National Survey of Rural Landowners

ATTITUDES AND BEHAVIOURS REGARDING LAND STEWARDSHIP

Prepared by Environics Research Group

Prepared for: Agriculture and Agri-food Canada Canadian Federation of Agriculture Natural Resources Canada – Canadian Forest Service Ontario Ministry of Natural Resources Wildlife Habitat Canada

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Environics Research Group is pleased to present the following report on a survey of Canadian rural landowners, carried out on behalf of a coalition of clients interested in the issues of afforestation and stewardship of Canadian rural lands. Fieldwork took place between March 17 and April 15, 2003. A total of 382 callbacks were conducted between June 16 and June 22 to clarify the responses to specific questions.

The groups sponsoring the survey are:

Agriculture and Agri-food Canada Canadian Federation of Agriculture Natural Resources Canada – Canadian Forest Service Ontario Ministry of Natural Resources Wildlife Habitat Canada

This study updates and builds upon a benchmark national survey of farmers and ranchers on the topic of land use and land stewardship, undertaken by the same sponsors in 2000 and hereafter referred to as the Phase I survey. The current survey also explores a number of issues studied in a wide-ranging survey of rural landowners in Ontario, conducted in 2001 and hereafter referred to as the Phase II survey. This survey was conducted among rural landowners who owned 25 acres or fewer in Southern Ontario and 50 acres or fewer in Northern Ontario.

Like the original benchmark survey, this is one of the most comprehensive surveys of its kind ever undertaken in Canada. The primary purpose of this study – as for the Phase I and Phase II studies – was to provide policy makers and program developers with current data to assist them in the development of stewardship policies and programs. However, the current survey was also designed to widen the scope of the Phase I survey, by including a significant proportion of non-farming rural landowners, and to broaden the scope of the Phase II survey by taking some of the issues raised among Ontario rural landowners and explore them among a national sample of rural landowners.

The reader should note that the tracking data discussed in this report is largely confined to observations between the results of the Phase I survey and those of the Phase III survey. There is a sound methodological reason for doing this, since both of those surveys were based on national samples. Further, since the Phase I survey was conducted solely among Canadian farmers, the tracking observations are made comparing farmers in the Phase I survey with those in the current survey (as opposed to comparing them with the entire current sample of farmers and non-farming rural landowners). It is always very important, when making tracking observations, that the samples and methodologies being compared are as closely matched as possible.

Up to this point, the Phase II survey has been used largely as intelligence to inform the design of the questionnaire for the current survey. However, future comparative analyses of the Ontario results from the current survey with those of the Phase II survey may well prove fruitful for those wishing to further explore issues of land stewardship in Ontario. The reader is cautioned, however, that the Phase II sample also varies from the current Ontario sample in that it was composed almost entirely of respondents who owned 30 acres of land or fewer (compared to 43% of Ontario rural landowners in the current survey who report owning 30 acres or fewer).

Some of the topics covered in the Phase I and Phase II surveys and tracked in the current survey include:

- Landowners' top-of-mind concerns about environmental issues as they affect both the agricultural sector in general and their own land in particular
- Landowners' understanding of the nature and function of the physical environment, for example, their understanding of the value of forests and wildlife
- Landowners' understanding of the concept of stewardship
- Factors affecting landowners' decisions regarding use of their land, including stewardship considerations
- The degree to which landowners are already practising stewardship and would consider participating more actively in stewardship initiatives

- Landowners' openness to programs, policies and regulations that promote stewardship
- Landowners' confidence in various organizations as sources of information on stewardship and their attitudes toward various vehicles for conveying stewardship information.

Some of the new topics covered in the Phase III survey are:

- Landowners' reported recent afforestation activities and their interest in afforestation activities in the near future
- Landowners' assessment of their own conservation efforts and the impact of land management practices on the environment and their perception of their image among urban Canadians
- Support for government financial assistance to rural landowners who undertake stewardship activities.

To qualify for the sample of 1,647 rural landowners, respondents had to own a minimum of ten acres of land outside a village, town or other urban centre and be one of the people in the household primarily responsible for making longterm decisions affecting the land.

Respondents were classified as "farmers" if they reported earning at least \$2,500 per annum from their land (Statistics Canada's definition of a farmer). For the purposes of this report, any references to "farmers" should be looked at in terms of this definition. The reader should also be aware that the term "farmers" refers to both "farmers" and "ranchers." The term "farmers" is used in a generic sense to refer to respondents across the country.

For further details on the methodology used, please refer to the Methodology in the attached Appendix.

Introduction

Environics Research Group is pleased to present the following report on a survey of Canadian rural landowners, carried out on behalf of a coalition of clients interested in the issues of afforestation and stewardship of Canadian rural lands. Fieldwork took place between March 17 and April 15, 2003. A total of 382 callbacks were conducted between June 16 and June 22 to clarify the responses to specific questions.

The groups sponsoring the survey are:

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The Phase III study updates and builds upon a benchmark national survey of farmers and ranchers on the topic of land use and land stewardship, undertaken by the same sponsors in 2000 (Phase I survey) and a survey of rural landowners in Ontario, conducted among rural landowners who owned 25 acres or fewer in Southern Ontario, and 50 acres or fewer in Northern Ontario (Phase II survey).

The primary purpose of this study – as for the Phase I and Phase II studies – was to provide policy makers and program developers with current data to assist them in the development of stewardship policies and programs. However, the current survey was also designed to widen the scope of the Phase I survey by including a significant proportion of non-farming rural landowners, and to broaden the scope of the Phase II survey by taking some of the issues raised among Ontario rural landowners and exploring them among a national sample of rural landowners.

Profiles of Respondents

The sample for the Phase III survey consists of 1,647 rural landowners across Canada who report owning ten

acres or more of rural land – that is, land outside of a village or town – and being one of the people in the household primarily responsible for making longterm decisions affecting the land. This resulted in a sample of 950 farmers (so classified because they met Statistics Canada's definition of a farmer being someone who earns at least \$2,500 per annum from the land he/she owns), and 664 non-farming rural landowners.

Fewer than half of the sample of the Phase III survey list farming as their primary occupation. Among those who meet the definition of "farmer," this proportion increases to six in ten, but that proportion is still significantly below that reported for the Phase I survey of 2000. Among farmers, four in ten report that most or all of their household income is derived from the land or farm they own; this proportion is also down significantly from 2000. Among non-farming rural landowners, almost all – nine in ten – report that none or hardly any of their household income is derived from the land they own.

As was the case in 2000, household income levels among farmers are fairly well distributed across the spectrum. Overall, reported income levels are similar for farmers and for non-farming rural landowners. The current sample of farmers appears to be somewhat younger than that reported in 2000, but in both cases there is a skew slightly toward middle-aged respondents. The proportions of farmers and non-farmers are fairly consistent across the age groups.

Farmers and non-farming rural landowners both report high levels of access to computers and the Internet. In both cases, nine in ten report having a computer in their homes, and similar proportions say their computer is linked to the Internet.

Again, as in the Phase I survey, respondents to the Phase III survey indicated a high degree of interest in the issues explored in the study: the survey had a much higher than average compliance rate of 93 percent. This means that almost everyone who qualified for the survey completed the entire interview, and virtually no one quit mid-interview.

Summary of Findings

The following is an outline of the major sections of the report, and of the findings reported in each section.

THE LEADING ISSUES IN 2003

When Canadian farmers are asked, top-of-mind, to name the issues that most concern them regarding their own land specifically, they are more likely to mention environmental concerns than economic issues. The top environmental issues, by far, are related to drought and water issues, with soil quality and erosion, and weather, tied in a distant second place. The top economic issues for farmers are: making a living, commodity prices and expenses/input costs.

The findings for non-farming rural landowners are similar, although, for obvious reasons, they express less concern over the need to make a living from the land and over commodity prices. When farmers are asked to name the most important issue, aside from economic issues, facing the agricultural sector at large, they are most likely to mention commodity prices, with environmental issues in general a close second; urban sprawl is the leading issue, by far, among non-farming rural landowners.

THE ECOLOGICAL CONTEXT IN 2003

The Phase III survey continues to find Canadian farmers divided on the question of what is meant by "land stewardship," but there is a clear consensus that it refers to the future rather than the present. Among non-farming rural landowners, there is a consensus that the term refers to voluntary conservation of the natural environment for the future.

There is a consensus among both Canadian farmers and non-farming rural landowners that people like themselves can – and do – have a positive impact on wildlife conservation and the natural environment, but that urban Canadians have a poor understanding of the contribution that rural landowners make toward conservation and a healthy environment, and of the conservation issues facing rural Canadians. The Phase III survey found a slight decrease since 2000, among Canadian farmers, in reported levels of wildlife activities on their land, but a slight increase in the perceived seriousness of wildlife damage as a problem for farmers. Non-farming rural landowners are less likely than farmers to report increased wildlife activity over the past five years, and they are less likely to perceive wildlife damage as a serious agricultural problem. Both farmers and non-farmers express majority support for the proposal that farmers should receive compensation for any crop damage caused by wildlife, but this support is greater among farmers than among non-farming rural landowners.

All rural landowners report fairly high levels of familiarity with wildlife habitat requirements, but rather low levels of knowledge regarding the presence of endangered species in their local areas. However, nonfarming rural landowners are more likely than farmers to believe there are endangered species in their communities. Clearly, there is still a need for greater awareness and public education efforts, especially among farmers, regarding the issues surrounding endangered species.

At the same time, it should be noted that rural landowners are sensitive to the importance of wildlife, both in the role that wildlife play as indicators of overall ecological well-being and in the benefits they bring to rural lands. Moreover, the survey results suggest that Canadian farmers are slightly more sensitive now than they were in 2000 to the importance of wildlife as "ecosystem indicators" and in the benefits they provide in the areas of recreational activities, such as hunting, fishing and trapping.

The Phase III survey finds that stewardship considerations continue to influence Canadian landowners' land use decisions, and there is a strong consensus that land management practices can offer a great deal of benefit to downstream users of water and land resources. However, most rural landowners cannot name a change to their land management practices that would increase current benefits. Non-farming rural landowners are noticeably more likely than farmers to consider the impact of their decisions on wildlife habitat.

STEWARDSHIP IN PRACTICE IN 2003

The Phase III survey results indicate that almost all rural landowners, whether they are farmers or not, are following one of the basic tenets of land stewardship: nine in ten report no clearing of forested areas on their lands. This is strong evidence that rural landowners continue to value the forested land they own. At the same time, although the number of farmers who are cutting trees remains small, the average acreage of cleared areas is about twice that reported in 2000. As would be expected, the trees that are cut tend to be either mature or over-mature trees.

Among Canadian farmers who report clearing forested land, most say they cleared the forest for crops, pasture or other agricultural production. Non-farming rural landowners report clearing forest for a variety of reasons, including crops, pasture or other agricultural production, for regeneration/reforestation, for aesthetic reasons, for economic reasons, and for housing/urban development.

The Phase III survey found that just under two in ten rural landowners report afforestation activities, with non-farming rural landowners being slightly more likely than their farming counterparts to say they have planted blocks of trees. Planting is more likely than average to have been done on high productivity land (compared to medium or low productivity soil). For each type of soil, farmers report planting larger blocks of trees than do non-farming rural landowners. Most report that their afforestation activities have resulted in at least some trees surviving in good health.

Planting was done primarily for shelterbelts/wind protection and aesthetics, with farmers being more likely to report the former reason and non-farming rural landowners the latter. Spruce is the most popular species for farmers, and pine is the most popular variety for non-farming rural landowners. Just over half report paying out-of-pocket for the trees they planted; among those who received a grant, opinion is divided as to whether they would have planted the trees without a subsidy.

STEWARDSHIP POTENTIAL FOR THE FUTURE

Nine in ten rural landowners – whether they are farmers or non-farmers – agree that forests can reduce the effects of climate change. However, non-farmers are more willing than farmers to commit to planting trees – more than seven in ten compared to just under six in ten – in order to facilitate ecological improvements, and there has been a decrease since 2000 in farmers' willingness to help in this effort. At the same time, it should be emphasized that a majority of rural landowners, including a majority of farmers, are willing to plant trees in order to improve the environment for future generations.

There has been a slight increase since 2000 in the proportion of Canadian farmers, now more than eight in ten, who agree that it is important to plant trees that are native to one's local area; interest in native species is even higher among non-farming rural landowners. Just over four in ten rural landowners are interested in planting species of trees that are naturally fast-growing; interest in these is slightly greater among farmers than among non-farmers.

Among rural landowners who have land on which they might plant trees, two in ten plan afforestation activities over the next five years. The projected incidence of afforestation planting is higher among non-farming rural landowners than among farmers. Lack of interest is mostly related to the need to use the land for other, primarily agricultural, purposes, and to a feeling that rural landowners have enough trees.

Rural landowners who plan afforestation activity expect to plant an average of 8.6 acres. Projected afforestation activity is much greater for high productivity land than for medium or low productivity soil.

Those who are planning afforestation activity are primarily motivated by the desire for shelterbelts/wind protection and by aesthetic reasons. Farmers tend to be motivated more by a desire for windbreaks and non-farming rural landowners are equally motivated by both reasons. About three in ten rural landowners are planning afforestation efforts for reasons related to conservation and wildlife habitat, and about half that number are motivated by a desire to improve the quality of water and soil. About one in ten report being motivated by reasons related to reforestation.

Projected afforestation activities are much more likely to be planned for idle land than for land that's currently being used for crops or for pasture land, although about one-third of rural landowners are planning to plant on pasture land.

The results of the Phase III survey indicate a slight increase since 2000 in Canadian farmers' interest in proposed inducements to plant trees. About five in ten farmers, compared to about four in ten in the Phase I survey, say they would be interested in planting if they were provided with free seedlings, their planting costs were covered, and they would own the mature trees. Nearly six in ten non-farming rural landowners respond positively to the offer. Rural landowners who respond positively to the inducement of free seedlings are more likely to say they would plant on high or medium productivity land than on low productivity land.

When rural landowners are asked about renting out their land for tree plantations, interest is noticeably greater among farmers (almost half of whom respond positively, regardless of the productivity of their available land) than among non-farming rural landowners (two in ten of whom express interest in leasing good productivity land and one in ten of whom express interest in leasing medium or low productivity land). It should be noted that, among rural landowners who do specify a price, farmers tend to name a lower rental price for their land than do non-farmers.

The survey results indicate that the work that's involved in tending trees after they have been planted has a significant impact on the decision to undertake afforestation activities. This is the case both for those who have undertaken recent afforestation activity and for those who plan to undertake this activity within the next five years. About half of rural landowners say the work that's involved in tending trees after they have been planted has a major or moderate impact on their decision whether to plant blocks of trees; this proportion increases significantly when rural landowners are told specifically what needs to be done. The Phase III survey finds a very strong consensus among both farmers and non-farming rural landowners that tax dollars should be used to provide financial assistance to rural landowners who undertake improvements that will protect or improve natural resources. However, opinion is divided on the question of whether this assistance should be provided by the federal or provincial governments, with farmers expressing a slight preference for the former and non-farming rural landowners tending to prefer the latter.

There is significant interest among rural landowners in learning more about the planting and tending of trees, with about one-third saying they require more information and technical assistance regarding the longterm tending of trees, choosing the species of trees that they might plant, and to a lesser extent, the actual planting of trees.

When rural landowners are asked about a number of sources of land management information, the largest proportions say they have confidence in landowner or farmer associations and non-government or conservation groups. On the next tier are local municipal governments, provincial governments and volunteer groups such as Stewardship councils. Inspiring the least confidence are private consultants and the federal government, with Ottawa being the only source of information in which a majority say they lack confidence.

When rural landowners are asked how they would most like to receive information about land management, the largest proportion, by far, say they would like to receive brochures or manuals. On the next tier are demonstration sites, government offices, management workshops, on-site consultation, and websites or e-mail. Least preferred is information dispensed over the phone.

More than five in ten rural landowners believe the Internet is a good source of information on issues associated with ownership of rural land. When this finding is considered in conjunction with the finding that almost all rural landowners report having access to the Net, the combined results confirm that the Internet is, indeed, a resource with a great potential for communicating with rural landowners.

CONCLUSIONS

The Phase III survey confirms the main conclusions of the Phase I and Phase II surveys: namely that Canadian landowners remain generally sensitive to, and knowledgeable about, environmental issues as they pertain to their land and, for the most part, are already practising good stewardship. However, the current survey results indicate that non-farming rural landowners are more open than farmers to improving stewardship practices, most probably for the reason that farmers are more likely to think of land stewardship in terms of keeping the land productive rather than strictly in terms of environmental conservation. These differences should be kept in mind when planning communications and programs.

There also appear to be some information gaps in terms of rural landowners' knowledge of how they might change their land management practices in order to improve benefits for downstream users, and in terms of the presence of endangered species of animals and plants. These are two important areas that might be addressed by future programs and communications efforts. Interest in afforestation activities is greater among nonfarming rural landowners than among farmers. Interest in afforestation activity is motivated more by the desire for wind protection (especially for farmers) and for aesthetic reasons than for reasons related to conservation and wildlife habitat or to improve the quality of water and soil. There is also evidence that the work that's involved in tending trees after they have been planted has a significant impact on the decision to undertake afforestation activities.

The survey results indicate that afforestation inducements offering free seedlings, coverage of planting costs and ownership of mature trees resonate better with non-farmers than do those offering lease money for tree plantations. Both types of inducements attract about half of farmers, but leasing options, although potentially more expensive, may result in larger blocks of trees being planted by Canadian farmers.

The survey also found that both farmers and non-farming rural landowners believe that people like themselves have a positive impact on wildlife conservation and the natural environment. At the same time, they feel that urban Canadians have a poor understanding of the contribution that rural landowners make toward conservation and a healthy environment, and of the conservation issues facing rural Canadians.

Personal Profiles

The sample for the Phase III survey consists of 1,647 rural landowners across Canada who report owning ten acres or more of rural land – that is, land outside of a village or town – and being one of the people in the household primarily responsible for making longterm decisions affecting the land. This resulted in a sample of 950 farmers (so classified because they met Statistics Canada's definition of a farmer being someone who earns at least \$2,500 per annum from the land he/she owns), and 664 non-farming rural landowners. (See Figure 1.)

In contrast, all of the 1,437 respondents to the Phase I survey, conducted in 2000, had to report that they earned at least \$2,500 per annum from their land and that their primary farming operation was in one of the following six commodity groups: grain/oil seed, cattle, dairy, forage, hog/other meat or horticulture in order to qualify for the survey. Ontario respondents also had to report that they owned at least 25 acres if they lived in Southern Ontario, and at least 50 acres if they lived in Northern Ontario.

FIGURE 1

Land Generates Farm Receipts of \$2500 or More Annually April 2003





Among the sample for the Phase III survey, a plurality of 38 percent of rural landowners list farming as their primary occupation. This proportion rises to 57 percent among those who meet the definition of "farmer," as described above; this proportion is 14 points lower than that reported in the Phase I survey of 2000. In other words, the current survey not only has a smaller proportion of respondents who qualify as farmers, but also a smaller proportion of farmers who list their primary occupation as that of farming. The current survey is twice as likely as the earlier survey to have farmers who list their primary occupation as that of professional or skilled tradesperson (See Figures 2 and 3.)

Among all rural landowners in the current survey, a total of 34 percent list their primary occupation as that of professional (18%) or skilled tradesperson (16%). Non-farming rural landowners are twice as likely as farmers to list either of these as their primary occupations. (See Figure 3.)

FIGURE 2





FIGURE 3





Q.D6

What is your primary occupation? {If more than one, the job that generates the most income.}

Among farmers, 41 percent report that most or all of their household income is derived from the land or farm that they own; this proportion is 12 points lower than that reported in 2000. In other words, more than half of the respondents are in two-income households or they work at another job to supplement their farming income. (See Figure 4.) Among non-farming rural landowners, almost all, 91 percent, report that none or hardly any of their household income is derived from the land they own. (See Figure 5.)

