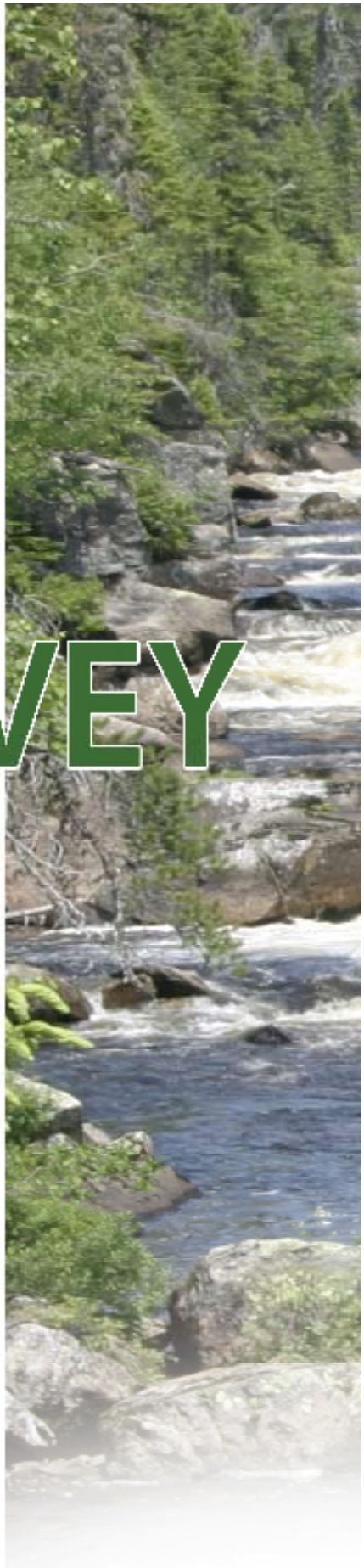
* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

Table A2.7-3. Details on place of residency for various periods of respondent's life (1463≤n≥1410)

	Percentage of respondents, by group				Total respondents
	Urban areas	Low forest dependence	Moderate forest dependence	High forest dependence	
Until their 18th birthday, lived in*					
Rural	48.8	67.7	72.9	71.8	60.1
Urban adjacent	12.6	12.2	9.6	5.8	11.6
Urban	38.8	20.1	17.6	22.3	28.3
Most of their adult life, lived in*					
Rural	29.3	71.2	66.1	65.7	52.0
Urban adjacent	19.1	11.6	13.4	11.4	15.0
Urban	51.6	17.2	20.5	22.9	33.0
Current residence*					
Rural	31.6	80.5	73.6	72.0	57.6
Urban adjacent	17.5	8.5	8.5	8.4	12.5
Urban	50.9	11.0	17.8	19.6	29.9

* Indicates variables for which there was a significant ($p < 0.05$) difference in frequency distribution using Chi-square test

APPENDIX 3. SURVEY QUESTIONNAIRE



Your views
on forest management in New Brunswick
SURVEY

UNIVERSITÉ DE MONCTON
CAMPUS D'EDMUNDSTON

UNB

Canada

New Nouveau Brunswick

Complete and return to:
NB Forest Management Survey
PO Box 127, 570 Queen,
Fredericton, NB, E3B 4Y2

Thank you for agreeing to participate in this study. Your views are important and will help guide future management of New Brunswick's forests. This survey is one way to ensure that your views are captured.

This survey is completely voluntary. Please try to answer all questions by checking (✓) boxes, circling items that best describe your answer, or writing in the space provided. If there are any questions you do not wish to answer, please leave them blank and move on to the next question.

All information you provide is confidential. Your name will never appear with your answers; only a summary of everyone's answers will be made public.

Please return your completed questionnaire in the postage-paid envelope provided.

If you have any questions regarding the survey, please do not hesitate to contact:

Solange Nadeau at sonadeau@nrcan.gc.ca or by phoning (506) 452-2074.

Some terms you need to know

To assist you in filling out the survey please refer to these definitions:

- **Crown lands** refer to all the forests owned by the province of New Brunswick (e.g., provincial parks and conservation areas, and lands managed by the forest industry).
- **Freehold** refers to forests owned by forest companies.
- **Private woodlots** refer to forests owned by individuals or families.

Section 1: Your use of New Brunswick's forests

Forests provide many benefits to the people of New Brunswick. In this section, we would like to learn about your views on different forest uses, as well as your activities and use of the forest.