As was the case in 2000, household income levels among farmers are fairly well distributed across the spectrum. Two in ten report annual incomes under \$40,000, and another two in ten report incomes of





0.D7b

Approximately, what proportion of your total household income is derived from the land or the farm that you own?

\$100,000 or more. Just under two in ten report incomes in the \$40,000-\$60,000 range and just under two in ten report incomes in the \$60,000-\$100,000 range. (See Figure 6.) In most cases, reported income levels are similar for farmers and for non-farming rural landowners, but the latter less likely than farmers to report incomes of \$100,000 or more. (See Figure 7.)



Q.D7a

For statistical purposes only, we need information about your income. All individual responses will be kept confidential. What was your total gross household income before taxes for 2002? The current sample of farmers appears to be somewhat younger than that reported in 2000, but in both cases, there is a skew slightly toward middle-aged respondents: just under three in ten are 44 years of age or younger (but almost all of these are in the 35-44 yearold age bracket); three in ten are between the ages of 45-54; one-quarter are between the ages of 55-64; and about two in ten are 65 years of age or older. The proportion in the oldest age group is smaller than that found in 2000. (See Figure 8.) The proportions of farmers and non-farmers are fairly consistent across the age groups, although there are slightly more farmers than non-farmers in the 35-44 age group, and slightly fewer farmers in the oldest age group. (See Figure 9.)







Farmers and non-farming rural landowners both report high levels of access to computers and the Internet. In both cases, two-thirds report having easy access to a computer; almost all of these say the computer is in their homes and linked to the Internet. (See Figure 10.)





Q.D8a

Do you have regular or easy access to a computer? 0.D8b

Is this computer in your home?

* Subsample: Those who have regular or easy access to a computer (n=1,107)

Q.D8c

Is this computer linked to the Internet?

* Subsample: Those who have regular or easy access to a computer (n=1,107)

Since the available sample of rural landowners is more limited than that of the general population, Environics recommended that the survey determine what proportion of respondents had completed one or both of the Phase I and Phase II surveys. Just eight percent of respondents reported that they had taken part in the Phase I survey in May 2000, and five percent reported taking part in the Phase II survey in March or April of 2001. In each case, another one percent thought that someone in their household had been a participant. About four to five in ten confirmed that no one in their household had participated in the earlier surveys, and a similar proportion could not remember if their household had been part of one of the earlier surveys. (See Figure 11.)

FIGURE 11 Remember Doing Survey for Environics April 2003 In May 2000 44 Total 9 43 3 42 47 3 Farmers Non-farmers 38 2 12 47 Yes, personally or someone in family Maybe, can't remember No one in household dk/na In March or April 2001



Q.5S

I would like to ask if you remember doing a survey for us, that is, for Environics, on issues related to rural landowners ...?

Land Ownership Profiles

The sample is almost entirely composed of rural landowners – nine in ten – who manage their land on a day-to-day basis. Just one in ten report renting out the land. (See Figure 13.) These findings are similar to those reported in 2000. (See Figure 12.)

Among farmers in the Phase III sample, the largest proportions report that grain farming (38%, up ten points) or beef farming (30%, down seven points) are the terms that best define their farm operations. These two types of farming operations also predominated among the Phase I sample, although the order has switched. One in ten or fewer describe their farm operations as concentrating on some other area of agricultural activity. (See Figure 14.)

FIGURE 12 Responsible for Land Management Farmers 2000 - 2003



FIGURE 13 Responsible for Land Management April 2003



Q.4Sa

Are you one of the people responsible for making the longterm management decisions regarding this land?

FIGURE 14 Farm Operation





Which of the following commodity groups best describes your farm or ranch operation ...? Subsample: Those whose land generates gross annual farm receipts

of \$2,500 or more (n=950)

The reported acquisition of land ownership is primarily concentrated in the years 1970 to 2000. About two in ten rural landowners report having owned their land since 1970 or longer and just four percent report acquiring ownership within the past two years. About two in ten (each) report acquiring the land either in the 1970s or the 1980s. About three in ten say they acquired the land during the years 1991-2000; this is more likely to be the case with non-farming rural landowners than with farmers. (See Figure 15.)



when and you first take ownership of your land? (If more than one land holding, ask about the property that respondent has owned the longest.)

As would be expected, farmers tend to report owning significantly larger acreages than is the case with nonfarming rural landowners. Farmers report owning an average of 900 acres (up from the 761 acres reported in 2000). Among non-farming rural landowners, the average is 179 acres. At the top end of the spectrum, six in ten farmers (compared to five in ten farmers in 2000, and one in ten non-farmers today) report that they own more than 300 acres. At the other end of the spectrum, two in ten farmers (compared to more than seven in ten non-farmers today) say they own 100 acres or less. (See Figures 16 and 17.)



Q.D4

How many acres {bectares} in total make up your rural property or landholding? Figure 16 subsample: Farmers (n=950)

Note: Wording slightly different in 2003

Land Use Profiles

About six in ten rural landowners report owning forested land (63%) or land that is growing crops (60%). However, farmers are much less likely to report owning forested land (53%, compared to 80% of non-farming rural landowners) and are much more likely to report having land in crops (81%, compared to 28% of nonfarming rural landowners). The proportion of farmers reporting crop land is down from the 69 percent in 2000. (See Figures 18 to 20.)

FIGURE 18 Any Land Covered with Forest April 2003



Q.1Fa

Currently, is any of the land that you own or rent covered with forest?





FIGURE 20 Any Land Growing Crops



Q.2Fa

Currently, is any of your land growing crops? Figure 19 subsample: Farmers (n=950) Farmers report owning an average of 132 acres of forested land (compared to 101 acres in 2000 and 73.1 for non-farming rural landowners today) and an average of 526 acres of crop land (compared to an average of 395 in 2000 and to 123 for non-farming rural landowners today). As the adjacent graphs show, the distribution of forested land is smaller and more varied than is the case with crop land (with majorities of those who own crop land reporting they own in excess of 100 acres). (See Figures 21 to 23.)



Note: Maximum value = 7,760 acres

Q.1Fb

How many acres {hectares} are covered with forest? Subsample: Those who own or rent land covered with forest (n=1,065)



Q.2Fb

How many acres {hectares} are in crops? Subsample: Those whose land is growing crops (n=977) When rural landowners are asked about their open land, 55 percent report having open land that is used as pasture and 40 percent report having open land that is left idle. Not surprisingly, farmers are much more likely to say their open land is used as pasture (65%, compared to 38% of non-farming rural landowners) than left idle (32%, compared to 53% of non-farming rural landowners). (See Figure 24.)

Farmers report owning an average of 651 acres of pasture land (compared to 145 for non-farming rural landowners) and an average of 59.9 acres of idle land (compared to 30.9 for non-farming rural landowners).

Among farmers who report having pasture land, the largest proportion say they have in excess of 100 acres. Among farmers who report having idle land, the largest proportion report having ten acres or less. Among nonfarming rural landowners, however, pluralities report having ten acres or less, whether they are reporting on pasture or idle land. (See Figures 25 and 26.)



Q.3Fa

Currently, is any of your land left open as pasture or grazing land?

Q.4Fa

Not counting any wetland you might own, is any of your land left open as idle land?



Q.3Fb

How many acres {bectares} are left open as pasture or grazing land?

Subsample: Those who have any of their land left open as pasture or grazing land (n=895)



Note: Maximum value = 1,300 acres

Q.4Fb

Not counting wetlands, how many acres {hectares} of your land are left open as idle land? Subcambles These subc have any land that's left open as idle land.

Subsample: Those who have any land that's left open as idle land (n=682)

When rural landowners are asked to rate the quality of their unforested land in terms of its ability to produce crops that are traditionally grown in their area, farmers tend to give their land higher ratings than do non-farming rural landowners. However, both groups are more likely to say they have good or medium productivity land than to say they have poor land. About two-thirds of all rural landowners report having good productivity land and a slightly smaller proportion say they have medium productivity land, but fewer than half say they have poor productivity land. (See Figure 27.)

Farmers are much more likely than non-farmers to report having good productivity land (74%, compared to 54% of non-farming rural landowners); they are also more likely than non-farmers to report having medium productivity land (67%, compared to 55% of non-farming rural landowners). However, they are less likely than non-farmers to report having poor productivity land (43%, compared to 48% of non-farming rural landowners).

FIGURE 27

Productivity of at Least Some of Unforested Land April 2003



Q.5F

Thinking now about the soil productivity of your non-forested or open land, in terms of its ability to produce crops that are traditionally grown in your area, would you describe any of this land as ...?

Subsample: Those who have any land that's left open as pasture, grazing or idle land (n=1,245)

Most Important Land Use Issue - Own Land

Environmental issues, particularly water issues, top the list of concerns for both farmers and non-farming rural landowners.

The survey results confirm rural landowners' ongoing concern with a wide range of environmental issues, with water-related issues continuing to top that list.

When Canadian farmers are asked, top-of-mind, to name the issues that most concern them regarding their own land specifically, four in ten mention environmental concerns and three in ten name economic issues.

Farmers' environmental concerns include: drought and water issues (14%, up two points from 2000), soil quality and erosion (5%, unchanged), weather (5%), urban sprawl and loss of farmland (3%, down three points), pollution/chemicals (3%), environmental issues in general (3%, down 11 points), drainage/excess water (2%), weed control (2%), maintenance/stewardship of the land (2%), trees (1%), and biotechnology and fertilizers (1%, down four points). These findings are similar for non-farming rural landowners, although non-farmers are slightly more likely to mention pollution/chemicals and trees, and are less likely to mention weather. (See Figure 28.)

Farmers' economic concerns include: making a living (8%), commodity prices (5%, down 14 points), expenses/input costs (5%), taxes (3%, unchanged), growth/productivity (2%), the absence of a new generation of farmers to take over the agricultural industry (2%, down one point), the ability of small farms to compete (1%, unchanged), farm management issues (1%, down four points), the lack of government subsidies and support (1%, unchanged), being able to keep the land (1%), and other economic concerns (2%, down five points). The findings for non-farming rural landowners are similar; non-farmers express less concern over the need to make a living from the land and commodity prices. (See Figure 28.)

FIGURE 28 Issue of Greatest Concern regarding Land 2000 - 2003

	MAY 2000	APRIL 2003		
	Farmers	TOTAL	Farmers	NON- Farmers
Drought/water issues	12	14	14	13
Making a living/ profitability/sustainability	_	6	8	2
Taxes	3	4	3	5
Government restrictions/ lack of control	6	4	5	4
Urban sprawl/loss of farm land	6	4	3	5
Soil quality/erosion	5	4	5	2
Pollution/chemicals	-	4	3	6
Commodity prices	19	3	5	1
Expenses/input costs	_	3	5	2
Weather	-	3	5	1
Maintenance/stewardship	-	3	2	3
Environmental issues	14	2	3	2
Drainage/excess water	_	2	2	2
Trees	_	2	1	4
Other economic concerns	7	2	2	1
Trespassers/poachers	1	2	1	3
Dwindling industry/no new generation of farmers	3	2	2	1
Growth/productivity	_	2	2	1
Weed control	_	1	2	1
Farm management	5	1	1	1
Fire	_	1	*	2
Lack of government subsidies/support	1	1	1	1
Being able to keep farm	_	1	1	*
Small farm issues/ competition	1	1	1	*
Zoning	_	*	*	1
Biotechnology/fertilizers	5	*	1	*
Other	5	3	3	3
None	6	17	12	24
dk/na	12	4	4	5

* Less than one percent

Q.2W

Specifically, when you think about your own land, what is the one issue that causes you the greatest concern?

Farmers also mention concern over government restrictions and lack of farmer control (5%, down one point) and trespassers/poachers (1%, unchanged). Again, findings are similar for non-farming rural landowners. Non-farming rural landowners are twice as likely as farmers to say they have no concerns regarding their own land (24%, compared to 12%). (See Figure 28.)

Rural landowners in Alberta are more likely than average to mention drought and water issues. Those in Quebec are more likely than others to say they have no concerns about their land, and those in Atlantic Canada are less likely than average to offer no opinion on the question.

There are no statistically significant differences on the issues between those who define "land stewardship" in terms of voluntarily conserving the natural environment and those who define the term as keeping the land economically productive, although the former group, who are less likely to be farmers, are more likely to say they have no particular concerns.

Non-economic Agricultural Issues

When Canadian farmers are asked to name the most important issue, aside from economic issues, facing the agricultural sector at large, about one-quarter mention environmental issues. However, almost five in ten mention an issue that is related to the economics of farming.

The survey results suggest that Canadian farmers have some difficulty thinking in terms of non-economic agricultural issues. When asked to name the most important issue, aside from economic issues, facing the agricultural sector at large, they are most likely to mention commodity prices, with environmental issues in general a close second. Among non-farming rural landowners, the leading issue, by far, is that of urban sprawl.

About one-quarter of Canadian farmers mention the following environmental issues: environmental issues in general (7%, down nine points from 2000), drought and water issues (5%, up one point), urban sprawl (4%, down two points), weather (3%), soil quality and erosion (3%, up one point), pollution/chemicals (2%), waste management/contamination (1%), and biotechnology and fertilizers (1%, down three points). (See Figure 29.)

Although asked to name issues apart from "economic issues," a total of just under five in ten farmers say the most important agricultural issues facing our country today are: commodity prices (10%, down five points), the rising costs of production (6%), international trade (4%, unchanged), making a living (4%), the ability of small farms to compete economically (3%, down one point), lack of government support (3%, down one point), the absence of a new generation of farmers to take over the agriculture industry (3%, down two points), farm management issues (2%, down one point), marketing (1%), infrastructure (1%), and other economic concerns (2%, down five points). Farmers also mention concern over government restrictions and lack of farmer control (7%, unchanged) and their public image (1%, down four points). (See Figure 29.)

Among non-farming rural landowners, the leading issue is urban sprawl (11%) and they are less likely than farmers to say the leading agricultural issue is commodity prices and the costs of production. Non-farmers are about twice as likely as farmers to simply offer no opinion on the question (32%, compared to 17% of farmers). However, on most of the issues, there are no statistically significant differences between farmers and non-farmers. (See Figure 29.)

Rural landowners in Saskatchewan are more likely than average to mention commodity prices. Those in Quebec are more likely to mention environmental issues in general, those in Alberta are more likely to mention drought/water issues, and those in Ontario are more likely to mention urban sprawl/loss of farmland. Atlantic Canadian rural landowners are less likely than others to offer an opinion on the question.

As would be expected, the leading issues among rural landowners who define "land stewardship" in terms of voluntarily conserving the natural environment are environmental concerns in general and urban sprawl. Among those who define the term as keeping the land economically productive, the leading issues are commodity prices and the rising costs of production.

FIGURE 29 Most Important Non-economic Issue Facing Agricultural Sector 2000 - 2003

	MAY 2000	APRIL 2003		
	Farmers	TOTAL	Farmers	Non- Farmers
Commodity prices	15	8	10	5
Environmental issues	16	7	7	7
Urban sprawl/loss of farm land	6	7	4	11
Government restrictions/ lack of farmer control	7	5	7	3
Drought/water issues	4	5	5	6
Rising costs of operation	-	5	6	2
International trade/ competition	4	3	4	2
Making a living/ profitability/sustainability	· _	3	4	2
Pollution/chemicals	-	3	2	5
Small farm issues/ competition	4	3	3	3
Lack of government subsidies/support	4	3	3	2
Dwindling industry/no new generation of farmers	5	3	3	3
Farm management	3	3	2	3
Weather/climate	_	3	3	2
Soil quality/erosion	2	2	3	1
Marketing	_	1	1	1
Other economic concerns	7	1	2	1
Taxes	1	1	1	1
Waste management/ contamination	_	1	1	1
Biotechnology/fertilizers	4	1	1	1
Infrastructure/ transportation	_	1	1	1
Attitude toward famers/ public image	5	1	1	*
Problems with wheat board	_	*	1	_
Other	4	4	4	3
None	2	2	2	1
dk/na	22	23	17	32

* Less than one percent

Q.1W

Apart from economic issues, what do you think is the most important issue facing Canada's agricultural sector?

Perceptions of "Stewardship"

As was the case in 2000, Canadian farmers continue to be divided on the question of what is meant by "land stewardship," but there is a clear consensus that it refers to the future rather than the present. Among non-farming rural landowners, there is a consensus that the term refers to voluntary conservation of the natural environment for the future.

When Canadian farmers are asked to choose between two definitions of the term "land stewardship," a slight plurality say it means the voluntary conservation of the natural environment (35%, up two points) but almost equal proportions believe it refers to keeping the land economically productive (30%, unchanged) or a combination of the two definitions (29%, down three points). (See Figures 30 and 31.)

Among non-farming rural landowners, a majority say the term means the voluntary conservation of the natural environment (53%), and fewer than half as many say either that it refers to keeping the land economically productive (15%) or a combination of the two definitions (20%).



Figure 30 subsample: Farmers (n=950)

Among Canadian farmers who have heard the term, a majority of 58 percent believe that stewardship activities are undertaken for the future and another 26 percent believe that stewardship activities are performed both for the present and for the future health and productivity of the land. Just 14 percent believe that stewardship activities are oriented solely toward the present. These findings are largely unchanged from 2000. (See Figures 32 and 33.)

Similarly, among non-farming rural landowners, a majority of 58 percent believe that stewardship activities are undertaken for the future and another 21 percent believe that stewardship activities are performed both for the present and for the future. Just 18 percent believe that stewardship refers to the voluntary conservation of land.

The perception that "land stewardship" refers to the voluntary conservation of land appears to be most prevalent in Quebec (where the sample was evenly split between farmers and non-farmers) and Ontario (where there is a predominance of non-farming rural landowners). It is lower than average in Saskatchewan (where farmers predominate) and in Atlantic Canada (where non-farming rural landowners predominate).

This understanding is also less pronounced among men than among women, among those who have owned their land for more than 50 years and among those who own in excess of 300 acres.

There is a consensus across all regions that "land stewardship" refers to the future rather than the present. This is also the consensus among those who think the term refers to the voluntary conservation of land for the natural environment and among those who think it refers to keeping the land economically productive. However, among those who think it refers to a combination of both, opinion is divided between those who say the term refers to activities that are oriented solely toward the present, and those who say it refers to both the present and the future.

FIGURE 32





FIGURE 33 Timeframe Meaning of Stewardship Activities April 2003



Q.3Wb

Do you think that stewardship refers more to activities that are undertaken ...?

Figure 32 subsample: Farmers who have heard of "stewardship" in terms of land use (n=903)

Figure 33 subsample: Those who have heard of "stewardship" in terms of land use (n=1,534)

Image of Rural Landowners as Stewards of the Land

There is a consensus among both Canadian farmers and non-farming rural landowners that people like themselves can – and do – have a positive impact on wildlife conservation and the natural environment. However, there is also a consensus that urban Canadians have a poor understanding of the contribution that rural landowners make toward conservation and a healthy environment, and of the conservation issues facing rural Canadians.

The survey results indicate that rural landowners understand the impact that their actions can have on wildlife and the environment, and that they give themselves good marks for their efforts in these areas, but there is also a consensus that these efforts are largely unappreciated by urban dwellers. There is clearly a disconnect – in the minds of rural landowners – between the image they have of themselves as "stewards of the land" and their perception of how they are perceived by their urban compatriots.

More than eight in ten rural landowners say that people like themselves have a major (52%) or moderate (33%) impact on wildlife conservation in Canada; just 13 percent say they have little or no impact. These findings are similar for both Canadian farmers and for non-farming rural landowners. (See Figure 34.)



Q.5W

Do you think that rural landowners like yourself have a major impact, a moderate impact or little or no impact on wildlife conservation in Canada? In response to a related question, 65 percent of Canadian farmers agree with the statement that farmers do an excellent job in protecting natural areas and wildlife habitats; this proportion is down four points from 2000 and there has been an increase of nine points in the number, now 30 percent, who disagree with that assessment; six percent offer no opinion. Among nonfarming rural landowners, 53 percent agree that farmers do an excellent job in protecting natural areas and wildlife habitats, 37 percent disagree and nine percent offer no opinion. (See Figures 35 and 36.)

FIGURE 35





FIGURE 36





Q.18Wc

Do you agree or disagree with the following statements ... Farmers do an excellent job in protecting natural areas and wildlife habitats?

Figure 35 subsample: Farmers (n=950)

A majority of 68 percent of rural landowners say that urban Canadians have a poor understanding of the environmental and conservation issues facing rural Canadians; just 29 percent think that urban Canadians have a good understanding, and the proportion who perceive the understanding is very poor (34%) is more than five times that who say it is very good (6%). Non-farming rural landowners are more likely than Canadian farmers to believe that urban Canadians have a good understanding (34% compared to 25%). (See Figure 37.)

Similarly, a majority of 65 percent of rural landowners say that urban Canadians have a poor understanding of the contribution that rural landowners make toward conservation and a healthy environment; just 32 percent think that urban Canadians have a good understanding, and the proportion who perceive the understanding is very poor (30%) is almost four times that who say it is very good (8%). Non-farming rural landowners are more likely than Canadian farmers to believe that urban Canadians have a good understanding (39% compared to 28%). (See Figure 37.)

Rural landowners in Atlantic Canada and Quebec are more likely than average to think that people like themselves have a major impact on wildlife conservation. This opinion is also more prevalent among those who believe that "land stewardship" refers to the voluntary conservation of land for the natural environment (compared to those who think it refers to keeping the land economically productive), among those who believe that good land management practices can have a great deal of benefit on all downstream users of water and land resources (compared to those who think good land management practices can have only some benefit), and among those who consider the impact on wildlife habitats when they make their own land use decisions.

There is a consensus in all regions of the country that farmers do an excellent job in protecting natural areas and wildlife habitats, although this is more pronounced in Atlantic Canada and Quebec than in British Columbia. It is also more pronounced among those who own more land, and among those who believe that "land stewardship" refers to keeping land economically productive (compared to those who think the term refers to natural conservation of land).

FIGURE 37 Understanding of Issues by Urban Canadians Very/Somewhat Good April 2003



Q.6W

From what you've seen and heard, do you think that Canadians who live in urban areas have a very good, somewhat good, somewhat poor or very poor understanding of ... {rotate} ... the environmental and conservation issues facing rural Canadians ... the contribution that rural landowners make toward conservation and a healthy environment? Interestingly, those who say that their own land use decisions are influenced by their impact on wildlife habitats are less likely than those who do not to give farmers an excellent rating in this area. (This may be because the former group is more sensitive to the needs of wildlife and therefore, more likely to be critical of farming practices). Similarly, those who believe that good land management practices can have a great deal of benefit on all downstream users of water and land resources tend to be somewhat more critical of farmers' efforts to protect natural areas (compared to those who think good land management practices can have only some benefit on downstream users of water and land resources).

The belief that urban Canadians have a very poor understanding of the environmental and conservation issues facing rural Canadians, and of the contribution that rural landowners make toward conservation and a healthy environment is more pronounced in Atlantic Canada; the latter is less pronounced than average in Quebec and British Columbia. Those who have owned their land longer are also more likely to think that urban Canadians have a very poor understanding of the environmental and conservation issues facing rural Canadians, and of the contribution that rural landowners make toward conservation and a healthy environment. These feelings of not being appreciated are also more prevalent among those who believe that "land stewardship" refers to the voluntary conservation of land for the natural environment (compared to those who think it refers to keeping the land economically productive), and among those who believe that good land management practices can have a great deal of benefit on all downstream users of water and land resources (compared to those who think good land management practices can have only some benefit).

Awareness of Wildlife

The survey results indicate there has been a slight decrease since 2000, among Canadian farmers, in reported levels of wildlife activities on their land, but a slight increase in the perceived seriousness of wildlife damage as a problem for farmers. Non-farming rural landowners are less likely than farmers to report increased wildlife activity over the past five years, and they are less likely to perceive wildlife damage as a serious agricultural problem and to support compensation for crop damage caused by wildlife (although a majority of non-farming rural landowners do support the latter).

There does appear to be a split of opinion between Canadian farmers and their non-farming neighbours on the question of wildlife's impact on farming operations.

There has been a decrease of seven points since 2000 in the proportion of Canadian farmers, now 44 percent, who report that the level of wildlife activity on their property has increased over the past five years; there have been slight increases in the numbers who say either that the level has stayed the same (44%, up three points) or that it has decreased (10%, up four points). (See Figure 38.)

Among non-farming rural landowners, 34 percent report that the level of wildlife activity on their property has increased over the past five years; a plurality of 48 percent say the level has stayed the same, and 14 percent believe it has decreased. (See Figure 39.)



Q.10W

Over the past five years, has wildlife activity on your land ...? Figure 38 subsample: Farmers (n=950) There has been virtually no change since 2000 in the proportion, now 58 percent of Canadian farmers, who report that wildlife on their land causes damage to their farm operations; 41 percent report no damage from wildlife. (See Figure 40.) Reported levels of wildlife damage are greatest in Saskatchewan, British Columbia and Alberta, where six in ten report damage; reported levels are lowest in Atlantic Canada, where over seven in ten report no damage.

Canadian farmers are now almost evenly divided on the question of whether damage by wildlife is (49%, up six points) or is not (46%, down four points) a serious problem for farmers in general. (See Figure 41.) However, there has been no change in the substantial majority of 81 percent who believe that farmers should receive compensation for crop damage caused by wildlife; 17 percent disagree. (See Figure 43.)

Among non-farming rural landowners, a majority of 50 percent say damage by wildlife is not a serious problem for farmers in general; 43 percent disagree. (See Figure 42.) Although less supportive of the proposal than are farmers, a majority of 62 percent of non-farmers believe that farmers should receive compensation for crop damage caused by wildlife; 33 percent disagree. (See Figure 44.)

FIGURE 40 Wildlife Activity Causes Damage to Land Farmers 2000 - 2003



May 2000 April 2003

Q.16W Does wildlife on your own land cause damage to your farm operation? Subsample: Farmers (n=950)

FIGURE 41 Extent of Wildlife Damage to Land Farmers 2000 - 2003



FIGURE 42 Extent of Wildlife Damage to Land April 2003



Q.17W

Would you say that damage by wildlife is or is not a serious problem for farmers in general? Figure 41 subsample: Farmers (n=950) Rural landowners in Atlantic Canada and Saskatchewan are more likely than others, especially those in Quebec, to perceive wildlife damage as a serious problem for farmers. Those in Manitoba, Saskatchewan and Alberta are more likely than others, especially those in Ontario and British Columbia, to support compensation for crop damage caused by wildlife.

The perception that wildlife activity has increased over the past five years is more pronounced than average among those who own larger parcels of land, and also among those whose land use decisions are influenced by the effect on wildlife habitat.

Reported damage by wildlife is greater among those who own more land, those whose land use decisions are influenced by the effect on wildlife habitat, those who report increased wildlife activity on their land, and by those who think wildlife damage is a serious problem.

The perception that wildlife damage is a serious problem is greater among rural landowners who own larger parcels of land, and those who have owned rural land for longer periods of time. It is also greater among those who believe that "land stewardship" refers to keeping the land economically productive (compared to those who think it refers to the voluntary conservation of land for the natural environment). Not surprisingly, these same three groups are also more supportive of compensation for crop damage, as are those who believe wildlife damage is a serious problem for farmers.

FIGURE 43 Farmers Should Receive Compensation for Crop Damage Caused by Wildlife Farmers 2000 - 2003



FIGURE 44

Farmers Should Receive Compensation for Crop Damage Caused by Wildlife April 2003



Q.18Wb

Do you agree or disagree with the following statements ... Farmers should receive compensation for crop damage caused by wildlife? Figure 43 subsample: Farmers (n=950)

Rural landowners, whether farmers or not, report fairly high levels of familiarity with wildlife habitat requirements, but the survey results indicate rather low levels of knowledge regarding the presence of endangered species in their local areas. Non-farming rural landowners are more likely than farmers to think that there are endangered species in their communities.

When rural landowners are asked how familiar they consider themselves to be with the habitat needs of wildlife, seven in ten describe themselves as either very (32%) or somewhat (41%) familiar with these needs. One in ten report being not very (8%) or not at all (3%) familiar with the habitat requirements of wildlife. Fewer than two in ten say that the habitat needs of wildlife are not a concern for them (15%). Non-farming rural landowners are more likely than farmers to express some familiarity with habitat requirements and are less likely to say this is not a concern for them. (See Figure 46.)

The findings for Canadian farmers are similar to those reported in 2000, although there has been a slight increase in the proportion who say they are somewhat familiar with habitat requirements, and a slight decrease in the proportion who say this is not a concern for them. (See Figure 45.)

FIGURE 45

Habitat Requirements of Wildlife in Your Area Farmers 2000 - 2003



FIGURE 46

Habitat Requirements of Wildlife in Your Area April 2003



Q.14W

Are you very familiar, somewhat familiar, not very familiar, or not at all familiar with the habitat requirements of the wildlife that exist in your area, that is, what they need in terms of food, water, shelter and room to move around, or is this not a concern for you?

Figure 45 subsample: Farmers (n=950)

The survey results indicate there is still a need for greater awareness and public education efforts, especially among farmers, regarding the issues surrounding endangered species. When Canadian farmers are asked to name one endangered plant or species in their area, the survey finds a decrease of six points in the proportion, now 33 percent, who name some species of wildlife, including plants, and a number of these responses refer to wildlife that is not endangered, for example, rabbits and deer. In addition, the survey finds that a total of 66 percent report either that there were no endangered species in their area (51%, up four points) or there probably are endangered species in their area but that they cannot name any (10%, up one point) or offer no opinion (5%, down one point). (See Figure 47.)

Awareness is somewhat greater among non-farming rural landowners: 40 percent name some species of wildlife, including plants (although, again, a number of these responses refer to species that are not endangered). A total of 59 percent report either that there were no endangered species in their area (40%) or there probably are endangered species in their area, but that they cannot name any (14%) or offer no opinion (5%). (See Figure 48.)



FIGURE 48 Endangered Plant or Animal in Local Area

Q.13W

Can you name one plant or animal in your local area that could be described as endangered, or would you say there are no endangered species?

Figure 47 subsample: Farmers (n=950)

Reported familiarity with wildlife habitat requirements is greater than average in British Columbia and lower in Quebec. It is also slightly greater among those who believe that "land stewardship" refers to the voluntary conservation of land for the natural environment (compared to those who think it refers to keeping the land economically productive), among those who believe that good land management practices can have a great deal of benefit on all downstream users of water and land resources (compared to those who think good land management practices can have only some benefit), among those who consider the impact on wildlife habitats when they make their own land use decisions, and among those who report an increase in wildlife activity (compared to those who report a decrease). Rural landowners in Atlantic Canada are more likely than average to think there probably are endangered species, but they cannot name any, and rural landowners in Manitoba are more likely to assume there are no endangered species.

Rural landowners with larger parcels of land are also more likely to assume there are no endangered species, as are those who believe that "land stewardship" refers to keeping the land economically productive (compared to those who think it refers to the voluntary conservation of land for the natural environment), those who do not factor wildlife habitat requirements into their land use decisions and those who report increased wildlife activity on their land (compared to those who report declining activity).
Rural landowners are sensitive to the importance of wildlife, both in the role that wildlife play as indicators of overall ecological well-being and in the benefits wildlife bring to rural lands. Moreover, the survey results suggest that Canadian farmers are increasingly sensitive to the importance of wildlife as "ecosystem indicators" and in the benefits they provide in the areas of recreational activities like bunting, fishing and trapping.

FIGURE 49 Health of Wildlife Populations Is One of Best Indicators of Health of Environment Farmers 2000 - 2003



FIGURE 50

Health of Wildlife Populations Is One of Best Indicators of Health of Environment April 2003



Q.18Wd

Do you agree or disagree with the following statements ... The health of wildlife populations is one of the best indicators of the health of our environment? Figure 49 subsample: Farmers (n=950) There is almost unanimous agreement that the health of wildlife is one of the best indicators of the health of the environment in general, both among Canadian farmers (89%, up five points from 2000) and among non-farming rural landowners (94%). Only about one in ten (each) disagree with this statement. (See Figures 49 and 50.)

The survey also continues to find widespread recognition of the benefits of having wildlife on one's land. Among Canadian farmers who have had wildlife activity on their land over the past five years, large majorities agree that wildlife contributes to insect and rodent control (70%, up two points from 2000), that wildlife makes their land more conducive to hunting, fishing or trapping (62%, up 13 points), that it contributes positively to the maintenance of fundamental natural balances such as soil fertility and water quality (60%, up two points) and that it serves to beautify their property (59%, up three points). (See Figure 51.)





Q.12W

Do you agree or disagree that the wildlife on your land makes an important contribution to ... {rotate} ... the appearance or aesthetic value of your property ... maintaining the fundamental balance in nature such as soil fertility and water quality ... controlling insects or rodents ... recreational hunting, fishing or trapping?

Subsample: Farmers who have had wildlife activity on their land over the past five years (n=928)

Non-farming rural landowners are even more likely than Canadian farmers to see the benefits of wildlife in terms of making a contribution to insect and rodent control (79%), the maintenance of fundamental natural balances such as soil fertility and water quality (78%) and the beautification of rural property (78%). A large majority also agree that wildlife makes their land more conducive to hunting, fishing or trapping (60%). (See Figure 52.)

There is almost unanimous agreement in every region and among all demographic groups that the health of wildlife populations is one of the best indicators of the health of our environment.

Appreciation of the benefits of having wildlife on rural land is greater than average, on all four measures, in Atlantic Canada. Quebecers are also more likely than others, especially British Columbians, to appreciate the recreational benefits of wildlife. Residents of Saskatchewan are less appreciative than average of the aesthetic benefits and the contribution to nature's balance; Albertans are also less likely to appreciate the latter contribution.

Appreciation of the benefits of having wildlife on rural land is greater than average, on all four measures, among those who believe that "land stewardship" refers to the voluntary conservation of land for the natural environment (compared to those who think it refers to keeping the land economically productive) and among those who consider the impact on wildlife when making land use decisions.

Appreciation of wildlife's aesthetic contribution, and of its contribution to pest control and the balance of nature, tends to be greater among those who have owned their land for shorter periods of time, among those who own smaller acreages, as well as among those who report declining wildlife activity on their land (compared to those who report increasing activity). Not surprisingly, appreciation of wildlife's aesthetic contribution is lower among those who think wildlife causes serious damage for farmers, although even among this group, a majority agree that wildlife does make an important contribution to the appearance of their property. Similarly, appreciation of wildlife's contribution to recreational activities is slightly lower among those

FIGURE 52 Wildlife Makes an Important Contribution April 2003 To contolling insects/rodents 61 To recreational hunting/ fishing/trapping 60



Q.12W

Do you agree or disagree that the wildlife on your land makes an important contribution to ... {rotate} ... the appearance or aesthetic value of your property ... maintaining the fundamental balance in nature such as soil fertility and water quality ... controlling insects or rodents ... recreational hunting, fishing or trapping?

Subsample: Those who have had wildlife activity on their land over the past five years (n=1,594)

who report declining wildlife activity, although even among this group, a majority agree that wildlife does make an important contribution to activities such as hunting, fishing and trapping.

Factors Affecting Land Management Decisions

Stewardship considerations continue to influence Canadian landowners' land use decisions, and there is a strong consensus that land management practices can offer a great deal of benefit to downstream users of water and land resources (although most cannot name a change to their land management practices that would increase current benefits). Non-farming rural landowners are noticeably more likely than farmers to consider the impact of their decisions on wildlife habitat.

The survey finds clear evidence that land use decisions are influenced by considerations associated with stewardship. Rural landowners are aware of and consider the impact of their land use decisions on downstream users of water and land resources, on their neighbours' lands and on wildlife habitat.

A majority of 74 percent of rural landowners say that good land management practices can have a great deal of benefit on all downstream users of water and land resources, such as villages, towns and cities and another 21 percent say there is some benefit. These findings are similar for Canadian farmers and for non-farming rural landowners. (See Figure 53.)

However, when rural landowners are asked if there are any changes they could make in their land management practices that would benefit downstream users, 72 percent of farmers and 81 percent of non-farming rural landowners say none come to mind. (See Figure 54.)

FIGURE 53

Impact of Good Land Management Practices on Downstream Users of Water and Land April 2003



Q.7W

Do you think that good land management practices can have a great deal of benefit, some benefit or little or no benefit on all downstream users of water and land resources, such as villages, towns and cities?

FIGURE 54







Are there any changes you could make in your land management practices that would benefit downstream users?

Among Canadian farmers, 51 percent state that the effect of their land use decisions on their neighbours' land is a significant factor in those decisions; this proportion is down five points from 2000. Among non-farming rural landowners, 47 percent consider the impact on their neighbours' land. (See Figures 55 and 56.)

Among Canadian farmers, 52 percent say the effect on wildlife and wildlife habitats has an impact on their land use decisions; this proportion is up four points from 2000. Among non-farming rural landowners, a substantial majority of 65 percent consider the impact on wildlife habitat. (See Figures 57 and 58.)

FIGURE 55

Effect on Neighbours' Land Impacts Decisions Farmers 2000 - 2003



FIGURE 56

Effect on Neighbours' Land Impacts Decisions April 2003



Q.4W

When you make decisions about the activities on your land, does the effect on your neighbours' land have an impact on your land use decisions?

Figure 55 subsample: Farmers (n=950)

FIGURE 57

Effect on Wildlife Impacts Decisions Farmers 2000 - 2003



May 2000 April 2003

FIGURE 58

Effect on Wildlife Impacts Decisions April 2003



Total Farmers Non-farmers

Q.11W

When you make decisions about agricultural activities on your land, does the possible effect on wildlife and their habitats have an impact on your decisions?

Figure 57 subsample: Farmers who have had wildlife activity on their land over the past five years (n=928)

Figure 58 subsample: Those who have had wildlife activity on their land over the past five years (n=1,594)

When farmers are asked to name one change they might make in their operations to help local wildlife, seven in ten answer either that there are no such changes (31%, down five points) or that they don't know what changes they could make to benefit wildlife (40%, up four points). A total of 29 percent mention such changes as planting trees/allowing trees and bushes to grow, using different fertilizers/insecticides, or planting crops/leaving feed for wildlife. (See Figure 59.)

Most rural landowners (81%) disagree with the statement that "the damage caused by wildlife makes me care less about what happens to endangered species of wildlife in my area." These results are virtually identical for farmers and for non-farming rural landowners. These results are also essentially unchanged from 2000 for Canadian farmers. (See Figures 60 and 61.)

FIGURE 59



Q.15W

Can you think of any one change that could be made in your dayto-day farming operations that will also benefit wildlife? Subsample: Farmers (n=950)

FIGURE 60 Damage by Wildlife Makes Me Care Less





FIGURE 61

Damage by Wildlife Makes Me Care Less about Endangered Species April 2003



Q.18Wa

Do you agree or disagree with the following statements ... The damage caused by wildlife makes me care less about what happens to endangered species of wildlife in my area? Figure 55 subsample: Farmers (n=950) The perception that good land management practices can have a great deal of benefit on all downstream users of water and land resources is less pronounced in Atlantic Canada. However, Atlantic Canadian rural landowners are more likely than average to say they consider the impact on wildlife habitat and the impact on their neighbours' land when making land use decisions. Quebec rural landowners are noticeably more likely than average to agree that damage caused by wildlife makes them care less about what happens to endangered species of wildlife in their area although, even among this group, a majority disagree with the statement.