1. Please rank the importance of the following uses for all New Brunswick forests. Begin by placing a "1" next to the use you consider the most important, a "2" next to the second most important use, and so on, until all of the statements have been ranked (Rank 1 to 5).

	Rank
As a source of economic wealth and jobs.	____
As a place for recreation and relaxation.	____
As a place for protection of water, air, and soil.	____
As a place for a variety of animal and plant life.	____
As a source of meat, firewood, berries, and other non-timber products.....	____

2. Check *(✓)* all the types of forests in New Brunswick where you spend some time during a typical year.

I visit . . .

- ☐ Provincial parks or protected areas (e.g., Mt. Carleton)
- ☐ Other Crown lands
- ☐ Kouchibouguac or Fundy national parks
- ☐ Private woodlots
- ☐ Land owned by forest companies (freehold)
- ☐ Forests within city limits
- ☐ Other forest lands (please specify)_____
- ☐ I visit forests, but I'm not sure who owns them
- ☐ None of the above; I don't visit any forests

3. Do you spend time on your own woodlot or one owned by a family member?

☐ Yes ☐ No

4. Please indicate which of the following activities you do in New Brunswick's forests during a typical year. *Check (✓) all that apply.*

- ☐ Picnicking
- ☐ Four-wheeling/ATVing
- ☐ Bird watching
- ☐ Canoeing/kayaking/boating
- ☐ Camping
- ☐ Hunting
- ☐ Walking/hiking
- ☐ Snowmobiling
- ☐ Skiing
- ☐ Visiting a camp or a cottage
- ☐ Fishing
- ☐ Other (please specify) _____

☐ I do not participate in any of these activities.

5. Which of the following products from the forest are used in your household during a typical year? Please check *(✓)* all the products you buy, are given, or harvest yourself.

- ☐ Firewood
- ☐ Christmas trees or fir tips
- ☐ Fish
- ☐ Material for handicraft products
- ☐ Small game (e.g., rabbits, partridge)
- ☐ Sawlogs or other wood products
- ☐ Maple products (e.g., syrup, candy)
- ☐ Big game (e.g., moose, deer, bear)
- ☐ Furbearers (e.g. mink, beaver)
- ☐ Food products (e.g., mushrooms, berries, or fiddleheads)

☐ I do not use any of these forest products.

Section 2: Your Views on Forest Policy and Management

One goal of this study is to understand the public's views on forest management and forest policy in New Brunswick.

6. Forest management involves a variety of activities to provide diverse products and services such as timber, recreational opportunities, wildlife habitat, water quality, and biodiversity.

We would like to know how satisfied you are with forest management as it is currently practiced on the following types of lands in New Brunswick. *Check only (✓) one box for each type of land.*

	Totally satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Totally dissatisfied	No opinion
Crown lands	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Lands owned by forest companies (freehold)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Private woodlots	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

7. Indicate your agreement or disagreement with each statement by checking the box that best reflects what you think of current forest management in New Brunswick.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No opinion
Forest practices (such as timber harvesting and road building) have insignificant long-term negative effects on the environment	☐1	☐2	☐3	☐4	☐5	☐6
The amount of timber cut in New Brunswick's forest is too high	☐1	☐2	☐3	☐4	☐5	☐6
The economic contributions of the forest industry outweigh environmental impacts	☐1	☐2	☐3	☐4	☐5	☐6
Forests are being managed for an appropriate mix of values and uses	☐1	☐2	☐3	☐4	☐5	☐6
The forest industry has too much control over forest management in New Brunswick	☐1	☐2	☐3	☐4	☐5	☐6
New Brunswick has enough protected areas (e.g., provincial and national parks, conservation areas)	☐1	☐2	☐3	☐4	☐5	☐6

8. Please indicate how satisfied you are with NB Department of Natural Resources' current efforts regarding the following:

	Totally satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Totally dissatisfied	No opinion
Involving the public in decisions	☐1	☐2	☐3	☐4	☐5	☐6
Enforcing regulations	☐1	☐2	☐3	☐4	☐5	☐6
Representing public interests	☐1	☐2	☐3	☐4	☐5	☐6
Protecting biodiversity	☐1	☐2	☐3	☐4	☐5	☐6
Managing deer habitat	☐1	☐2	☐3	☐4	☐5	☐6
Promoting economic development through forest industries	☐1	☐2	☐3	☐4	☐5	☐6
Supporting management of private woodlots	☐1	☐2	☐3	☐4	☐5	☐6