The perception that good land management practices can have a great deal of benefit on all downstream users of water and land resources is less pronounced among rural landowners who own larger parcels of land, those who have owned rural land for longer periods of time, and among those who believe that "land stewardship" refers to keeping the land economically productive (compared to those who think it refers to the voluntary conservation of land for the natural environment). These same three groups are also less likely to consider the impact on wildlife habitat when making land use decisions. Those who consider the impact of their land use decisions on wildlife are more likely to consider the impact on their neighbours' land, and to be able to name a change they might make in their operations to help local wildlife (although, even among this group, a majority either say there are no changes to be made or offer no opinion on the question).

Reported Clearing of Trees

Nine in ten rural landowners indicate they are following one of the basic tenets of land stewardship by reporting no clearing of forested areas on their lands. These findings are similar for Canadian farmers and for non-farming rural landowners.

The survey results indicate that rural landowners continue to value the forested land they own. Among farmers in general, just nine percent report that, since 1995, they have permanently cleared forested land, or sold or rented out forested land that they knew would be permanently cleared of all or most of its trees; this proportion is three points lower than that reported in 2000, when Canadian farmers were asked if they had cleared any forested land. Among non-farming rural landowners, ten percent report permanent clearing of forested land. (See Figures 62 and 63.)

Among the 63 percent of rural landowners who report currently having land that is covered with forest, just 12 percent report that, since 1995, they have permanently cleared forested land, or sold or rented out forested land that they knew would be permanently cleared of all or most of its trees; this proportion is three points lower than that reported in 2000. Among those who report that they now have no forested land, just four percent report clearing forest in the period since 1995. FIGURE 62 Cleared Forested Land Rented or Sold Land for Clearing Farmers 2000 - 2003



FIGURE 63 Cleared Forested Land Rented or Sold Land for Clearing April 2003

9	9	10	
Total	Farmer	rs Non-	
		farmore	

Q.6Fa

Since 1995, have you permanently cleared any of your forested land, or sold or rented out forested land that you knew would be permanently cleared of all or most of its trees? Figure 62 subsample: Farmers (n=950) Note: In 2000, this question asked "Over the past five years, have you cleared forest areas ...?" The trees that were cut are equally likely to have been mature or over-mature trees. Although the number of farmers who are cutting trees remains small, the results of the current survey suggest that the average acreage of cleared areas is about twice that reported in 2000.

Among the nine percent of all rural landowners who report having cleared forested land since 1995, 33 percent report cutting down mature trees, 31 percent very old trees and 20 percent young trees. (See Figure 64.)

Among all rural landowners, an average of 38.5 acres of forest were cleared. However, the average amount of acreage cleared is twice as great among farmers (49.6 acres) as among non-farming rural landowners (21.4 acres). (See Figures 65 and 66.) The former proportion is also about twice the average reported among Canadian farmers in 2000 (24 acres).



Q.6Fb

Which one of the following best describes the trees that were cleared ...?

Subsample: Those who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995 (n=159)



Note: Maximum value = 360 acres



Note: Maximum value = 360 acres

Q.6Fc

How many acres {bectares} were cleared, including the acres that you might have sold or rented out?

Figure 65 subsample: Farmers who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995 (n=87) Figure 66 subsample: Those who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995 (n=159)

Utilization of Trees

The trees that were removed were mostly used or sold for lumber or pulp or burned on the site.

Rural landowners who cleared forest were equally likely to report having removed the timber from the site and used or sold it for lumber or pulp (38%) or having burned it on the site (37%). Smaller proportions report removing it from the site to be used for firewood or simply burned off-site (23%), or to have left in on the site to decay (21%). (See Figure 67.)

The stumps and other debris were most often left to decay on the site (53%), although in some cases they were burned on the site (37%). In a few cases, they were removed and burned off-site (12%), just moved off-site (6%), or buried (3%). (See Figure 68.)



Q.6Fe

How were the trees themselves disposed of? Subsample: Those who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995 (n=159)





Q.6Ff

How were the stumps and other debris disposed of? Subsample: Those who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995 (n=159)

Purpose for Clearing Forest

Farmers generally clear land for agricultural activities; non-farming rural landowners clear for a variety of reasons.

Among Canadian farmers who report clearing forested land, most say they cleared the forest for crops, pasture or other agricultural production (84%). Non-farming rural landowners report clearing forest for a variety of reasons, including crops, pasture or other agricultural production (19%), for regeneration/reforestation (15%), for aesthetic reasons (13%), for economic reasons (12%), and for housing/urban development (11%). (See Figure 69.)





Q.6Fd

For what purpose or use was the land cleared? Subsample: Those who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995 (n=159) In almost all cases, 91 percent, rural landowners report the cleared land is still being used for the same purpose as when it was cleared. Among the very few who report that the land is no longer being used for the same purpose, a majority (61%) say the trees are starting to grow back. (See Figures 70 and 71.)







Q.6Fg

Is the clear land still being used for the same purpose today? Subsample: Those who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995 (n=159)





Q.6Fb

Are the trees starting to grow back, that is, is the land reverting back to forest?

Subsample: Those who have permanently cleared any of their forested land, or sold or rented out forested land that would be permanently cleared since 1995, and whose clear land is not being used for the same purpose today (n=13)

Reported Afforestation Activities

Just under two in ten rural landowners report afforestation activities, with non-farming rural landowners being slightly more likely than their farming counterparts to say they have planted blocks of trees.

Sixteen percent of rural landowners report that they planted blocks of trees between 1990 and 2002 on areas that had been bare of forest cover prior to 1990. Non-farming rural landowners (20%) are slightly more likely than farmers (14%) to report afforestation activities. (See Figure 72.) Related tracking data from 2000 indicate there has been little change in farmers' reported incidence of planting: at that time, 16 percent of Canadian farmers reported they had planted blocks of trees within the previous five years.

Reported afforestation activity is greatest in Quebec and lowest in Alberta. It is also greater among those who own smaller parcels of land, those who report having at least some idle land, those who have no land growing crops, and those who plan to plant more trees over the next five years.

FIGURE 72

Planted Trees on Bare Land from 1990 to 2002 April 2003



0.7F

Between 1990 and 2002, did you plant blocks of trees on areas that had been bare of forest cover before that period, that is, before 1990?

Planting is more likely than average to have been done on high productivity land (compared to medium or low productivity soil). For each grade of soil, farmers report planting larger blocks of trees than do non-farming rural landowners. Overall, eight in ten rural landowners report at least some success in terms of trees surviving in good health.

When rural landowners who report afforestation activity are asked to rate the soil productivity of the land on which they planted trees, 58 percent report having planted an average of 51.4 acres on high productivity soil. The incidence of planting and average acreage is noticeably lower for medium productivity soil (40% report planting an average of 34.7 acres) and low productivity soil (34% report planting an average of 35.4 acres). (See Figure 73.)

On average, farmers report planting larger blocks of trees than do non-farming rural landowners, whether it be on high productivity soil (an average of 73.7 acres, compared to 25.5), medium productivity soil (53.5 acres, compared to 18.0) or low productivity soil (47.7 acres, compared to 27.6). (See Figure 73.)

When rural landowners who planted blocks of trees are asked how many acres are still in good health, 82 percent report at least some acreage. Nine percent say none have survived in good health, and another nine

FIGURE 73 Acres of Trees Planted on Each Type of Land April 2003

FIGURE 74





Note: Maximum value = 1,000 acres

Q.9Fc

Of the trees that you planted, how many acres {hectares} are still alive and in good health? Subsample: Those who planted blocks of trees on areas that had been bare of forest cover before 1990 (n=270)

	G	G O O D / H I G H			MEDIUM			POOR/LOW		
	Total	Farmers	Non- Farmers	TOTAL	Farmers	Non- Farmers	TOTAL	Farmers	Non- Farmers	
None	36	31	42	53	58	48	60	67	52	
1 to 10 acres	33	32	33	25	18	33	19	13	24	
11 to 25 acres	6	8	5	5	6	4	7	8	8	
26 to 50 acres	8	7	9	5	6	4	3	2	5	
51 to 100 acres	5	5	5	2	3	_	3	3	3	
Over 100 acres	6	10	2	2	3	3	1	2	2	
dk/na	6	7	5	7	6	8	6	7	6	

Q.8F

If you were to rate the soil productivity of the land on which you planted trees, in terms of its ability to produce crops that are traditionally grown in your area, how many acres {hectares} would be classified as ...?

Subsample: Those who planted blocks of trees on areas that had been bare of forest cover before 1990 (n=270)

percent offer no response. Rural landowners, as a whole, report that an average of 21.4 acres are still in good health; this finding is similar for farmers and for nonfarming rural landowners. (See Figure 74.)

It is interesting to note that there is not a great deal of difference, in terms of the average size of successful acreage, between those who plan to plant more trees in the future and those who do not (16.5 acres, compared to 15.7).

Planting was done primarily for shelterbelts/wind protection and aesthetics, with farmers being more likely to report the former reason and non-farming rural landowners the latter. These motivations outranked those associated with wood supply or recreation. Spruce is the most popular species for farmers, and pine is the most popular variety for non-farming rural landowners.

When rural landowners are asked why they planted blocks of trees, the largest proportion, a total of 41 percent, say they did it to create shelterbelts, that is, protection for open land from wind and desiccation. However, this is a much greater motivator for farmers (55%) than for non-farming rural landowners (27%). The desire to create a shelterbelts is also noticeably more likely than aesthetic reasons to be mentioned first as

Reason for Past Afforestation Activity

the prime motivator behind the planting of blocks of trees (34%, compared to 19%). (See Figure 75.) The reader is cautioned at this point that respondents who say they have planted trees for shelterbelts, when asked how many acres they planted, may have reported the area *around* which they planted trees rather than the actual area *on* which they planted trees. Therefore, the reported estimates for the average area planted by land type may be overestimated. This issue will be addressed in future analysis.

A total of 37 percent say they planted for aesthetic reasons. This is a greater motivator for non-farming rural landowners (44%) than for farmers (31%). Aesthetic considerations are a "first mention" for 19 percent of non-farming rural landowners, but for just nine percent of farmers.

A total of 19 percent of rural landowners say they planted for reasons related to conservation and wildlife habitat; there are no statistically significant differences between farmers and non-farming rural landowners, but it should be noted that this is a "first mention" for just six percent of rural landowners. Another four percent, in total, say they planted in order to help reduce climate change; this is a "first mention" for one percent of rural landowners.

FIRST MENTION ALL MENTIONS Non-NON-Τοται FARMERS FARMERS FARMERS FARMERS Τοται Shelterbelts/wind protection 34 49 19 41 55 27 Aesthetics 19 9 29 37 31 44 Reforestation 10 8 12 13 13 13 9 10 6 16 17 Improve water/soil quality 14 Commercial wood supply 6 4 8 8 6 11 Conservation/wildlife habitat 6 5 7 19 16 21 Produce fruit/nuts/berries 2 4 1 2 4 1 2 3 Recreation 4 3 4 _ 2 4 5 3 Reduce climate change 1 _ Other 10 10 12 25 23 27 Q.9Fa

Why did you plant these trees?

Subsample: Those who planted blocks of trees on areas that had been bare of forest cover before 1990 (n=270)

FIGURE 75

April 2003

A total of 16 percent report they planted to effect improvements to the quality of water and soil. Again, there are no statistically significant differences between farmers and non-farming rural landowners; this is a "first mention" for nine percent of rural landowners.

A total of 13 percent report planting for reasons related to reforestation. There are no differences between farmers and non-farming rural landowners; this is a "first mention" for ten percent of rural landowners.

The environmental commitment of rural landowners is reflected in the finding that a large proportion – at least half of all those who report afforestation activity – were motivated to plant trees in order to improve the environment or reduce the risk of negative environmental impacts (e.g., for reforestation, to improve water/soil quality, or for conservation/wildlife habitat) and it can certainly be argued that the leading motivator of afforestation (for wind protection) also offers clear environmental benefits. (See Figure 75.)

Relatively few rural landowners report planting trees for commercial reasons such as commercial wood supply (8%) or to produce fruit, nuts or berries (2%). Nonfarming rural landowners are slightly more likely than farmers to say they planted trees for commercial wood supply, but the proportions who say they planted for this commercial reason is much smaller than the proportions who planted for windbreaks or for conservation/ wildlife habitat. (See Figure 75.)

Among rural landowners who planted trees, the largest proportions report planting spruce (54%) or pine (46%) trees. Half as many, or fewer, planted maple (21%) or poplar (16%). About one in ten each report planting ash (13%), cedar (12%), fir (9%), oak (9%) or willow (8%). Smaller proportions report planting a wide variety of other species. (See Figure 76.)

Pine trees are the most popular species for non-farming rural landowners (62%, compared to 54% for spruce). However, spruce trees are the most popular variety among those who are planning afforestation activity within the next five years (61%, compared to 42% for pine).

FIGURE 76			
Types of	Tree	Species	Planted

April 2000			
	Total	Farmers	Non- Farmers
Spruce	54	53	54
Pine	46	30	62
Maple	21	16	26
Poplar	16	19	14
Ash	13	14	12
Cedar	12	8	17
Fir	9	5	13
Oak	9	8	10
Willow	8	11	5
Birch	6	1	11
Walnut	6	4	9
Various fruit/berry	6	6	6
Caragana	6	9	3
Black cherry	5	5	5
Larch	5	3	7
Elm	4	5	4
Lilac	4	6	2
Apple	4	3	4
Tamarack	3	2	5
Hemlock	2	-	4
Other	19	23	19

Q.9Fb

What types of tree species did you plant? Subsample: Those who planted blocks of trees on areas that had been bare of forest cover before 1990 (n=270) A majority of rural landowners paid out-of-pocket for the trees they planted. Among those who received a grant, opinion is divided as to whether they would have planted the trees without a subsidy.

Among rural landowners who became involved in afforestation activity, a majority of 55 percent report that they paid for the trees out of their own pockets. This proportion is slightly higher among non-farming rural landowners (60%) than among farmers (50%). These findings are yet another indication of the commitment that rural landowners have toward conservation of the environment. A total of 32 percent report that all (24%) or part (8%) of the costs were covered by some kind of grant or subsidy, and another two percent say the government provided the trees. (See Figure 77.)

Among rural landowners outside Quebec¹ who became involved in afforestation activity, a majority of 62 percent report that they paid for the trees out of their own pockets. This proportion was slightly higher among non-farming rural landowners (66%) than among farmers (58%). A total of 26 percent report that all (18%) or part (8%) of the costs were covered by some kind of grant or subsidy, and another two percent say the government provided the trees. (See Figure 77.) In Saskatchewan, seven percent of rural landowners report getting a grant from the Prairie Farmers' Rehabilitation Association.

Among the few rural landowners who did get a grant for planting trees, 52 percent say they would have planted the trees whether or not they received a subsidy, but a statistically equal proportion, 45 percent, say they likely would not have gone ahead without the financial incentive. (See Figure 78.)

Rural landowners in Quebec are much less likely than others to say they paid out-of-pocket (31%). It is interesting to note that rural landowners who plan to plant trees in the next five years are no more or less likely than others to report getting a grant for recent afforestation activity.

FIGURE 77 Financing of Tree Planting April 2003



Q.9Fd

Did you receive a grant or subsidy to plant the trees or did you pay for them out of your own pocket? Subsample: Those who planted blocks of trees on areas that had been bare of forest cover before 1990 (n=270)

FIGURE 78 Would Have Planted Trees Even Without Grant April 2003



Q.9Fe

Would you have planted these trees if you had not received a grant or subsidy to plant them?

Subsample: Those who planted blocks of trees on areas that had been bare of forest cover before 1990, and received a grant or subsidy to plant the trees (n=65)

¹ Respondents in Quebec were not asked this question because the regional agencies in Quebec that manage the provincial financial assistance program for the development of private woodlots provide rural landowners with free seedlings and support to cover planting establishment and tending costs.

Interest in Future Afforestation

Among rural landowners who have land on which they might plant trees, two in ten plan afforestation activities over the next five years. The projected incidence of afforestation planting is higher among non-farming rural landowners than among farmers. Lack of interest is mostly related to the need to use the land for other, primarily agricultural, purposes and to a feeling that one has enough trees.

Among rural landowners who report having land that has been left open as pasture, grazing or idle land, 18 percent say that, over the next five years, they are planning to plant blocks of trees on land that has been bare of forest since 1990. As was the case with reported afforestation activity since 1995, non-farming rural landowners (23%) are more likely than farmers (15%) to be planning afforestation activity in the near future. (See Figure 79.)

Those who report no afforestation plans primarily say they are not interested in planting trees because they need to use the land as pasture (12%) or for crops (11%) or because they have enough trees (11%) or have already planted trees (10%). Farmers are more likely than non-farmers to say they need the land for other purposes; non-farming rural landowners are more likely than farmers to think they have no need for more planting. (See Figure 80.)

Projected levels of afforestation are higher than average in Quebec. As might be expected, they are also higher among those who report recent afforestation activity and among those who do not have any crop land. Rural landowners in British Columbia are noticeably more likely than average to report their lack of interest in planting is related to the need to use the land for pasture.

FIGURE 79 Planning to Plant Trees in Next Five Years April 2003



Q.13Fa

Within the next five years, are you planning to plant blocks of trees on land that has been bare of trees since 1990? Subsample: Those who have any land left open as pasture, grazing or idle land (n=1,245)

FIGURE 80 Main Reason Not Interested in Planting Trees April 2003

	TOTAL	Farmers	Non- Farmers
Need land as pasture	12	13	9
Need land for crops	11	15	4
Have enough trees	11	10	14
Already treed/forested	10	7	14
My age/retiring	7	7	6
Not enough space	7	5	9
No need/interest	6	7	4
Cost of planting trees	6	6	4
Trees growing naturally	5	4	8
Land is productive	4	5	2
Time involved	4	5	2
No economic value	4	5	1
Land is for farming	4	4	1
Prefer look of landscape	3	2	5
Other	22	19	25

Q.13Fb

What is the main reason you are not interested in planting trees? Subsample: Those who have any land left open as pasture, grazing or idle land, and are not planning to plant blocks of trees on land that has been bare of trees since 1990 (n=991)

Rural landowners who plan afforestation activity expect to plant an average of 8.6 acres. Overall, projected acreage is slightly higher among farmers than among non-farming rural landowners. The projected incidence of afforestation activity is lower for poor productivity land than for high or medium productivity soil, but the projected average acreage is larger.

Rural landowners who plan afforestation activity say they expect to plant an average of 8.58 acres. Overall, projected acreage is slightly higher among farmers (10.1 acres) than among non-farming rural landowners (7.11 acres). (See Figure 81.)

When rural landowners are asked to rate the soil productivity of the land on which they are planning afforestation activity, 82 percent say they expect to plant on high productivity soil (an average of 7.4 acres). Much smaller proportions are planning afforestation activity on medium productivity soil (59% planning to plant an average of 6.3 acres) or low productivity soil (53% planning to plant an average of 12.0 acres). There are no striking differences between farmers and non-farmers in terms of the average acreage they are planning to plant. (See Figure 82.)



Note Maximum values = 100 acres

Q.13Fc

About how many acres {bectares} are you planning to plant? Subsample: Those who have any land left open as pasture, grazing or idle land, and who are planning to plant blocks of trees on land that has been bare of trees since 1990 (n=221)

April 2003										
	GOOD/HIGH				MEDIUM			POOR/LOW		
	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers	
None	14	14	16	33	33	34	42	43	41	
1 to 10 acres	66	65	67	50	48	52	39	40	38	
11 to 25 acres	12	16	5	8	13	3	7	5	8	
26 to 50 acres	4	2	8	1	_	2	6	6	7	
51 to 100 acres	_	_	_	_	_	_	1	3	_	
dk/na	5	5	5	8	7	9	9	9	9	
Average number of acres	7.4	7.3	8.0	6.3	6.9	5.6	12.0	12.7	11.5	
	acres	acres	acres	acres	acres	acres	acres	acres	acres	

FIGURE 82 Projected Acreage for Future Afforestation by Type of Soil April 2003

Maximum values = 50 for good land, 50 for medium land and 70 for poor land

Q.14F

If you were to rate the soil productivity of the land on which you're planning to plant trees, in terms of its ability to produce crops that are grown in your area, about how many acres {hectares} would be classified as ...?

Subsample: Those who have any land left open as pasture, grazing or idle land, and who are planning to plant blocks of trees on land that has been bare of trees since 1990 and who specify an acreage that is equal to or less than that specified in Q.13Fc (n=113 for good land, 93 for medium land, and 82 for poor land) (n=221)

Projected afforestation is planned primarily for shelterbelts/wind protection and aesthetics, with farmers being motivated more by a desire for windbreaks and non-farming rural landowners being about equally motivated by both reasons.

When rural landowners are asked why they are planning to plant blocks of trees, the largest proportion, a total of 45 percent, say they want to create shelterbelts, that is, protection for open land from wind and desiccation. However, as was the case with recent afforestation activity, this is a much greater motivator for farmers (53%) than for non-farming rural landowners (36%). The desire to create shelterbelts is also noticeably more likely than aesthetic reasons to be mentioned first as the prime motivator behind afforestation (37%, compared to 15%). (See Figure 83.) Again, the reader is cautioned that respondents who say they will plant trees for shelterbelts, when asked how many acres they will plant, may have reported the acreage around which they will plant trees rather than the specific acreage on which they will plant. This issue will be addressed in future analysis.

A total of 36 percent say they are planning to plant for aesthetic reasons. Overall, there are no statistically significant differences in the total number of farmers and non-farming rural landowners who give this reason, but this is more likely to be a "first mention" for nonfarming rural landowners (20%) than it is for farmers (9%). Overall, aesthetic considerations are a "first mention" for 15 percent of rural landowners.

A total of 27 percent of rural landowners are planning afforestation efforts for reasons related to conservation and wildlife habitat; there are no statistically significant differences between farmers and non-farming rural landowners. This is a "first mention" for 12 percent of rural landowners. Another seven percent, in total, say they are motivated by a desire to help reduce climate change; this is a "first mention" for one percent of rural landowners.

A total of 15 percent say they are motivated by a desire to improve the quality of water and soil. Again, there are no statistically significant differences between farmers and non-farming rural landowners; this is a "first mention" for nine percent of rural landowners.

	FIRST MENTION			ALL	ALL MENTIONS		
	TOTAL	Farmers	Non- Farmers	Total	Farmers	Non Farmers	
Shelterbelts/wind protection	37	46	28	45	53	36	
Aesthetics	15	9	20	36	34	37	
Conservation/wildlife habitat	12	10	14	27	26	29	
Improve water/soil quality	9	9	8	15	19	12	
Reforestation	9	5	13	10	5	15	
Commercial wood supply	7	9	5	11	12	11	
Fruit	2	2	1	3	3	3	
Reduce climate change	1	2	1	7	5	9	
Privacy	1	_	3	5	2	8	
Shade	1	1	1	2	1	4	
Recreation	1	3	-	2	4	_	
Other	8	8	7	14	12	18	

FIGURE 83 Reason for Planned Afforestation Activity April 2003

What is your main reason for planting trees on this area?

Subsample: Those who have any land left open as pasture, grazing or idle land, and who are planning to plant blocks of trees on land that has been bare of trees since 1990 (n=221)

Q.13Fd

A total of 11 percent of rural landowners are planning to plant trees to be harvested as commercial wood. There is no significant difference between farmers and non-farming rural landowners; this is a "first mention" for seven percent of rural landowners.

A total of ten percent report being motivated by reasons related to reforestation. This is a more powerful motivator for non-farming rural landowners (15%) than for farmers (5%). This is a "first mention" for nine percent of rural landowners.

Even more so than was the case with reported afforestation activity, the environmental commitment of rural landowners is reflected in the finding that over half of all those planning afforestation activity are motivated to plant trees in order to improve the environment or reduce the risk of negative environmental impacts (e.g., for conservation/wildlife habitat, to improve water/soil quality, for reforestation or to reduce climate change) and it can certainly be argued that the leading motivator of planned afforestation (for wind protection) also offers clear environmental benefits. (See Figure 83.)

Relatively few rural landowners say they are planting trees for commercial reasons such as commercial wood supply (11%) or to produce fruit (3%). (See Figure 83.)

Projected afforestation activities are much more likely to be planned for idle land than for land that's currently being used for crops or for pasture land, although about two-thirds of rural landowners are planning to plant on crop and/or pasture land.

When rural landowners who are planning afforestation activities are asked about the current status/use of the land they're planning to use for these activities, 63 percent say they plan to plant trees on an average of 10.5 acres of land that is currently being used for agricultural crops. An equal proportion, 62 percent, say they plan to plant trees on an average of 7.5 acres of land that is currently being used for pasture. A noticeably larger proportion, 71 percent, say they plan to plant trees on an average of 9.6 acres of land that is currently idle. (See Figure 84.) Farmers who are planning afforestation activities are more likely than their non-farming counterparts to indicate that they will plant on crop or pasture land. Non-farming rural landowners who are planning afforestation activities are more likely than their farming couterparts to say they will plant on idle lands. These differences undoubtedly reflect the fact that non-farming rural landowners are much less likely than farmers to have any current crop or pasture land.

Among Canadian farmers who are planning afforestation activities, 75 percent say they plan to plant trees on an average of 9.6 acres on land that is currently being used for agricultural crops (compared to just 45% of non-farmers who plan to plant an average of 12.9 acres). Similarly, 67 percent of farmers planning afforestation activities say they will plant an average of 9.1 acres on pasture land (compared to 54% of non-farmers who plan to plant an average of 5.0 acres). In contrast, 65 percent of farmers planning afforestation activities say they will plant an average of 11.1 acres on idle land (compared to 75% of non-farmers who plan to plant an average of 8.7 acres). (See Figure 84.)

FIGURE 84 Current Use for Land on which Planning to Plant Trees April 2003

	AGRICULTURAL CROPS		PASTURE/GRAZING			IDLE/NOT IN USE			
	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers
None	37	28	52	37	30	45	26	32	20
1 to 10 acres	50	59	36	54	57	51	57	51	61
11 to 25 acres	6	10	_	5	7	3	8	8	8
26 to 50 acres	6	6	6	3	6	_	4	2	6
51 to 100 acres	1	_	3	-	-	-	2	4	-
dk/na	1	_	3	4	5	3	4	4	4
Average number of acres	10.5 acres	9.6 acres	12.9 acres	7.5 acres	9.1 acres	5.0 acres	9.6 acres	11.1 acres	8.7 acres

Maximum values = 60 acres for agricultural land, 50 for pasture, and 100 for idle land

Q.15F

Thinking now about the land on which you are planning to plant these trees, about how many acres {bectares} are currently being used ...? Subsample: Those who have any land left open as pasture, grazing or idle land, and are planning to plant blocks of trees on land that has been left bare of trees since 1990, and who apecify an acreage that is equal to or less than that specified in Q.13Fc (n=84 for agricultrual land, 85 for pasture and 101 for idle land) (n=221)

Inducements to Planting Trees

The survey results indicate an increase since 2000 in Canadian farmers' interest in inducements to plant trees.

When farmers (outside Quebec²) who have at least some unforested land are asked how many acres they would plant if they were provided with free seedlings, their planting costs were covered, and they would own the mature trees, 49 percent express interest in planting an average of 75.5 acres (compared to 19.0 acres in 2000). Interest appears to be greater now than in 2000, when farmers were offered the same inducement package, but with no explicit mention of whether they would own the trees.

Among non-farming rural landowners (outside Quebec) who have at least some unforested land, and were offered the same inducement package, 57 percent express interest in planting an average of 14.2 acres.

The inducements appear to be more attractive – in terms of expressed willingness to plant any seedlings – to rural landowners who have owned their land for shorter periods of time, among those who report recent afforestation activities, and also among those who are planning afforestation activities in the near future.

Rural landowners who respond positively to the inducement of free seedlings are more likely to say they would plant on high or medium productivity land than on low productivity land.

Among rural landowners who say they would plant the free seedlings, 63 percent say they would plant an average of 48.3 acres of trees on high productivity land. There is some indication that the inducement is more attractive to farmers (66% say they would plant an average of 67.7 acres) than to non-farming rural landowners (57% say they would plant an average of 14.6 acres).

FIGURE 85

Acres Would Plant if Seedlings Free, Planting Costs Covered and Would Own Mature Trees April 2003



Note: Maximum value = 20,000 acres

Q.16F

I would now like you to please consider the following hypothetical situation. If you were provided with free seedlings and your planting costs were covered and you would own the trees once they reach maturity, how many acres {hectares}, in total, would you consider planting on the land you currently own? Note: Previously, this question did not mention "owning the trees" Subsample: Rural landowners outside Quebec who have any land growing crops, or left open as pasture, grazing or idle land (n=1,302)

² Respondents in Quebec were not asked this question because the regional agencies in Quebec that manage the provincial financial assistance program for the development of private woodlots provide rural landowners with free seedlings and support to cover planting establishment and tending costs.

Among rural landowners who say they would plant the free seedlings, 44 percent say they would plant an average of 37.8 acres of trees on medium productivity land. There is little difference between farmers and nonfarmers in terms of the likelihood that they would plant on medium productivity land, but, as usual, farmers say they would plant larger blocks of trees (45% say they would plant an average of 52.2 acres, compared to 45% of non-farmers who say they would plant an average of 16.9 acres).

Among rural landowners who say they would plant the free seedlings, 26 percent say they would plant an average of 50.1 acres of trees on low productivity land. (See Figure 86.) Interest seems to be slightly lower among farmers, in terms of the likelihood that they would plant, but again, those who are interested say they would plant larger blocks of trees (21% say they would plant an average of 81.9 acres, compared to 34% of non-farmers who say they would plant an average of 18.4 acres). Interest in leasing land for tree plantations is noticeably greater among farmers: just under balf of farmers express interest, regardless of the productivity of their available land, as opposed to non-farming rural landowners (two in ten of whom express interest in leasing their good productivity land and one in ten of whom express interest in leasing their medium or low productivity land).

Rural landowners were asked to name the minimum amount of annual rent, per acre, that they would require before they would consider leasing their good, medium or low productivity land for 20 years, so that the land could be used as tree plantations where the trees themselves would be established, maintained and owned by someone else, and then harvested at the end of the 20-year period. Farmers are more likely than non-farming rural landowners to specify a rental price, and are less likely to say they would never consider renting land for tree plantations. Interestingly, among rural landowners who do specify a price, farmers tend

FIGURE 86 Projected Acreage for Planting Free Seedlings by Type of Soil April 2003

	G	GOOD/HIGH			MEDIUM			POOR/LOW		
	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers	
None	34	32	38	51	52	48	70	75	62	
1 to 10 acres	40	38	42	29	27	34	17	13	24	
11 to 25 acres	8	7	8	5	6	4	4	3	6	
26 to 50 acres	6	9	3	4	5	3	2	2	3	
51 to 100 acres	5	5	4	3	3	2	2	3	1	
Over 100 acres	4	7	_	2	3	1	1	1	1	
dk/na	4	3	5	5	3	7	4	4	4	

Note: Maximum values: 2,000 acres for good land, 1,600 acres for medium land, and 3,500 acres for poor land.

Q.17F

If you were to rate the soil productivity of this land in terms of its ability to produce crops that are grown in your area, about how many acres {hectares} would be classified as ...?

Subsample: Rural landowners outside Quebec who have any land growing crops, or left open as pasture, grazing or idle land, and would consider planting on the land they currently own (n=710)

to name a lower price than do non-farmers.³ However, for the obvious reason that they tend to have more land, farmers are willing to rent larger parcels of land than is the case with non-farming rural landowners. (See Figure 87.)

Among farmers who own good productivity land, 47 percent name a rental price; 33 percent say they would never lease the land for a tree plantation, and 19 percent do not name a rental price. However, among non-farming rural landowners who own good productivity land, just 22 percent name a rental price; 42 percent say they would never lease the land for a tree plantation, and 35 percent do not name a rental price.

A total of 33 percent of farmers specify a rental price of \$100 or less for good productivity land (compared to 7% of non-farmers), and 14 percent name a price in excess of \$100 (compared to 15% of non-farmers). The average rental price is \$147 for farmers (compared to \$507 for non-farmers). The average number of acres that would be leased is 177 acres for farmers (compared to 27 acres for non-farmers).

Among farmers who own medium productivity land, 43 percent name a rental price; 31 percent say they would never lease the land for a tree plantation, and 22 percent do not name a rental price. In contrast, among non-farming rural landowners who own good medium productivity land, just 15 percent name a rental price; 47 percent say they would never lease the land for a tree plantation, and 36 percent do not name a rental price.

A total of 33 percent of farmers specify a rental price of \$100 or less for medium productivity land (compared to 6% of non-farmers), and ten percent name a price in excess of \$100 (compared to 9% of non-farmers). The average rental price is \$123 for farmers (compared to \$293 for non-farmers). The average number of acres that would be leased is 130 acres for farmers (compared to 47.4 acres for non-farmers).

Among farmers who own low productivity land, 42 percent name a rental price; 32 percent say they would never lease the land for a tree plantation, and 23 percent do not name a rental price. In contrast, among nonfarming rural landowners who own low productivity land, just 13 percent name a rental price; 51 percent say they would never lease the land for a tree plantation, and 33 percent do not name a rental price.

A total of 34 percent of farmers specify a rental price of \$100 or less for low productivity land (compared to 4% of non-farmers), and eight percent name a price in excess of \$100 (compared to 9% of non-farmers). The average rental price is \$129 for farmers (compared to \$481 for non-farmers). The average number of acres that would be leased is 96 acres for farmers (compared to 23.6 acres for non-farmers).

Among rural landowners as a whole, those who name a price of \$100 or less per acre for good productivity land are willing to rent an average of 188 acres for tree plantations; those who name a price in excess of \$100 per acre are willing to rent an average of 77.5 acres. Rural landowners who name a price of \$100 or less per acre for medium productivity land are willing to rent an average of 127 acres for tree plantations; those who name a price in excess of \$100 per acre are willing to rent an average of 79.7 acres. Rural landowners who name a price of \$100 or less per acre for low productivity land are willing to rent an average of 92.6 acres for tree plantations; those who name a price in excess of \$100 per acre are willing to rent an average of 73.7 acres.

³ The reader is cautioned that the dollar amounts specified in a phone survey should be read only as a broad indication of what rural landowners, hypothetically, would like to get or be willing to take, and may or may not reflect the actual value of land in their area or the amount for which land would eventually be leased in a "real life" situation. Moreover, in the current survey, Environics followed accepted practice when calculating averages, and removed responses in excess of \$2000 per acre from the analysis of this question.

FIGURE 87 Leasing Land for Tree Plantations** April 2003

	G	00D/HIG	H ¹		MEDIUM ²		P 0 0 R / L 0 W ³		N ³
	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers	Total	Farmers	Non- Farmers
Interested in renting	40	47	22	34	43	15	30	42	13
Would never lease	35	33	42	36	31	47	40	32	51
No price given	24	19	35	26	22	36	27	23	33
No unforested land	1	1	2	4	4	3	4	4	4
Prices per acre specified									
\$10 or less	1	*	1	1	1	_	2	4	_
\$11 to \$25	4	5	*	6	8	1	7	11	1
\$26 to \$50	12	16	3	11	16	2	9	14	2
\$51 to \$100	9	12	3	7	8	3	4	5	1
\$101 to \$500	8	10	5	6	7	5	4	5	3
Over \$500	6	4	10	3	3	4	4	3	6
Average \$/acre	\$206	\$147	\$507	\$148	\$123	\$293	\$192	\$129	\$481
Acres specified									
Less than 10	35	27	68	31	25	59	36	29	61
11 to 25	9	8	14	13	15	6	18	20	12
26 to 50	12	14	3	15	16	8	16	20	2
51 to 100	16	18	7	12	12	15	12	12	9
101 to 150	2	3	1	2	2	3	2	2	3
Over 150	20	25	2	20	23	5	11	14	3
Average number of acres	146.0 acres	177.0 acres	27.0 acres	115.0 acres	130.0 acres	47.4 acres	81.2 acres	96.0 acres	23.6 acres

* Less than one percent

** All responses shown in percentages, unless otherwise indicated

Note: Maximum value for "Prices per acre specified" = \$2,000. Maximum values for "Acres specified" = 2,400 acres for good land, 2,400 acres for medium land, and 1,500 acres for poor land.

Q.19Fa, 20Fa, 21Fa

Now, I would like you to think about any land you have on which trees could be grown, that you would classify as ... good or high ... medium ... poor or low ... productivity land and that has been bare of forest cover since at least 1990. What is the minimum amount of annual rent {per acre} that you would require before you would consider leasing this land for 20 years, so that it could be used as tree plantations where the trees themselves would be established, maintained and owned by someone other than yourself and then harvested at the end of the 20-year period?

1 Subsample: Those who have good productivity open land (n=822)

2 Subsample: Those who have medium productivity open land (n=762)

3 Subsample: Those who have low productivity open land (n=564)

Q.19Fb, 20Fb, 21Fb

How many acres {hectares} in total, of your ... good ... medium ... low ... productivity land would you consider leasing at this rental price? 1 Subsample: Those who have good productivity open land and would consider leasing that land (n=325)

2 Subsample: Those who have medium productivity open land and would consider leasing that land (n=255)

3 Subsample: Those who have low productivity open land and would consider leasing that land (n=173)

Barriers to Planting Trees

About balf of rural landowners say the work that's involved in tending trees after they have been planted has a major or moderate impact on their decision whether to plant blocks of trees; this proportion increases significantly when rural landowners are told specifically what needs to be done.

The survey results indicate that the work that's involved in tending trees after they have been planted has a significant impact on the decision to undertake afforestation activities. This is the case both for those who have undertaken recent afforestation activity and for those who plan to undertake this activity within the next five years.

When asked top-of-mind, a total of 48 percent of rural landowners say the work that's involved in tending trees after they have been planted has a major (25%) or moderate (23%) impact on the decision of whether or not to plant blocks of trees; 50 percent say this consideration has little or no impact. Farmers are more likely than non-farming rural landowners to say the work involved would have a major impact on the decision-making process. (See Figure 88.)

When rural landowners are told that they would have to weed and fertilize new trees for five years, and protect them against fire and insects, a total of 65 percent of rural landowners say the work that's involved would have a major (39%) or moderate (26%) impact on the decision of whether or not to plant blocks of trees; 33 percent still say this consideration would have little or no impact on their decision to plant blocks of trees. These findings are similar for farmers and for non-farming rural landowners. (See Figure 88.)

When those who report a moderate impact (when asked top-of-mind) are given the specific information on the work that's involved with tending trees, 35 percent say this would have a major impact on their decision-making process. Among those who report little or no impact when asked top-of-mind, the added information causes a total of 43 percent to say the work would have a major (22%) or moderate (21%) impact on their decision.

The top-of-mind perception that the work involved would have a major impact is less pronounced than

FIGURE 88

Impact of Work Involved on Decision to Plant April 2003



Q.18Fa

Would the work that's involved in tending trees after they are planted have a major impact, a moderate impact, or little or no impact on your decision to plant blocks of trees? 0.18Fb

If I told you that you'd have to weed and fertilize these new trees for five years, and protect them against fire and insects, would you then say that this would have a major impact, a moderate impact, or little or no impact on your decision to plant blocks of trees?

average in Ontario and British Columbia. However, in both cases, the proportion who say there would be major impact doubles when rural landowners are given more information about the actual work that's involved.