9. The government of New Brunswick has set a number of goals regarding the management of forests on Crown lands. Please indicate how important each of these goals is to you:

	Very important	Somewhat important	Neither important nor unimportant	Somewhat unimportant	Not important at all	No opinion
To maintain the diversity and characteristics of New Brunswick's forests	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
To ensure that wood supply for the forest industry remains at current levels	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
To provide wildlife habitat	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
To protect water quality	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
To protect forests from wood theft	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
To protect forests from fire	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
To protect forests from insect pests and diseases	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

10. Considering the goals listed in the previous question, do you think something important is missing in the goals that the Department of Natural Resources has set for management of forests on Crown lands?

☐ Yes ☐ No ☐ No opinion

↓

Please specify:_____

_____

_____

_____

_____

_____

_____

_____

_____

11a. In the following three questions, we would like to get your opinions regarding the impact, the acceptability of impacts, and the need for control for various activities that can take place in a forest.

Please rate the extent to which you believe each of the following has an impact on the forests of New Brunswick.

	Very positive impact	Positive impact	Neither positive nor negative impact	Negative impact	Very negative impact	Not sure
Forest road density	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Herbicide use in the forest	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Amount of timber harvested	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
ATVs, 4X4s, & snowmobiles	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Spruce budworm outbreaks	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Forest fires	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

11b. We would now like you to indicate your acceptability of these impacts.

	Very acceptable	Acceptable	Neither acceptable nor unacceptable	Unacceptable	Very unacceptable	Not sure
Forest road density	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Herbicide use in the forest	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Amount of timber harvested	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
ATVs, 4X4s, & snowmobiles	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Spruce budworm outbreaks	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Forest fires	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

11c. Finally, indicate to what extent you think there is a need for government control of these activities. *Check only (✓) one box for each item.*

	No need for any control	Need for less control	Existing control is adequate	Need for slightly more control	Need for much more control	Not sure
Forest road density	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Herbicide use in the forest	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Amount of timber harvested	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
ATVs, 4X4s, & snowmobiles	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Spruce budworm outbreaks	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Forest fires	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

12a. For the last 25 years, New Brunswick's Crown lands have been managed under contract by forestry companies that own wood-processing facilities. The Department of Natural Resources establishes objectives and monitors activities occurring on these lands.

If the government were to reconsider its management systems for Crown lands, which of the following groups do you think should be considered as possible managers? In all cases, the managers would have to comply with rules and pay fees established by the government.
Please check (✓) all the groups you think should be considered.

- ☐ Private developers interested in creating major recreational facilities (golf, snowmobile trails, lakeshore homes or condos, hunting lodges)
- ☐ Local communities
- ☐ First Nations
- ☐ Individual small-scale harvesting contractors
- ☐ Woodlot owners
- ☐ Environmental organizations
- ☐ Forest companies that do not currently have rights to Crown wood
- ☐ Forest companies that currently have rights to Crown wood
- ☐ An agency managed by the provincial government
- ☐ Other _____
- ☐ Other _____
- ☐ I think things are working fine the way they are
- ☐ I have no opinion on the subject

12b. Now please circle *up to three* of the above options that you prefer the most.

Section 3: Your Familiarity with Forest Policy and Management

13. Please state your awareness level of the following policy initiatives.

	Never heard of it	Heard of it but know nothing about it	Have some knowledge	Know a lot about it
Jaakko Pöyry Report on Wood Supply	☐ 1	☐ 2	☐ 3	☐ 4
Our Acadian Forest in Danger	☐ 1	☐ 2	☐ 3	☐ 4
NB Protected Natural Areas Strategy	☐ 1	☐ 2	☐ 3	☐ 4
The NB Millennium Forest Project	☐ 1	☐ 2	☐ 3	☐ 4
The Vision Document: Our Shared Future	☐ 1	☐ 2	☐ 3	☐ 4
First Nation Forest Harvest Agreements	☐ 1	☐ 2	☐ 3	☐ 4
Forest Management Guidelines to Protect Native Biodiversity in the Greater Fundy Ecosystem	☐ 1	☐ 2	☐ 3	☐ 4

14. We would like to understand how familiar people are with New Brunswick's forests and their management. Please indicate if you think each statement is true or false or if you are not sure.