Interestingly, if you combine those who say there would a major or moderate impact (top-of-mind), there is not a great deal of difference in opinion among those who have undertaken recent afforestation activity (51%, compared to 47% of those who have not done this) and among those who plan to undertake this activity within the next five years (54%, compared to 46% of those who have no such plans). At the same time, it should be noted that, when those who have no afforestation plans are given concrete information about the work that's involved, the proportion who say there would be a major impact increases from 26 percent to 41 percent (compared to 20% increasing to 27% among those who do plan to plant blocks of trees in the near future).

Planting Preferences

There has been a slight increase since 2000 in the proportion of Canadian farmers, now more than eight in ten, who agree that it is important to plant trees that are native to one's local area; interest in native species is even higher among non-farming rural landowners. Just over four in ten rural landowners are interested in planting species of trees that are naturally fast-growing; interest in these is slightly greater among farmers than among non-farmers.

Since 2000, there has been an increase of three points in the proportion of Canadian farmers, now 83 percent, who agree that it is important to plant trees that are native to their local area. Among non-farming rural landowners, 91 percent agree with this objective. (See Figures 89 and 90.)

In response to a related question, 43 percent of rural landowners say they are interested in planting species of trees that are naturally fast-growing, such as poplar and willow; this proportion is slightly higher among farmers (46%) than among non-farming rural landowners (41%). However, slight majorities of both groups indicate that the rate of growth is not an interest for them. (See Figure 91.)

Interest in planting native species of trees is somewhat greater among those who report recent afforestation activity (compared to those who do not) and among those who plan to undertake afforestation activity (compared to those who have no plans to plant blocks of trees).

Interest in planting fast-growing trees is slightly greater among those who report recent afforestation activity (compared to those who do not). However, it is much greater among those who plan to undertake afforestation activity within the next five years (68%, compared to 40% of those who have no plans to plant blocks of trees).

FIGURE 89

Important to Plant Trees Native to Area Farmers 2000 - 2003



May 2000 April 2003





0.10F

Is it important or is it not important to plant trees that are native to your area?

Figure 89 subsample: Farmers (n=950)

FIGURE 91

Interested in Planting Naturally Fast-growing Trees April 2003



0.11F

Are you interested, or not interested, in planting species of trees that are naturally fast-growing, such as poplar and willow, that is, fast-growing trees that have not been genetically-modified?

Climate Change

Nine in ten rural landowners agree that forests can reduce the effects of climate change. These findings are similar for farmers and for non-farming rural landowners. However, non-farmers are more willing than farmers to commit to planting trees – more than seven in ten compared to just under six in ten – in order to facilitate ecological improvements and there has been a decrease since 2000 in farmers' willingness to help in this effort.

The survey continues to find almost unanimous agreement among farmers that forests can reduce the effects of climate change (87%, unchanged from 2000). Among non-farming rural landowners, 90 percent agree with the statement. (See Figures 92 and 93.)

Among farmers who agree that forests can reduce the effects of climate change, a total of 56 percent say either that they are willing and able (47%) or that they are willing but not able (9%) to plant trees on their non-forested land in order to help in this effort. In 2000, 65 percent of farmers expressed willingness to help by planting trees and there has been an increase of seven points in the proportion, now 39 percent, who say they are not willing to help. (See Figure 92.)

Among non-farming rural landowners who agree that forests can reduce the effects of climate change, a total of 73 percent say either that they are willing and able (61%) or that they are willing but not able (12%) to plant trees on their non-forested land in order to help in this effort; 23 percent say they are not willing to help. (See Figure 93.)

The perception that forests can reduce climate change is slightly more prevalent among those who are planning afforestation activities (95%, compared to 86% among those who have no plans to plant blocks of trees).

Willingness to plant trees is higher than average in Atlantic Canada and Quebec, and lower in Saskatchewan. It is also greater among those who have owned their land for shorter periods of time and who own smaller parcels of land. Reluctance to plant trees in an effort to reduce climate change is greater among those who currently have crop land.



Q.22Fa

Do you think that forests can help reduce the effects of climate change?

Total

Farmers

Non-farmers

Q.22Fb

Would you be willing, or able, to plant trees on your non-forested land in order to help in this effort? (Note slightly different wording in 2000: Would you be willing to plant trees to help in this effort?)

1 Subsample: Farmers (n=950)

2 Subsample: Farmers who think that forests can help reduce the effects of climate change (n=826)

3 Subsample: Those who think that forests can help reduce the effects of climate change (n=1,447)

Willingness to plant trees is much greater among those who have recently undertaken afforestation activities (78%, compared to 60% of those who have not) and among those who are planning afforestation activity within the next five years (88%, compared to 56% of those who have no such plans).

Government Financial Inducements for Environmental Protection

There is a very strong consensus among both farmers and non-farming rural landowners that tax dollars should be used to provide financial assistance to rural landowners who undertake improvements that will protect or improve natural resources. However, opinion is divided on the question of whether this assistance should be provided by the federal or provincial governments, with farmers expressing a slight preference for federal responsibility and non-farming rural landowners tending to prefer provincial responsibility.

The importance that rural landowners' attach to environmental conservation is also reflected in the finding that almost all agree that these efforts should be subsidized by tax dollars. This level of support is actually higher than that found in other Environics surveys that have asked about tax support for health care programs and services.

Nine in ten rural landowners strongly (52%) or somewhat (36%) agree that tax dollars should be used to provide financial assistance to rural landowners who undertake improvements that will protect or improve natural resources such as land and water; just ten percent disagree with the proposal. These findings are similar for farmers and for non-farming rural landowners. (See Figure 94.)

Rural landowners are somewhat divided on the question of which level of government should provide this assistance. A slight plurality of 32 percent say it should come from the federal government, but an almost equal proportion (29%) see this as a provincial responsibility. Just six percent think the money should come from local or municipal governments. Thirteen percent favour joint federal-provincial funding and 14 percent say all levels should be involved. (See Figure 95.)

Among Canadian farmers, a plurality of 35 percent see this kind of funding as federal responsibility. Among non-farming rural landowners, a plurality of 35 percent look to their provincial government. (See Figure 95.)

FIGURE 94

Taxes Should Be Used to Help Landowners to Make Improvements Protecting Natural Resources April 2003



Q.9Wa

Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree that tax dollars should be used to provide financial assistance to rural landowners who undertake improvements that will protect or improve natural resources such as land and water?

FIGURE 95





Q.9Wb

Which level of government should provide this assistance? Subsample: Those who agree that tax dollars should be used to provide financial assistance to rural landowners who undertake improvements that will protect or improve natural resources (n=1,471) Strongly expressed support for financial assistance to rural landowners who undertake improvements that will protect or improve natural resources is higher than average in Ontario and Quebec, and lower in Atlantic Canada and Alberta. It is also more pronounced among those who believe that good land management practices can have a great deal of benefit on all downstream users of water and land resources (compared to those who perceive only some benefit), and among those whose land use decisions are influenced by the impact on wildlife habitats (compared to those who do not consider these factors). Rural landowners in Atlantic Canada and Saskatchewan are much more likely than those in Quebec, Ontario and British Columbia to think the funding should come from the federal government. In Ontario and British Columbia, pluralities favour provincial funding. Opinion is quite divided in Quebec.

Information on Trees

About one-third (each) of rural landowners say they require technical assistance or information regarding the longterm tending of trees and choosing the species of trees that they might plant, and a slightly smaller proportion would like to know more about how to plant trees.

The survey results indicate there is significant interest among rural landowners in learning more about the planting and tending of trees. About one-third (each) say they require more information and technical assistance regarding the longterm tending of trees (37%), choosing the species of trees that they might plant (36%) and to a lesser extent, the actual planting of trees (29%). These results are similar for farmers and non-farmers, although the former express slightly higher levels of interest in learning more about the different species of trees. (See Figure 96.)

Interest in all three areas of information is greater than average in Atlantic Canada and lowest in British Columbia.

Interest is also greater among those planning afforestation activities within the next five years, with about half saying they would like to learn more about species of trees and the longterm tending of trees, and more than four in ten wanting to know more about planting trees. Somewhat surprisingly, those who report recent afforestation activity are no more likely than those who do not report such activity to say they require more information about the longterm tending of trees.

FIGURE 96 Technical Assistance or Information Required April 2003 37 Longterm tending of trees 39 Choosing species 33 Total 29 Farmers

30

30

Non-farmers

0.12F

How to plant

Thinking generally about having trees on your land, do you require technical assistance or information in any of the following areas ... choosing the species of trees that you might plant on your land ... how to plant trees ... on the longterm tending of the trees?

Confidence in Specific Organizations to Provide Information on Land Management

About seven in ten (each) rural landowners have confidence in the ability of landowner or farmer associations and non-government or conservation groups to give them land management information. About five in ten (each) say the same of their local municipal government, their provincial government, and volunteer groups such as Stewardship councils. About four in ten have confidence in private consultants and just over three in ten have confidence in the federal government. The federal government is the only source of information for which a majority say they lack confidence.

When rural landowners are asked about a number of sources of land management information, the largest proportions say they have confidence in landowner or farmer associations (73%) and non-government or conservation groups (65%). About two in ten (each) say they lack confidence in these groups. (See Figure 97.)

About half of rural landowners say they have confidence in their local municipal government (56%), their provincial government (50%) and volunteer groups such as Stewardship councils (48%). Between three and four in ten lack confidence in their municipal and provincial governments, and about one-quarter lack confidence in volunteer groups. (See Figure 97.)

Well below half of rural landowners say they have confidence in private consultants (41%) and the federal government (34%). About one-third lack confidence in private consultants and just over half lack confidence in the federal government. (See Figure 97.)

Confidence in landowner or farmer associations and local governments is greater among farmers than among non-farmers. Non-farming rural landowners express greater confidence than do farmers in non-government or conservation groups. (See Figure 97.)

Confidence in provincial governments varies significantly, from about two-thirds (each) who express confidence in Atlantic Canada and Quebec, to one-third in British Columbia; about half (each) express confidence in Ontario and the Prairie provinces. Interestingly, confidence in the federal government is higher than average

FIGURE 97 Have Confidence to Provide Land Management Information April 2003

	TOTAL	Farmers	Non- Farmers
Landowner/farmer associations	73	76	68
Non-government/ conservation groups	65	62	72
Your municipal government	56	60	52
Your provincial government	50	52	49
Volunteer groups	48	49	49
Private consultants	41	42	41
Federal government	34	33	37

Q.19W

Do you or do you not have confidence in each of the following organizations to provide information on land management ...?

in Quebec, where majorities of rural landowners express roughly the same levels of confidence in all three levels of government. Confidence in municipal governments is lowest in Ontario and British Columbia; in all the other provinces, about six in ten (each) express confidence in their local government as source of information on land management.

Those who define "land stewardship" in terms of voluntarily conserving the natural environment are more likely than those who define the term as keeping the land economically productive to say they have confidence in non-government or conservation groups, volunteer groups and the federal government. Those who think of stewardship in terms of the productivity of the land are slightly more likely than others to express confidence in landowner or farmer organizations.

Preferred Sources of Information on Land Management

Brochures and manuals are the most preferred sources of information on land management, and information given over the phone is the least preferred medium.

The survey results indicate that rural landowners prefer to get information on land management from written materials. When asked how they would most like to receive information about land management, the largest proportion, by far, say they would like to receive brochures or manuals (67%). On the next tier are demonstration sites (54%). Just under half would like to get information from government offices (46%). About four in ten (each) prefer management workshops (44%), on-site consultation (42%), or websites or e-mail (39%). Least preferred is information dispensed over the phone (26%). (See Figure 98.)

There are few differences between the preferences of farmers and non-farming rural landowners, although the latter are slightly more likely to prefer website communications and on-site consultation, and farmers express a slightly greater preference for demonstration sites. (See Figure 98.)

Preference for all the sources is greatest in Atlantic Canada. Preference for websites or e-mail, and going to government offices is lowest in Saskatchewan. Rural landowners in Quebec are more likely than others to prefer to use the phone.

Those who define "land stewardship" in terms of voluntarily conserving the natural environment are more likely than those who define the term as keeping the land economically productive to say they prefer to get information via websites or e-mail, workshops and demonstration sites.

FIGURE 98 Preferred Sources of Land Management Information April 2003

	TOTAL	Farmers	Non- Farmers
Written materials such as brochures/ self-help manual	67	67	68
Demonstration sites	54	57	52
Government offices	46	47	46
Workshops	44	46	44
On-site consultation	42	40	45
Websites/e-mail	39	37	43
Over the phone	26	25	29

Q.20W

Would you personally like to get information on land management through each of the following ...?

Confidence in the Internet

More than five in ten rural landowners believe the Internet is a good source of information on issues associated with ownership of rural land, and this proportion rises to more than six in ten among those who have access to the Net.

The survey finds the Internet gets passing marks from rural landowners, especially from those who have access, but this endorsement is rather tentative. Assessments are slightly higher among farmers than among nonfarming rural landowners.

A majority of 54 percent of rural landowners say the Internet is a very (21%) or somewhat (33%) good source of information on issues associated with ownership of rural land; ten percent say it is a poor source of information and 36 percent offer no opinion. Overall positive assessments are slightly higher among farmers (57%)than among non-farmers (52%). (See Figure 99.)

Among rural landowners who have access to the Internet, a majority of 64 percent say the Internet is a very (26%) or somewhat (38%) good source of information on issues associated with ownership of rural land; ten percent say it is a poor source of information and 27 percent offer no opinion. Among those who do not have access to the Internet, 48 percent say the Internet is a very (19%) or somewhat (29%) good source of information on issues associated with ownership of rural land; seven percent say it is a poor source of information and 45 percent offer no opinion.

Confidence in the Internet is much higher among Quebec rural landowners than among other rural landowners.

FIGURE 99

Internet as Source of Land Ownership Information $\ensuremath{\mathsf{April}}\xspace{2003}$



Q.D9

Generally, would you say that the Internet is a very good, somewhat good, somewhat poor or very poor source of information on issues associated with ownership of rural land? The primary purpose of this study – as for the Phase I and Phase II studies – was to provide policy makers and program developers with current data to assist them in the development of stewardship policies and programs. As was noted in the Introduction section of this report, the current survey was also designed to widen the scope of the Phase I survey, by including a significant proportion of non-farming rural landowners, and to broaden the scope of the Phase II survey by taking some of the issues raised among Ontario rural landowners and exploring them among a national sample of rural landowners.

The Phase III survey confirms the main conclusions of the Phase I and Phase II surveys, namely that Canadian landowners remain generally sensitive to, and knowledgeable about, environmental issues as they pertain to their land and, for the most part, are already practising good stewardship. In fact, the survey results suggest that Canadian farmers are slightly more sensitive now than they were in 2000 to the importance of wildlife as "ecosystem indicators" and to the benefits they provide in the areas of recreational activities like hunting, fishing and trapping.

The current survey results also indicate that openness to improving stewardship practices is slightly greater among non-farming rural landowners than among farmers, most probably for the reason that farmers are more likely to feel the need to weigh the possible economic impact of changing land management practices. Certainly, farmers are more likely to think of land stewardship in terms of keeping the land productive rather than strictly in terms of environmental conservation. These differences should be kept in mind when planning communications and programs for what are actually two rather different types of rural landowner.

These differences also reflect those reported in the Phase II survey, where it was noted that landowners with small holdings (50 acres or fewer) were less open to stewardship issues than had been the case with rural landowners in the Phase I survey (where nine in ten reported owning in excess of 50 acres).

The Phase III survey finds a certain disconnect between rural landowners' widespread awareness that land management practices can offer a great deal of benefit to downstream users of water and land resources and the finding that most rural landowners cannot name a change to their land management practices that would increase current benefits. The current survey also finds, as did the Phase I and Phase II surveys, that many landowners cannot correctly name any endangered species in their area. Again, we point out that this "lack of knowledge" about endangered species indicates the need for policy makers to consider the language they use when educating landowners about the problem of endangered species.

The current research confirms the need – noted in the Phase I and Phase II reports - to keep the lines of communication open between those who are designing policies and programs to encourage stewardship and the actual landowners. In this way, policy and program developers will be better equipped, not only to design programs that address real needs or opportunities (as revealed by the research), but also to use language that actually resonates with the actual landowners. This is not to say that communicators need to "talk down" to landowners. In fact, the survey results suggest just the opposite, in light of landowners' demonstrated appreciation for the principles of environmental stewardship. The point is that it may be necessary to identify the words and phrases that have become "buzz words" for policy and program developers, but are not understood in the same way by landowners in the general public. Communications with landowners will need to take these sorts of "information gaps" into account.

The data that have been collected and summarized in this report can certainly be used as intelligence for the development of stewardship programs and policies, and of a set of guidelines that might be applied whenever planning these programs and policies. However, the same caution noted in the Phase I survey still applies today. The guidelines, although critical, should not be used as the sole determinant in developing policies and programs: other inputs, in addition to quantitative survey research data, should be considered. For example, if a communications plan were to be conceived, we continue to advise qualitative research (such as focus groups) with different types of landowners to confirm that various messages are being heard by the target groups, and that the appropriate spokespeople are delivering these messages through suitable media.

In terms of spokespeople, the current survey results show that rural landowners are most likely to listen to representatives of landowner or farmer associations and non-government or conservation groups. They would also be open to communications from local municipal governments, provincial governments and volunteer groups such as Stewardship councils. The survey does not indicate much receptiveness to communications from private consultants (largely because they are an unknown commodity to many rural landowners) or from the federal government (which is rejected as a credible source of information by a majority of rural landowners).

The Phase III survey found that relatively few rural landowners – only about one in ten – reported having cleared forested land within the past eight years. It should also be noted that this proportion is significantly lower than that found for rural landowners who are planning afforestation activities over the next five years. In other words, the survey results indicate that more trees will be planted in the near future than have been cut down in the recent past. (Of course, it will take many years for those newly planted trees to reach a level of maturity that will allow them to effectively replace the trees that were cut.)

The survey finds that the key drivers behind tree clearance are different for farmers – almost all of whom report clearing forested land for crops, pasture or other agricultural production – than for non-farming rural landowners, who appear to be motivated by a variety of reasons, including crops, pasture or other agricultural production, regeneration/reforestation, aesthetic considerations and economic considerations (including housing/urban development).

The Phase III survey also found a number of interesting trends in regard to rural landowners' participation and interest in afforestation activities. Interest in afforestation is greater among non-farming rural landowners than among farmers – a finding that reflects the fact that lack of interest is mostly traced to the need to use the land for purposes other than planting trees. However, the farmers who are interested indicate they would plant larger blocks of trees, for the obvious reason that they mostly own more land.

Interest in future afforestation activity is motivated more by the desire to provide protection from wind and desiccation – this is especially the case among farmers – and for aesthetic reasons than for reasons related to conservation and wildlife habitat, wood supply, or to improve the quality of water and soil. The survey results also indicate that the work that's involved in tending trees after they have been planted has a significant impact on the decision to undertake afforestation activities.

The finding that one of the prime motivators for afforestation is wind protection, or shelterbelts, has raised the issue of whether respondents who either have planted or plan to plant for this reason are expressing acreage in terms of the area *around* which they have planted *or* will plant trees or in terms of the actual area *on* which they have planted or will plant trees. Therefore, the reported figures for the average area for past and planned tree planting may be overestimated. This issue will be addressed in future surveys and analysis.

The survey offered respondents two different hypothetical packages of inducements to afforestation: the first package offered free seedlings, covering the costs of planting and ownership of the trees; the second package consisted of annual lease payments whereby rural landowners would rent their land out for tree plantations but would not own the mature trees. The results indicate that farmers are about equally attracted to each package (about half express interest) but that the package offering annual lease payments may result in larger acreages being planted (an average of about 75 acres if given free seedlings compared to leased acreages that ranged from an average of 177 acres for good land to 96 acres for poor land). However, the cost for the seedlings package would be considerably less than that of the leased package (with farmers specifying amounts of about \$150 per acre to lease good land to \$120 for medium land to \$130 for poor land).

Among non-farming rural landowners, the first package offering free seedlings seems to hold the greater potential for a greater participation rate. About six in ten express interest in this package, compared to about two in ten or fewer who express interest in the annual lease package. Even more so than was the case with farmers, the potential costs appear to be greater with the annual lease package (with non-farming rural landowners specifying amounts of about \$500 per acre for good land, \$300 for medium land and \$500 for poor land, with acreages that varied from an average of 27 acres for good land to 47 acres for medium land to 23 acres for poor land).

Efforts to promote afforestation efforts should, of course, keep all of the above considerations in mind. Afforestation could be encouraged by giving rural landowners information or financial or other assistance to help, not just with the planting but also with the maintenance of trees. The survey results also indicate that educating rural landowners about the use of trees as wind breaks or to improve the appearance of their properties might result in more afforestation than would appeals to the environmental benefits of planting trees.

In addition, the reader is reminded that the Phase III survey finds a very strong consensus among both farmers and non-farming rural landowners that tax dollars should be used to provide financial assistance to rural landowners who undertake improvements that will protect or improve natural resources (including afforestation efforts). Certainly, most agree that forests can reduce the effects of climate change, although farmers are less likely today than in 2000 – and less likely than non-farmers – to say they would plant trees in order to help in this effort.

Finally, it should also be noted that both farmers and non-farming rural landowners believe that people like themselves have a positive impact on wildlife conservation and the natural environment, but that urban Canadians have a poor understanding of the contribution that rural landowners make toward conservation and a healthy environment, and of the conservation issues facing rural Canadians. Addressing rural landowners' feelings of being under-appreciated and misunderstood could open up a wide-ranging dialogue between urban and rural residents across the country. The survey results also suggest the need for future research among urban Canadians, to test the hypothesis that there is a disconnect between the perceptions of urban and rural dwellers.
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Methodology

The results of this survey are based on questions asked to a sample of 1,647 rural landowners across Canada. To qualify for the sample of rural landowners, respondents had to own a minimum of ten acres of land outside a village, town or other urban centre and be one of the people in the household primarily responsible for making long-term decisions affecting the land.

The 25-minute survey of rural landowners was conducted by telephone from March 17 to April 15, 2003. A three-minute callback survey was conducted between June 16 and June 22 among 382 respondents to the March 17-April 15 wave.

SAMPLE SELECTION

Return to sample design was primarily utilized in selecting the sample for this survey. Specifically, usable sample from two previous phases of this study was incorporated into the initial sample for the current phase. The characteristics of the sample drawn from these previous phases are as follows.

Phase I: Sample was derived from a number of sources, including sampling among the general public in areas that have higher than average densities of farms, lists acquired from farmers' organizations and publications, respondents identified as farmers in previous Environics' surveys and respondent referrals. The Ontario sample frame was a subset of the 1999 Ontario property tax roll listing rural landowners (25 acres or more in Southern Ontario and 50 acres or more in Northern Ontario). Matching this sample with known listed telephone directories gave the survey access to approximately 70 percent of the names on the tax roll.

Phase II: The sample frame was a subset of the 1999 Ontario property tax roll listing rural landowners (2 to 25 acres in Southern Ontario and 2 to 50 acres in Northern Ontario). Matching this sample with known listed telephone directories gave the survey access to approximately 40 percent of the names on the tax roll. Interviewing took place in eight regions, with specific quotas in each region. Sampling was disproportionate, with rural landowners in Northern Ontario being over-represented. In addition to the sample drawn from previous phases, fresh sample was obtained for this survey. This sample consisted of listed numbers drawn from the most recently available directories; the sample frame included rural areas in nine provinces (additional sample was not required in Ontario) delineated by FSA (Canada Post Forward Sortation Area). Through the use of previously generated sample and the acquisition of new sample, a total of 42,389 numbers were available in the initial sample. A total of 33,470 numbers were drawn from this sample.

Specific regional quotas were used to allocate interviews. These quotas were based largely on the actual incidence of landowners in the regions; the quotas also included an oversample in the Atlantic Region to ensure that there was a sample of at least 100 in each region. The final sample is distributed as follows.

	Quota	Weighted N	Unweighted N	Margin of Error
Atlantic Canada	100	59	100	9.8
Quebec	225	217	229	6.5
Ontario	385	394	386	5.0
Manitoba	125	142	126	8.7
Saskatchewan	325	351	327	5.4
Alberta	350	361	354	5.2
British Columbia	125	124	125	8.8
Total	1,635	1,647	1,647	2.4

The national sample was weighted in proportion to the number of rural landowners/farmers in each region (Atlantic, Quebec, Ontario, Prairies, British Columbia), based on current Statistics Canada data.

TELEPHONE INTERVIEWING

Field supervisors were present at all times to ensure accurate interviewing and recording of responses. Ten percent of each interviewer's work was unobtrusively monitored for quality control in accordance with the standards set out by the Canadian Association of Marketing Research Organizations. A minimum of five calls were made to a household before classifying it as a "no answer."

COMPLETION RESULTS - MARCH 17-APRIL 15, 2003

A total of 1,647 interviews were completed. A sample of 1,647 persons within the population produces a sampling error of plus or minus 2.4 percent in 95 out of 100 samples. The margins are wider for demographic subsamples.

The effective response rate for the survey is ten percent: the number of completed interviews (1,647) divided by the total dialled sample (33,470) minus the nonvalid/non-residential numbers, the numbers not in service and the numbers that presented a language barrier (16,317).

The actual completion rate is 16 percent: the number of completed interviews (1,647) divided by the number of qualified respondents contacted directly (10,164).

The compliance rate is 93 percent: the number of completed interviews divided by the number of interviews commenced.

	N	%
Total Dialled Sample	33,470	100
Not eligible	9,225	28
Non-residential/not in service	6,519	20
Language barrier	573	2
Subtotal	16,317	49
New Base (33,470 – 16,317)	17,153	100
No answer/line busy/		
respondent not available	6,989	41
Refusals	8,402	49
Mid-interview terminations	115	1
Subtotal	15,506	90
Net Completions (17,153 – 15,50	06) 1,647	10
Completion Rate (1,647/[17,153	- 6,989])	16
Compliance Rate (1,647/[1,647 +	⊦ 115])	93

COMPLETION RESULTS – JUNE 16-22, 2003

A total of 449 calls were made between June 16 and June 22, 2003 to respondents to the March-April wave of the survey. These calls resulted in 382 completed callback surveys.

QUESTIONNAIRE

Survey of Rural Landowners – Phase 3 PN5238 FIELD

1S Hello, my name is ______ and I am calling from Environics Research Group. We are conducting a survey on issues concerning rural landowners in Canada. Please be assured that we are not selling any products or services, nor are we acting on behalf of any private company. IF NECESSARY, ASK TO SPEAK TO AN ADULT

01 – Yes CONTINUE WHEN YOU HAVE AN ADULT 02 – Not available

2S Do you or does someone in your household own rural land, that is, land outside a town or village?

01 – Yes 02 – No TERMINATE INTERVIEW

2S Does this land consist of ten acres or more, or of 4 hectares or more?

01 – Yes 02 – No TERMINATE INTERVIEW

IF YES

Today, we are calling rural landowners to talk about what you want and need for your land, and about agricultural, wildlife and forestry issues. The results of this process will be used to help develop programs for the benefit of rural landowners and their families.

- 4St a) Are you one of the people responsible for making the longterm management decisions regarding this land? [NOTE TO INTERVIEWER: if the land is rented out, the respondent who actually owns the land still qualifies 1 and 2 below both qualify]
 - 01 Yes, own and manage day-to-day
 - 02 Yes, own but rent most/all of it
 - 03 No, don't make decisions

IF OPTION 2 IN a), TELL RESPONDENT

For all the questions I'm about to ask you, please remember that we also want to know about what's happening on land that you own but rent out to someone else, even if you're not the person making the decisions about how the rented land is managed

IF OPTION 3 IN a)

b) May I please speak with one of the people responsible for making the longterm management decisions on the land?

01 – Yes 02 – No 03 – No, decision-maker not at this number

IF DECISION-MAKER RESIDES AT ANOTHER NUMBER, ASK

c) Would you mind giving me his or her first name and telephone number?

01 – SPECIFY _____ [Try new number and re-ask Question 1S] 02 – No TERMINATE INTERVIEW 5S I would like to ask if you remember doing a survey for us, that is, for Environics, on issues related to rural landowners ...

a) in May 2000

01 – yes, personally 02 – yes, someone in my house/family 03 – no one in household VOLUNTEERED 04 – can't remember, might have done survey 05 – did a survey, but think it was for some other company

b) in March or April 2001

IF YES TO a) OR b), TELL THEM

This survey has some of the same questions, but it also has some new questions that we have not asked before. There is no need to worry about whether your answers have changed – some people will feel differently now than they did at the time of the earlier surveys and some will feel the same.

I would now like to ask you about the land that you currently own, that is, ALL your RURAL property ...

- D1 Does the land generate gross annual farm receipts of \$2,500 or more?
 - 01 Yes 02 – No

IF OPTION 1 IN D1

- D2 Which of the following commodity groups best describes your farm or ranch operation? [NOTE If more than one, probe as to which one provides the most income]
 - READ
 - 01 beef
 - 02 hogs, veal, mutton or lamb
 - 03 dairy
 - 04 grain (includes oil seed)
 - 05 forage
 - 06 horticulture
 - VOLUNTEERED
 - 98 Other SPECIFY ____
 - 07 N/A, do not farm
 - 08 land is rented out to someone else

ASK ALL

D3 When did you first take ownership of your land? (If more than one land holding, ask about the property that respondent has owned the longest)

01 – SPECIFY ACTUAL YEAR _____

1Wt Apart from economic issues, what do you think is the most important issue facing Canada's agricultural sector?

01 – SPECIFY _____

2Wt Specifically, when you think about your own land, what is the one issue that causes you the greatest concern?

01 – SPECIFY _____ VOLUNTEERED 02 – No concerns 03 - N/A, land is rented out to someone else 3Wt a) How would you define the term "stewardship" in terms of land use? Does stewardship mean...?

READ AND ROTATE 01 – keeping the land economically productive. 02 – voluntarily conserving the natural environment VOLUNTEERED 03 – Both 04 – Other SPECIFY _____ 05 – Have never heard the term GO TO NEXT QUESTION

b) Do you think that stewardship refers more to activities that are undertaken ...?

READ AND ROTATE 01 – for the present time 02 – for the future VOLUNTEERED 03 – Both/combination

D4 How many acres [hectares] in total make up your rural property or landholding?

01 – SPECIFY _____ acres 02 – SPECIFY _____ hectares

1Fr-t a) Currently, is any of the land that you own or rent covered with forest? [NOTE – includes sugar bushes and plantations that are not Christmas trees]

 01 – Yes [NOTE – Probe to make sure that these are not Christmas trees or apple orchards – tell respondent that these are considered "crops"]
 02 – No land covered with forest

IF YES TO a)

b) How many acres [hectares] are covered with forest?

READ IF NECESSARY 01 – Less than one acre or half a hectare 02 – An acre or more SPECIFY ______ acres 03 – More than half a hectare SPECIFY ______ hectares

- 2Ft a) Currently, is any of your land growing crops?
 - 01 Yes 02 – No

IF YES TO a)

b) How many acres [hectares] are in crops? [NOTE – Remember this includes Christmas trees and apple orchards]

READ IF NECESSARY 01 – Less than one acre or half a hectare 02 – An acre or more SPECIFY _____ acres

03 – More than half a hectare SPECIFY ______ hectares

ASK ALL

Currently, is any of your land left open as pasture or grazing land? 3Fr-t

> 01 – Yes 02 - No

IF YES TO a)

b) How many acres [hectares] are left open as pasture or grazing land?

READ IF NECESSARY 01 – Less than one acre or half a hectare 02 – An acre or more SPECIFY _____ acres 03 – More than half a hectare SPECIFY _____ hectares

ASK ALL

4Fr-t Not counting any wetland you might own, is any of your land left open as idle land?

> 01 – Yes 02 - No

IF YES TO a)

b) Not counting wetlands, how many acres [hectares] of your land are left open as idle land?

READ IF NECESSARY 01 – Less than one acre or half a hectare 02 – All acre or more SPECIFY _____ acres 03 – More than half a hectare SPECIFY _____

hectares

IF OPTION 1 IN 3F OR 4F

5F Thinking now about the soil productivity of your non-forested or open land, in terms of its ability to produce crops that are traditionally grown in your area, would you describe any of this land as

READ

a) good productivity land

01 - yes, at least some of my unforested land is good productivity 02 - none of my unforested land would be described as good productivity

b) medium productivity land

01 - yes, at least some of my unforested land is medium productivity 02 - none of my unforested land would be described as medium productivity

c) poor productivity land

01 - yes, at least some of my unforested land is poor productivity

02 - none of my unforested land would be described as poor productivity

ASK ALL

6Fr-t a) Since 1995, have you permanently cleared any of your forested land, or sold or rented out forested land that you knew would be permanently cleared of all or most of its trees?

PROBE

- 01 Yes, cleared forest land
- 02 Yes, sold or rented land that was cleared
- 03 Both of the above
- $04-\mathrm{No}\ \mathrm{forest}\ \mathrm{land}\ \mathrm{cleared}\ \mathrm{GO}\ \mathrm{TO}\ 7\mathrm{F}$

IF OPTIONS 1-3 IN a)

b) Which ONE of the following best describes the trees that were cleared?

READ - CHOOSE ONE ONLY

- 01 young trees
- 02 mature trees
- 03 very old or over-mature trees
- 98 Other PLEASE SPECIFY____

c) How many acres [hectares] were cleared, including the acres that you might have sold or rented out?

acres

- 01 Less than one acre or half a hectare
- 02 An acre or more SPECIFY _____
- 03 More than half a hectare SPECIFY _____ hectares

IF OPTIONS 1-3 IN a)

d) For what purpose or use was the land cleared?

DO NOT READ – CODE ALL THAT APPLY

- 01 crops, pasture or other agricultural production
- 02 drainage pond, artificial lake or sewage lagoon
- 03 effluent treatment (spread manure from a hog operation)
- 04 expand farm facilities or buildings
- 05 gravel pit or mine
- 06 housing or other urban development
- 07 oil and gas development (well pad or pipeline)
- 08 recreational use (park, golf course)
- 09 right of way (e.g., hydro)
- 10 road building
- 98 Other SPECIFY _____

IF OPTIONS 1-3 IN a)

e) How were the trees themselves disposed of?

READ – CODE ALL THAT APPLY

- 01 timber removed from site and used or sold for lumber or pulp
- 02 timber removed from site and used or sold for firewood or burned off-site
- 03 timber burned on the site
- 04 timber left on the site to decay
- 98 Other SPECIFY _____

IF OPTIONS 1-3 IN a)

f) How were the stumps and other debris disposed of?

READ – CODE ALL THAT APPLY

01 – stumps and debris left to decay on site (e.g., piled in windrows or stumps left in the ground, etc.)

02 - stumps and debris burned on site

03 - stumps and debris removed and burned off site

 $04-{\rm stumps}$ and debris removed off site but not burned

98 – Other PLEASE SPECIFY_____

IF OPTIONS 1-3 IN a)

g) Is the clear land still being used for the same purpose today?

01 – yes 02 – no

IF NO TO f)

h) Are the trees starting to grow back, that is, is the land reverting back to forest?

01 - yes, reverting to forest 02 - no, land still cleared of trees

ASK ALL

7Fr-t Between 1990 and 2002, did you plant blocks of trees on areas that had been bare of forest cover before that period, that is, before 1990?

01 – Yes 02 – No GO TO 10F

IF YES TO 7F

8F If you were to rate the soil productivity of the land on which you planted trees, in terms of its ability to produce crops that are traditionally grown in your area, how many acres [hectares] would be classified as ...

READ

a) good or high productivity?

01 - none 02 - SPECIFY _____ acres 03 - SPECIFY _____ hectares

b) medium productivity

c) poor or low productivity

IF YES TO 7F

9F a) Why did you plant these trees?

DO NOT READ – CODE ALL THAT APPLY – RECORD FIRST MENTION IF MORE THAN ONE

- 01 Aesthetics like the look of trees
- 02 Christmas trees
- 03 Commercial wood supply
- $04-\mathrm{Conservation}$ and wildlife habit at
- 05 Firewood
- 06 Improve water and soil quality
- 07 Recreation
- 08 Reduce climate change
- 09 Shelterbelts (wind protection)
- 10 Sugar bush
- 98 Other SPECIFY _____
- b) What types of tree species did you plant?

DO NOT READ – CODE ALL THAT APPLY

- 01 alder
- 02 arbutus
- 03 ash
- 04 aspen
- 05 beech
- 06 birch
- 07 black cherry
- 08 cedar
- 09 cottonwood
- 10 elm
- $11 \mathrm{fir}$
- 12-hemlock
- 13 hickory
- 14 larch
- 15 maple
- 16 mulberry
- 17 oak
- 18 pine
- 19 poplar
- 20 spruce
- 21 sycamore
- 22 tamarack
- 23 walnut
- 24 willow
- 98 Other SPECIFY _____

c) Of the trees that you planted, how many acres [hectares] are still alive and in good health?

01 - none 02 - SPECIFY _____ acres 03 - SPECIFY _____ hectares d) Did you receive a grant or subsidy to plant the trees or did you pay for them out of your own pocket?

01 – grant or subsidy 02 – paid out-of-pocket VOLUNTEERED 03 – combination 98 – Other SPECIFY _____

IF OPTION 1 IN d)

e) Would you have planted these trees if you had not received a grant or subsidy to plant them?

ASK ALL

I would now like to ask you some general questions about planting trees.

- 10Ft Is it important or is it not important to plant trees that are native to your area?
 - 01 important 02 – not important VOLUNTEERED 03 – not important as long as they will grow
- 11F Are you interested, or not interested, in planting species of trees that are naturally fast-growing, such as poplar and willow, that is, fast-growing trees that have not been genetically-modified?
 - 01 interested 02 – not interested VOLUNTEERED 03 – need more information 04 – would be interested in genetically-modified trees 05 – not applicable/fully treed or forested
- 12F Thinking generally about having trees on your land, do you require technical assistance or information in any of the following areas...

a) choosing the species of trees that you might plant on your land

01 – yes 02 – no

b) how to plant treesc) on the longterm tending of the trees

For the following series of questions please keep in mind that trees take many years to grow and that you may not be able to use the planted land for other purposes for many years.

IF ANY OF LAND LEFT OPEN - IF OPTION 1 IN 3F OR 4F

13F a) Within the next five years, are you planning to plant blocks of trees on land that has been bare of trees since 1990?

> 01 – yes 02 – no VOLUNTEERED 03 – not applicable/ fully treed or forested

IF NO TO a)

b) What is the main reason you are not interested in planting trees?

DO NOT READ – CODE ALL THAT APPLY 01 – prefer the look of the landscape without trees 02 – cost of planting trees 03 – insufficient knowledge of what's involved VOLUNTEERED 98 – Other SPECIFY _____

IF YES IN a)

c) About how many acres [hectares] are you planning to plant?

01 – SPECIFY	acres
02 – SPECIFY	hectares
VOLUNTEERED	
03 – None	

After June 15, asked:

c) When we spoke with you last time, you said that you were planning to plant _____[OPTION 1 OR 2 IN 13Fc) OF EARLIER WAVE] acres/hectares of trees on land that has been bare of trees since 1990. Is that correct?

01 – yes _____acres as specified above 02 – yes _____hectares as specified above 04 - no SPECIFY_____correct amount VOLUNTEERED 03 – none/not planning to plant any trees IF YES IN a)

d) What is your main reason for planting trees on this area?

DO NOT READ – CODE ALL THAT APPLY – RECORD FIRST MENTION IF MORE THAN ONE

- 01 Aesthetics like the look of trees
- 02 Christmas trees
- 03 Commercial wood supply
- 04 Conservation and wildlife habitat
- 05 Firewood
- 06 Improve water and soil quality
- 07 Recreation
- 08 Reduce climate change
- 09 Shelterbelts (wind protection)
- $10-{\rm Sugar}$ bush
- 98 Other SPECIFY _____

IF OPTION 1 IN 13Fa)

14F If you were to rate the soil productivity of the land on which you're planning to plant trees, in terms of its ability to produce crops that are grown in your area, about how many acres [hectares] would be classified as ...

READ

a) good or high productivity?

01 – none 02 – SPECIFY ______ acres 03 – SPECIFY ______ hectares

b) medium productivity

c) poor or low productivity

After June 15, asked:

14F If you were to rate the soil productivity of just those _____ acres on which you're planning to plant trees, in terms of its ability to produce crops that are grown in your area, about how many acres [hectares] would be classified as ...

READ

a) good or high productivity?

01 - none

02 – SPECIFY _______ acres IF THIS AMOUNT EXCEEDS AMOUNT SPECIFIED IN 13Fc) REMIND RESPONDENT THAT WE ARE ONLY ASKING ABOUT THE LAND ON WHICH TREES WILL BE PLANTED [NOTE TO PROGRAMMERS – DO NOT ACCEPT AMOUNT IN EXCESS OF THAT IN 13Fc)]

03 – SPECIFY ______ hectares IF THIS AMOUNT EXCEEDS AMOUNT SPECIFIED IN 13Fc) REMIND RESPONDENT THAT WE ARE ONLY ASKING ABOUT THE LAND ON WHICH TREES WILL BE PLANTED [NOTE TO PROGRAMMERS – DO NOT ACCEPT AMOUNT IN EXCESS OF THAT IN 13Fc)]

b) medium productivity

c) poor or low productivity

IF OPTION 1 IN 13Fa)

15F Thinking now about the land on which you are planning to plant these trees, about how many acres [hectares] are currently being used ...

READ AND ROTATE – CODE ALL THAT APPLY a) for agricultural crops

01 – none 02 – SPECIFY ______ acres 03 – SPECIFY ______ hectares

b) for pasture or grazing land

c) idle land that is not being used

After June 15, asked:

15F Thinking again about just those _____ acres on which you are planning to plant these trees, about how many acres [hectares] are currently being used ...

READ AND ROTATE – CODE ALL THAT APPLY a) for agricultural crops

01 – none 02 – SPECIFY ______ acres IF THIS AMOUNT EXCEEDS AMOUNT SPECIFIED IN 13Fc) REMIND RESPONDENT THAT WE ARE ONLY ASKING ABOUT THE LAND ON WHICH TREES WILL BE PLANTED [NOTE TO PROGRAMMERS – DO NOT ACCEPT AMOUNT IN EXCESS OF THAT IN 13Fc)]

03 – SPECIFY _______ hectares IF THIS AMOUNT EXCEEDS AMOUNT SPECIFIED IN 13Fc) REMIND RESPONDENT THAT WE ARE ONLY ASKING ABOUT THE LAND ON WHICH TREES WILL BE PLANTED [NOTE TO PROGRAMMERS – DO NOT ACCEPT AMOUNT IN EXCESS OF THAT IN 13Fc)]

ASK OUTSIDE QUEBEC

IF ANY OF LAND LEFT OPEN - OPTION 1 IN 2F, 3F OR 4F

16Fr-t I would now like you to please consider the following hypothetical situation. If you were provided with free seedlings and your planting costs were covered and you would own the trees once they reach maturity, how many acres [hectares], in total, would you consider planting on the land you currently own?

01 – SPECIFY ______ acres in total 02 – SPECIFY ______ hectares in total 03 – none

IF OPTIONS 1 OR 2 IN 16F

17F If you were to rate the soil productivity of these _____ acres of land, in terms of its ability to produce crops that are grown in your area, about how many acres [hectares] would be classified as ...

READ

a) good or high productivity?

01 – none 02 – SPECIFY ______ acres 03 – SPECIFY ______ hectares

b) medium productivity

c) poor or low productivity

ASK ALL

- 18F a) Would the work that's involved in tending trees after they are planted have a major impact, a moderate impact, or little or no impact on your decision to plant blocks of trees?
 - 01 major impact
 - 02 moderate impact
 - 03 little or no impact

b) If I told you that you'd have to weed and fertilize these new trees for five years, and protect them against fire and insects, would you then say that this would have a major impact, a moderate impact, or little or no impact on your decision to plant blocks of trees?

IF OPTION 1 IN 5Fa)

19F a) Now, I would like you to think about any land your have on which trees could be grown, that you would classify as GOOD or high productivity land and that has been bare of forest cover since at least 1990. What is the MINIMUM amount of annual rent that you would require before you would consider leasing this land for 20 years, so that it could be used as tree plantations where the trees themselves would be established, maintained and owned by someone other than yourself and then harvested at the end of the 20-year period? [NOTE – REMIND RESPONDENT THAT THIS COULD BE ANY LAND ON WHICH TREES COULD BE PLANTED, INCLUDING LAND THAT IS NOW IN CROPS OR BEING OTHERWISE USED]

01 – SPECIFY **\$_____** per acre 02 – SPECIFY **\$_____** per hectare VOLUNTEERED 03 – have no good productivity land that is unforested SKIP b) 04 – never would lease or sell land for trees SKIP b)

b) How many acres [hectares] in total, of your good productivity land would you consider leasing at this rental price?

01 – SPECIFY ______ acres in total 02 – SPECIFY ______ hectares in total

After June 15, asked:

IF OPTION 1 OR 2 IN 19Fa) IN EARLIER WAVE OF SURVEY

19F a) Now, I would like you to think about any land your have on which trees could be grown, that you would classify as GOOD or high productivity land and that has been bare of forest cover since at least 1990. What is the MINIMUM amount of annual rent PER ACRE that you would require before you would consider leasing this land for 20 years, so that it could be used as tree plantations where the trees themselves would be established, maintained and owned by someone other than yourself and then harvested at the end of the 20-year period? [NOTE – REMIND RESPONDENT THAT THIS COULD BE ANY LAND ON WHICH TREES COULD BE PLANTED, INCLUDING LAND THAT IS NOW IN CROPS OR BEING OTHERWISE USED]

01 – SPECIFY **\$_____** per acre PROBE TO BE SURE THAT THE AMOUNT SPECIFIED IS PER ACRE AND NOT THE TOTAL AMOUNT FOR ALL THE ACRES

02 – SPECIFY \$_____ per hectare PROBE TO BE SURE THAT THE AMOUNT SPECIFIED IS PER HECTARE AND NOT THE TOTAL AMOUNT FOR ALL THE ACRES

VOLUNTEERED

03 – have no good productivity land that is unforested

 $04-{\rm never}$ would lease or sell land for trees

IF OPTION 1 IN 5Fb)

20F a) Now, I would like you to think about any land your have on which trees could be grown, that you would classify as MEDIUM productivity land and that has been bare of forest cover since at least 1990. What is the MINIMUM amount of annual rent that you would require before you would consider leasing this land for 20 years, so that it could be used as tree plantations where the trees themselves would be established, maintained and owned by someone other than yourself and then harvested at the end of the 20-year period? [NOTE – REMIND RESPONDENT THAT THIS COULD BE ANY LAND ON WHICH TREES COULD BE PLANTED, INCLUDING LAND THAT IS NOW IN CROPS OR BEING OTHERWISE USED]

 01 - SPECIFY \$_____ per acre

 02 - SPECIFY \$_____ per hectare

 VOLUNTEERED

 03 - have no medium productivity land that is unforested
 SKIP b)

 04 - never would lease or sell land for trees
 SKIP b)

b) How many acres [hectares] in total, of your medium productivity land would you consider leasing at this rental price?

01 – SPECIFY ______ acres in total 02 – SPECIFY ______ hectares in total

After June 15, asked:

IF OPTION 1 OR 2 IN 20Fa) IN EARLIER WAVE OF SURVEY

20F a) Now, I would like you to think about any land your have on which trees could be grown, that you would classify as MEDIUM productivity land and that has been bare of forest cover since at least 1990. What is the MINIMUM amount of annual rent PER ACRE that you would require before you would consider leasing this land for 20 years, so that it could be used as tree plantations where the trees themselves would be established, maintained and owned by someone other than yourself and then harvested at the end of the 20-year period? [NOTE – REMIND RESPONDENT THAT THIS COULD BE ANY LAND ON WHICH TREES COULD BE PLANTED, INCLUDING LAND THAT IS NOW IN CROPS OR BEING OTHERWISE USED]

01 – SPECIFY **\$_____** per acre PROBE TO BE SURE THAT THE AMOUNT SPECIFIED IS PER ACRE AND NOT THE TOTAL AMOUNT FOR ALL THE ACRES

02 – SPECIFY \$_____ per hectare PROBE TO BE SURE THAT THE AMOUNT SPECIFIED IS PER HECTARE AND NOT THE TOTAL AMOUNT FOR ALL THE ACRES

VOLUNTEERED

03 - have no good productivity land that is unforested

 $04-{\rm never}$ would lease or sell land for trees

IF OPTION 1 IN 5Fc)

21F a) Now, I would like you to think about any land your have on which trees could be grown, that you would classify as POOR or low productivity land and that has been bare of forest cover since at least 1990. What is the MINIMUM amount of annual rent that you would require before you would consider leasing this land for 20 years, so that it could be used as tree plantations where the trees themselves would be established, maintained and owned by someone other than yourself and then harvested at the end of the 20-year period? [NOTE – REMIND RESPONDENT THAT THIS COULD BE ANY LAND ON WHICH TREES COULD BE PLANTED, INCLUDING LAND THAT IS NOW IN CROPS OR BEING OTHERWISE USED]

01 – SPECIFY \$_____ per acre 02 – SPECIFY \$_____ per hectare VOLUNTEERED 03 – have no poor productivity land that is unforested SKIP b) 04 – never would lease or sell land for trees SKIP b)

b) How many acres [hectares] in total, of your low productivity land would you consider leasing at this rental price?

01 – SPECIFY _____ acres in total 02 – SPECIFY _____ hectares in total

After June 15, asked:

IF OPTION 1 OR 2 IN 21Fa) IN EARLIER WAVE OF SURVEY

21F a) Now, I would like you to think about any land your have on which trees could be grown, that you would classify as POOR or low productivity land and that has been bare of forest cover since at least 1990. What is the MINIMUM amount of annual rent PER ACRE that you would require before you would consider leasing this land for 20 years, so that it could be used as tree plantations where the trees themselves would be established, maintained and owned by someone other than yourself and then harvested at the end of the 20-year period? [NOTE – REMIND RESPONDENT THAT THIS COULD BE ANY LAND ON WHICH TREES COULD BE PLANTED, INCLUDING LAND THAT IS NOW IN CROPS OR BEING OTHERWISE USED]

01 – SPECIFY **\$_____** per acre PROBE TO BE SURE THAT THE AMOUNT SPECIFIED IS PER ACRE AND NOT THE TOTAL AMOUNT FOR ALL THE ACRES

02 – SPECIFY \$_____ per hectare PROBE TO BE SURE THAT THE AMOUNT SPECIFIED IS PER HECTARE AND NOT THE TOTAL AMOUNT FOR ALL THE ACRES

VOLUNTEERED

03 – have no good productivity land that is unforested 04 – never would lease or sell land for trees

ASK ALL

4Wt When you make decisions about the activities on your land, does the effect on your neighbours' land have an impact on your land use decisions?

01 – Yes, has an impact on decision 02 – No, has no impact VOLUNTEERED 03 – N/A, land is rented out to someone else

- 5W Do you think that rural landowners like yourself have a major impact, a moderate impact or little or no impact on wildlife conservation in Canada?
 - 01 major impact 02 – moderate impact 03 – little or no impact VOLUNTEERED 4 – depends on how much land they have 5 – depends on where they live 98 – Other PLEASE SPECIFY_____
- 6W From what you've seen and heard, do you think that Canadians who live in urban areas have a very good, somewhat good, somewhat poor or very poor understanding of ...

READ AND ROTATE a) the environmental and conservation issues facing rural Canadians?

> 01 – very good 02 – somewhat good 03 – somewhat poor 04 – very poor

b) the contribution that rural landowners make toward conservation and a healthy environment?

- 7W Do you think that good land management practices can have a great deal of benefit, some benefit or little or no benefit on all downstream users of water and land resources, such as villages, towns and cities?
 - $01-{\rm great}$ deal of benefit
 - 02 some benefit
 - 03 little benefit
 - 04 no benefit
- 8W Are there any changes you could make in your land management practices that would benefit downstream users?
 - 01 SPECIFY______ 02 – none that come to mind
- 9W a) Do you strongly agree, somewhat agree, somewhat disagree or strongly disagree that tax dollars should be used to provide financial assistance to rural landowners who undertake improvements that will protect or improve natural resources such as land and water?
 - 01 strongly agree
 - 02 somewhat agree
 - 03 somewhat disagree
 - 04 strongly disagree

IF OPTIONS 1 OR 2 IN a)

b) Which level of government should provide this assistance?

READ AND ROTATE – CHOOSE ONE ONLY 01 – federal government 02 – the provincial government 03 – the local or municipal government VOLUNTEERED 04 – combination SPECIFY _____ 98 – Other SPECIFY _____

I would now like to ask you about some of the positive and negative aspects of having wildlife on your land. ASK ALL

10Wt Over the past five years, has wildlife activity on your land ...?

READ 01 – increased 02 – decreased 03 – stayed the same VOLUNTEERED 04 – no wildlife on property SKIP TO 13W 05 – N/A, land is rented out to someone else

IF OPTIONS 1 TO 3 IN 10W

- 11Wt When you make decisions about agricultural activities on your land, does the possible effect on wildlife and their habitats have an impact on your decisions?
 - 01 Yes, has an impact on decision 02 – No, does not have an impact VOLUNTEERED 03 – N/A, land is rented out to someone else

IF OPTIONS 1 TO 3 IN 10W

12Wt Do you agree or disagree that the wildlife on your land makes an important contribution to...?

READ AND ROTATE a) THROUGH d) a) the appearance or aesthetic value of your property

01 – agree makes an important contribution
02 – disagree, does not make an important contribution
VOLUNTEERED
03 – does not apply
04 – N/A, land is rented out to someone else

b) maintaining the fundamental balance in nature such as soil fertility and water quality

c) controlling insects or rodents

- d) recreational hunting, fishing or trapping
- 13Wt Can you name one plant or animal in your local area that could be described as endangered, or would you say there are no endangered species?
 - 01 SPECIFY
 - 02 Probably are, but cannot name species
 - 03 No species are endangered

14Wt Are you very familiar, somewhat familiar, not very familiar, or not at all familiar with the habitat requirements of the wildlife that exist in your area, that is, what they need in terms of food, water, shelter and room to move around, or is this not a concern for you?

01 – very familiar 02 – somewhat familiar 03 – not very familiar 04 – not at all familiar 05 – not a concern

ASK ONLY TO FARMERS (OPTION 1 IN D1)

15Wt Can you think of any one change that could be made in your day-to-day farmingoperations that will also benefit wildlife?

01 – SPECIFY _____ VOLUNTEERED 02 – N/A, do not farm or land is rented out to someone else

ASK ONLY TO FARMERS (OPTION 1 IN D1)

16Wt Does wildlife on your own land cause damage to your farm operation?

01 – yes 02 – no VOLUNTEERED 03 – does not apply 04 – N/A, land is rented out to someone else

ASK ALL

17W Would you say that damage by wildlife is or is not a serious problem for farmers in general?

01 – is serious 02 – is not serious

ASK ALL

18Wt Do you agree or disagree with the following statements...?

READ AND ROTATE – KEEP a) and b) TOGETHER a) The damage caused by wildlife makes me care less about what happens to endangered species of wildlife in my area.

01 – agree 02 – disagree

b) Farmers should receive compensation for crop damage caused by wildlife.

c) Farmers do an excellent job in protecting natural areas and wildlife habitats.

d) The health of wildlife populations is one of the best indicators of the health of our environment.

19Wt Do you or do you not have confidence in each of the following organizations to provide information on land management?

READ AND ROTATE a) the federal government

01 – Yes, have confidence

02 – No, do not have confidence

VOLUNTEERED

03 – depends

- 04 not familiar with organization/have never received information from it
- 05 N/A, land is rented out to someone else

b) non-government or conservation groups

- c) private consultants
- d) landowner or farmer associations

e) volunteer groups such as Stewardship councils

- f) your provincial government
- g) your local municipal government

22Ft a) Do you think that forests can help reduce the effects of climate change?

01 – Yes 02 – No

IF YES IN a)

r-t b) Would you be willing, or able, to plant trees on your non-forested land in order to help in this effort?

01 – Yes, willing and able 02 – No, not willing VOLUNTEERED 03 – Willing, but not able

ASK ALL

20Wt Would you personally like to get information on land management through each of the following ...?

READ AND ROTATE

a) written materials such as brochures or self-help manuals

- 01 Yes 02 – No VOLUNTEERED 03 – depends
- b) websites or e-mail
 c) on-site consultation
 d) workshops
 e) demonstration sites
 f) over the phone
 g) government offices

TELL ALL

And now, I'd like to ask you some questions about you and your household. Please be assured that all your responses will be kept entirely anonymous and absolutely confidential.

ASK ALL

D5 What year were you born?

01 – SPECIFY _____

D6 What is your primary occupation? [IF MORE THAN ONE, the job that generates the most income]

READ

- 01 Farmer (e.g. someone whose gross annual farm receipts are \$2,500 or more)
- 02 Skilled tradesperson (e.g. welder, plumber, electrician)
- 03 Professional (e.g. teacher, engineer, lawyer)
- 04 Retired NOTE: if retired farmer, code as farmer
- 98 Other SPECIFY ____
- D7 a) For statistical purposes only, we need information about your income. All individual responses will be kept confidential. What was your total gross household income before taxes for 2002? [ASK INCOME FOR 2001 IF 2002 INCOME UNKNOWN]

READ IF NECESSARY 01 – Under \$10,000 02 – \$10,000 to \$19,999 03 – \$20,000 to \$29,999 04 – \$30,000 to \$39,999 05 – \$40,000 to \$49,999 06 – \$50,000 to \$59,999 07 – \$60,000 to \$69,999 08 – \$70,000 to \$79,999 09 – \$80,000 to \$89,999 10 – \$90,000 to \$149,999 12 - \$150,000 and over

b) Approximately, what proportion of your total household income is derived from the land or the farm that you own?

READ – CHOOSE ONE ONLY 01 – all or most of it 02 – about half 03 – none or hardly any VOLUNTEERED 98 – Other SPECIFY _____

- D8 a) Do you have regular or easy access to a computer?
 - 01 yes 02 – no

IF YES TO a)

b) Is this computer in your home?

01 – yes 02 – no

IF YES TO a)

c) Is this computer linked to the Internet?

01 – yes 02 – no

- D9 Generally, would you say that the Internet is a very good, somewhat good, somewhat poor or very poor source of information on issues associated with ownership of rural land?
 - 01 very good
 - 02 somewhat good
 - 03 somewhat poor
 - 04 very poor