	True	False	Not Sure
Over 30% of New Brunswick Crown lands are permanently protected from any timber harvesting by legislation	☐ 1	☐ 2	☐ 3
The Acadian forest is a forest ecosystem made up of a mix of softwood and hardwood trees	☐ 1	☐ 2	☐ 3
Clearcutting is the most common harvesting method in New Brunswick	☐ 1	☐ 2	☐ 3
In New Brunswick, 75% of forests are on Crown lands	☐ 1	☐ 2	☐ 3
Forest companies are required to follow government guidelines when harvesting timber on Crown lands	☐ 1	☐ 2	☐ 3
By law, a buffer strip of trees must be left along rivers, streams, and wetlands after timber harvesting	☐ 1	☐ 2	☐ 3
In winter, deer thrive in very young planted forests	☐ 1	☐ 2	☐ 3
The forest industry contributes less to New Brunswick's economy than the agriculture industry	☐ 1	☐ 2	☐ 3

Section 4: People and Forests

15. We would now like to obtain your views on the relationship between people and the forest. This will help us understand people's preferences regarding policy and management. Please rate the extent to which you agree or disagree with each statement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No opinion
Whether or not I get to visit the forest as much as I like, it is important for me to know that forests exist in my province	☐1	☐2	☐3	☐4	☐5	☐6
Forests should be managed to meet as many human needs as possible	☐1	☐2	☐3	☐4	☐5	☐6
Forests should have the right to exist for their own sake, regardless of human concerns and uses	☐1	☐2	☐3	☐4	☐5	☐6
Forests give us a sense of peace and well being	☐1	☐2	☐3	☐4	☐5	☐6
Forests should exist mainly to serve human needs	☐1	☐2	☐3	☐4	☐5	☐6
Forests are sacred places	☐1	☐2	☐3	☐4	☐5	☐6
It is important to maintain the forests for future generations	☐1	☐2	☐3	☐4	☐5	☐6
Forests should be left to grow, develop and succumb to natural forces without being managed by humans	☐1	☐2	☐3	☐4	☐5	☐6
Forests that are not used for the benefit of humans are a waste of our natural resources	☐1	☐2	☐3	☐4	☐5	☐6
Humans should have more respect and admiration for the forests	☐1	☐2	☐3	☐4	☐5	☐6
Forests let us feel close to nature	☐1	☐2	☐3	☐4	☐5	☐6
If forests are not threatened by human actions, we should use them to add to the quality of human life	☐1	☐2	☐3	☐4	☐5	☐6
Forests rejuvenate the human spirit	☐1	☐2	☐3	☐4	☐5	☐6
Forests can be improved through management by humans	☐1	☐2	☐3	☐4	☐5	☐6
Wildlife, plants, and humans should have equal rights to live and develop	☐1	☐2	☐3	☐4	☐5	☐6
The primary function of forests should be for products and services that are useful to humans	☐1	☐2	☐3	☐4	☐5	☐6

Section 5. Who Should Have a Say in Forest Management and Policy?

There are many groups that could be involved in decisions on forest management, and there are several ways individuals may voice their views. We would like to know how you might express your concerns, who you think should be involved in forest management decisions, and what you think are the best ways to incorporate citizens' views.

16. In your opinion, the most appropriate role for the public in directing how the Crown forests are used is to: *Check (✓) only one box.*

- ☐ Have no role; let the resource professionals decide how the forests should be managed
- ☐ Review and comment on what the resources professionals present as the best way to manage the forests
- ☐ Suggest how the forest should be managed and let the resource professionals decide priorities
- ☐ Act as full and equal partners with the resource professionals in deciding how the forests should be managed
- ☐ Decide how the forests should be managed and instruct the resource professionals to carry out these plans
- ☐ Other (please specify) _____
- ☐ No opinion

17. Thinking back over the last 5 years, have you had any concerns about forest management on New Brunswick's Crown lands?

☐ Yes ☐ No → **If no, please go to question 20**

18. How many of your concerns have been resolved to your satisfaction?

- ☐ All of my concerns were resolved
- ☐ Most of my concerns were resolved
- ☐ Some of my concerns were resolved
- ☐ None of my concerns were resolved

19. Did you express your concerns to anyone?

☐ No, I did not express my concerns to anyone

Or

Yes, I expressed my concerns to: (check (✓) *all that apply)*

- ☐ My family, friends or neighbour
- ☐ An elected government representative
- ☐ Staff in a New Brunswick government department
- ☐ Staff in forest companies
- ☐ Someone in an environmental or conservation organization
- ☐ Someone in a woodlot owners' organization
- ☐ Someone in a recreational or hunting and fishing organization
- ☐ The public through the media (newspaper, radio, TV)
- ☐ The public through the internet
- ☐ Other _____

20. Please indicate how likely is it that you would use the following opportunities to express your views:

	Very likely	Likely	Unlikely	Very unlikely	No opinion
Participate in future public surveys such as this one	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Attend public sessions where information is presented and participants ask questions and provide feedback	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Be a member of an advisory committee composed of citizens who advise on how to manage Crown forests in your area.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Vote in a province-wide referendum	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Give a presentation in a formal public meeting	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Participate in a one-day workshop in which you and other citizens advise government on management of Crown forests	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Use toll-free phone numbers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Respond to request for public comments on a policy statement	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

21a. In recent years, many organizations and institutions have influenced or attempted to influence provincial forest management decisions and forest policy. Please check the box that indicates the amount of influence you think each of the following groups should have on the management of New Brunswick Crown forests.

	A lot of influence	Moderate influence	A little influence	No influence	No opinion
• Watershed management groups	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Woodlot owners' organizations	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Conservation Council of New Brunswick	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Environmental organizations (e.g., nature trusts, naturalists)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• NB Dept. of Environment	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Members of the Provincial Legislature	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Fish and game associations	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• New Brunswick First Nations	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Local government representatives (e.g., municipal, rural community, LSD)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Forestry companies	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Snowmobile and ATV clubs	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Other recreational organizations (e.g., hiking trail committees, camp owners)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• NB Dept. of Natural Resources	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Media (newspaper, radio, TV)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• NB public opinion	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Federal government	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Other _____	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
• Other _____	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

21b. From those above, please circle up to three organizations that best reflect your views about forest management on Crown forests.

22. Please indicate how often you would be willing to provide input on forest issues. Please note that you will not be asked to become involved as a result of answering this question. *Check (✓) only one box.*

- ☐ I would be willing to provide input once or twice a year
- ☐ I would be willing to provide input three or four times a year
- ☐ I would be willing to provide input every month
- ☐ I would not be willing to provide input

Section 6: About you

Finally, we would like to ask a few questions about you to help determine if there are connections between peoples' backgrounds and their opinions. Your name will never appear with your answers, however, if there is a question you do not want to answer, leave it blank and move on to the next question.

23. What year were you born? 19____

24. Gender: ☐ Male ☐ Female

25. What is the highest level of education that you have completed? *Check (✓) only one box.*

- ☐ Grade 9 or less
- ☐ Some High School
- ☐ High School Graduate
- ☐ Technical School or Community College
- ☐ Some University
- ☐ University Degree (Bachelor's)
- ☐ Some Post-graduate Study
- ☐ University Post-graduate Degree

26. Are you an aboriginal person (Status Indian, Non-Status Indian, Inuit, or Métis)?

☐ Yes ☐ No

27. We are interested in knowing where you have lived in three periods of your life. We define an urban area as a place with 10,000 residents or more. Areas next to urban areas include suburbs and "bedroom communities" of urban areas. Rural areas are geographically distinct from urban areas and have less than 10,000 residents.

Check (✓) the appropriate box for each time period.

	Rural	Next to an Urban Area	Urban
Until your 18th birthday	☐ 1	☐ 2	☐ 3
For most of your adult life	☐ 1	☐ 2	☐ 3
Your current residence	☐ 1	☐ 2	☐ 3

28. Does anyone in your household obtain income from the following activities? *Check all that apply.*

- ☐ Work in a mill that produces wood products
- ☐ Work in the woods (harvesting, tree planting, trucking, planning)
- ☐ Trapping, guiding for hunting or fishing
- ☐ Sugaring, Christmas tree production, fir tipping, or wreath making
- ☐ Other forest-related activities. Please specify: _____
- ☐ No one in my household obtains income from these activities

29. Do you belong to any of the following organizations? *Check all that apply.*

- ☐ A fishing organization
- ☐ A hunting organization
- ☐ An ATV, 4X4, or a snowmobile club
- ☐ An environmental or conservation organization
- ☐ I do not belong to any of these

If you want to share additional comments regarding forest management and forest policy in New Brunswick, please write them in the space provided on the back of this page.

Thank you for your participation!

Return this questionnaire in the postage-paid envelope provided

Additional comments regarding forest policy and forest management in New Brunswick: