



# Planning Future Directions

## For BC Parks:

# BC Residents' Views

## Technical Report

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## Executive Summary

British Columbia's provincial parks protect large areas containing representative examples of the broad range of ecosystems in the province and they also protect those special features - natural, cultural, historic and recreational - that are unique to British Columbia.

Over the past 10 years, the size of the provincial park system and the visits to provincial parks have grown. Currently, the provincial park system encompasses 807 provincial parks, recreation areas, ecological reserves and protected areas totaling more than 11.4 million hectares or about 12 percent of British Columbia's land base. In 2001, the provincial park system received about 24 million visits from BC residents and their visitors, and contributed about 6 percent of the total tourism revenue to the province.

The Parks and Protected Areas Branch (BC Parks) of the Ministry of Water, Land and Air Protection is the provincial agency responsible for the environmental stewardship of this park system and for the provision of outdoor recreational opportunities in provincial parks located throughout the province. BC Parks is currently in the process of developing future management directions for these provincial parks. One component of this process is to understand what improvements or changes, if any, British Columbians would like to see in the management of provincial parks.

To better understand British Columbians views about the management of provincial parks, BC Parks conducted a province-wide mail survey with a random sample of 4,198 adult BC residents. The primary purposes of the survey were to:

- identify the benefits that British Columbians feel they receive from having provincial parks;
- determine the number of British Columbians using the provincial park system;
- identify the services and types of accommodations that British Columbians would like to see in provincial parks;
- determine the information sources British Columbians would prefer to use to plan a visit to a provincial park;
- identify British Columbians views about the acceptability of activities in backcountry (or wilderness) areas of provincial parks;
- determine if British Columbians are aware of BC Parks' fire management policy;

- identify those park programs which British Columbians would like to see more emphasis given to in the next few years; and
- determine British Columbians' views about alternative ways to fund park programs.

Of the 4,198 residents that were sent a questionnaire, 2,856 returned a useable questionnaire. The response rate was 72 percent.<sup>1</sup>

Following are the initial findings from this survey.

### **Importance and Use of Provincial Parks**

- About 7 in 10 in British Columbians indicated that provincial parks are very important to them personally.
- British Columbians most value the conservation benefits that provincial parks provide. About 8 in 10 British Columbians indicated the protection of special natural features (e.g. waterfalls) (84%) and the preservation of natural environments (82%) as being very important benefits of having provincial parks in British Columbia.
- A majority of British Columbians also value the recreation benefits that provincial parks provide. About 6 in 10 British Columbians indicated places for relaxation (60%), the attraction of out-of-province visitors (58%) and places to go camping (58%) were very important benefits of having provincial parks in British Columbia.
- About 86 percent of BC residents indicated they have used a provincial park at some time in the past.
- Slightly more than 5 in 10 British Columbians (53%) indicated they had used a provincial park in 2001. The types of parks used by the largest number of British Columbians in 2001 were day use areas (37%) and provincial park campgrounds (30%).

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<sup>1</sup>The results of 2001 survey are based on a systematic, random sample of adult (18 years and over) British Columbians throughout the province. Names and addresses for the sample were drawn by and obtained from the Dominion Directories Company. BC Parks received questionnaires between September 18, 2001 and January 11, 2002. The potential number of respondents was reduced to 3,959 because 239 respondents were physically or mentally incapable of completing the questionnaire, were deceased, had moved from the community or were not residents of British Columbia. The margin of error is about +/- 2%. For more detailed information about the methodology, please see Appendix A.

- Between 1994 and 2001, the number of British Columbians using the provincial park system decreased 12 percent. One major reason that kept British Columbians from using the park system in 2001 was a preference for other types of overnight accommodation.

### **Provision of Outdoor Recreation Opportunities**

- A slight majority of British Columbians (52%) feel that BC Parks has done an outstanding or good job in providing recreation services and facilities over the past two years. By contrast, 24 percent of residents indicated that BC Parks has done an average job while 3 percent indicated either an unacceptable or a poor job. About 21 percent of British Columbians indicated not sure.
- British Columbians prefer the current types of services provided in provincial park campgrounds to the proposed new types of services. The highest preference was for existing services such as walking trails (86% indicated they would like to see these in campgrounds), firewood (80%) and hot showers (71%). The lowest preference was for new food-related services such as vending machines (32%), concession stands (30%) and mobile food service (28%).
- BC residents indicated a preference and a willingness to use and pay for some new types of overnight accommodation in parks. About 61 percent of the respondents indicated they would be willing to pay \$25 to \$30 per night to use campsites with water and electrical hookups.
- Advice from friends and relatives is the most preferred information source in planning future overnight trips to provincial parks. While about 20 percent of British Columbians visited the BC Parks web site in 2001, there may be potential for greater use of the BC Parks web site because 63 percent of the respondents indicated they had access to the internet in their home.

### **Protection of Natural Resources**

- A slight majority of British Columbians (54%) feel that BC Parks has done an outstanding or good job in conserving and protecting the natural resources in provincial parks over the past two years. By contrast, about 20 percent of residents indicated that BC Parks has done an average job while about 3 percent indicated either an unacceptable or a poor job. About 23 percent of British Columbians indicated not sure.
- Generally, British Columbians viewed non-motorized activities as being more acceptable activities than motorized activities in backcountry areas of provincial parks.

- A majority of respondents feel that four out of fifteen proposed activities are always acceptable in backcountry areas. Those activities viewed as being most acceptable in backcountry areas are fishing, canoeing, overnight backpacking, and cross-country skiing. Very few British Columbians feel that jet skis, all-terrain vehicles or motor boats are acceptable in backcountry areas.
- There is significant support for selected commercially guided services (day hikes and canoeing trips) in backcountry areas of provincial parks.
- Less than half of the respondents (47%) indicated they were aware of BC Parks fire management policy.

### **Funding of Park Programs**

- Over the next few years, British Columbians think BC Parks should give the highest priorities to the following park programs:
  - undertaking conservation projects;
  - providing backcountry patrols; and
  - operating high visitor use areas.
- British Columbians are generally supportive of a small increase in the camping fee and expanding the range of recreation fees, but there is little support for reducing services or long-term lease arrangements.
- There is strong support for establishing a trust fund to fund park programs and a considerable number of the respondents (71%) indicated they would be willing to contribute to the fund.

## Introduction

British Columbia has the greatest biological and physical diversity of any province in Canada. Scenic landscapes, vast tracts of wilderness, rugged mountains, old growth forests, extensive freshwater and marine waterways have been set aside and designated as provincial parks.<sup>2</sup> Currently, there are 807 provincial parks totaling more than 11.4 million hectares and representing about 12 percent of British Columbia's land base.

The Parks and Protected Areas Branch (BC Parks) of the Ministry of Water, Land and Air Protection is the provincial agency responsible for the environmental stewardship of this park system and for the provision of outdoor recreation opportunities in provincial parks located throughout the province. BC Parks is in the process of developing management directions for provincial parks for the next five years. This work involves addressing three challenges currently facing the agency.

### Challenges

#### *Provision of outdoor recreation opportunities*

One challenge facing BC Parks is the provision of outdoor recreation opportunities that meet visitor (or client) expectations. Currently, BC Parks is one of the largest suppliers of overnight accommodation and outdoor recreation facilities in British Columbia. Provincial parks contain over 13,800 road accessible campsites, 508 day use areas, 125 boat launching areas and over 3,000 kilometres of trails. In 2001, provincial parks received over 2.6 million overnight visits and, in total, received 24 million visits. These park visitors spent nearly one-half billion dollars during their visits to provincial parks contributing about 6 percent of the total tourism revenue in the province.<sup>3</sup>

BC Parks is committed to providing a diversity of safe outdoor recreation opportunities that maintain the integrity of natural and cultural park values and to providing the delivery of services in a cost-effective manner. It is not known, however, if the current types of facilities and services adequately meets the expectations of BC residents, whether or not British Columbians prefer and are willing to pay for other forms of overnight accommodation and what information sources British Columbians use in planning trips to provincial parks. Understanding the views of both users and non-users on these issues is

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<sup>2</sup> In this document, provincial parks refers to provincial parks and recreation areas (designated under the Park Act and the Protected Areas of British Columbia Act), ecological reserves (designated under the Ecological Reserve Act and the Protected Areas of British Columbia Act) and protected areas (designated under the Environment Land Use Act) administered by BC Parks.

<sup>3</sup> Economic Benefits of British Columbia's Provincial Parks, Ministry of Water, Land and Air Protection, September, 2001.



important in planning future facilities and services offered in provincial parks and identifying cost-effective means of providing public information.

### *Protection of natural resources*

A second challenge facing BC Parks is protecting the natural resources of an expanded provincial park system. Over the past 10 years, the size of the provincial park system has more than doubled from about 4.5 million hectares in 1992 to almost 11.4 million hectares in 2001. This expanded system protects large areas containing representative examples of the broad range of ecosystems in the province and they also protect those special features - natural, cultural, historic and recreational - that are unique to British Columbia.

Little is known, however, about the current priority that British Columbians place on fulfilling this environmental stewardship role, what types of activities British Columbians think are appropriate in backcountry areas and how aware British Columbians' are of current conservation policies. Understanding these views is important in establishing program priorities and preparing appropriate communication strategies.

### *Funding of park programs*

A third challenge facing BC Parks is the funding of park programs. Despite the fact the size of the provincial park system and visitor use has grown significantly over the past decade, BC Parks has faced a general trend of decreasing operating resources.

At present, BC Parks is considering several options to fund park programs. BC parks is interested in learning both what funding options British Columbians support and what park programs residents feel should be given the highest priority over the next few years.

## **2001 Household Survey**

The 2001 Household Survey was undertaken to provide British Columbians with an opportunity to provide input to the development of future management directions for the provincial park system. This province-wide mail survey was conducted with a random sample of 4,198 adult BC residents between September, 2001 and January 2002. The primary purposes of the 2001 survey were to:

- identify the benefits that British Columbians feel they receive from having provincial parks;
- determine the number of British Columbians using the provincial park system;
- identify the services and types of accommodations that British Columbians would like to see in provincial parks;
- determine the information sources British Columbians would prefer to use to plan a visit to a provincial park;
- identify British Columbians views about the acceptability of activities in backcountry (or wilderness) areas of provincial parks;
- determine if British Columbians are aware of BC Parks' fire management policy;
- identify those park programs which British Columbians would like to see more emphasis given to in the next few years; and,
- determine British Columbians' views about alternative ways to fund park programs.

Of the nearly 4,198 residents that were sent a questionnaire, 2,856 returned a useable questionnaire. The response rate was 72 percent. The appendices provide additional details on the survey methodology, a copy of the questionnaire and statistical tables.

Following are the initial findings from this survey. Comparisons are made with previous surveys where appropriate.<sup>4</sup>

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<sup>4</sup> This is the fifth province-wide household survey that BC Parks has undertaken. Previous surveys were conducted in 1995 (2,926 respondents; 74% response rate), 1989 (2,899 respondents; 76% response rate) 1988 (3,175 respondents; 81% response rate) and 1983 (1,003 respondents; 74% response rate). The first survey in 1983 was a telephone survey and the last four surveys have been mail surveys.

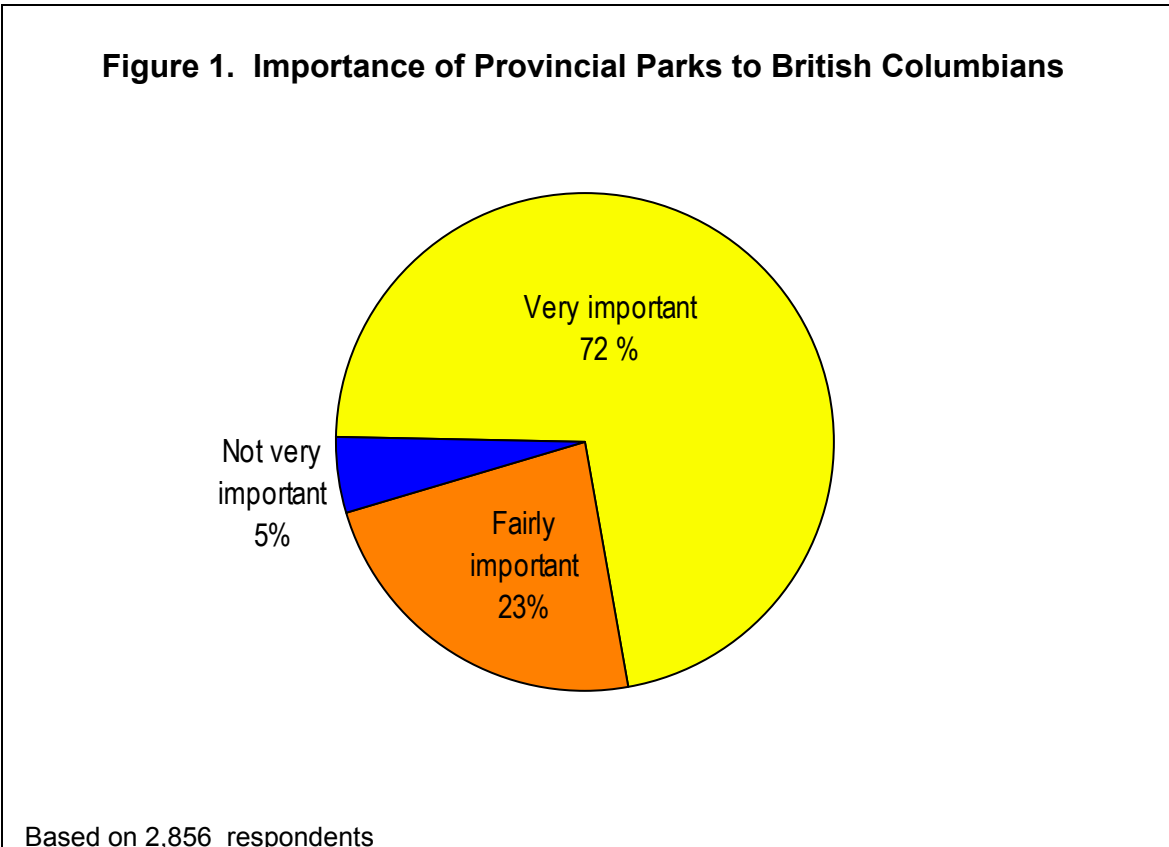
## Importance and Use of Provincial Parks

In identifying future management directions for provincial parks it is useful to know what BC residents value about provincial parks, how many British Columbians are currently using provincial parks and to determine what may be keeping BC residents from using their park system.

### Importance of Provincial Parks

About 7 in 10 British Columbians indicated provincial parks are very important to them personally (see Figure 1).<sup>5</sup> By comparison, about 23 percent of British Columbians indicated that having provincial parks was fairly important and about 5 percent indicated not very important.

When the results for this question were compared with the results of the BC Parks 1995 household survey, the percent indicating very important had not changed. Having a provincial park system in British Columbia continues to be important to many British Columbians.



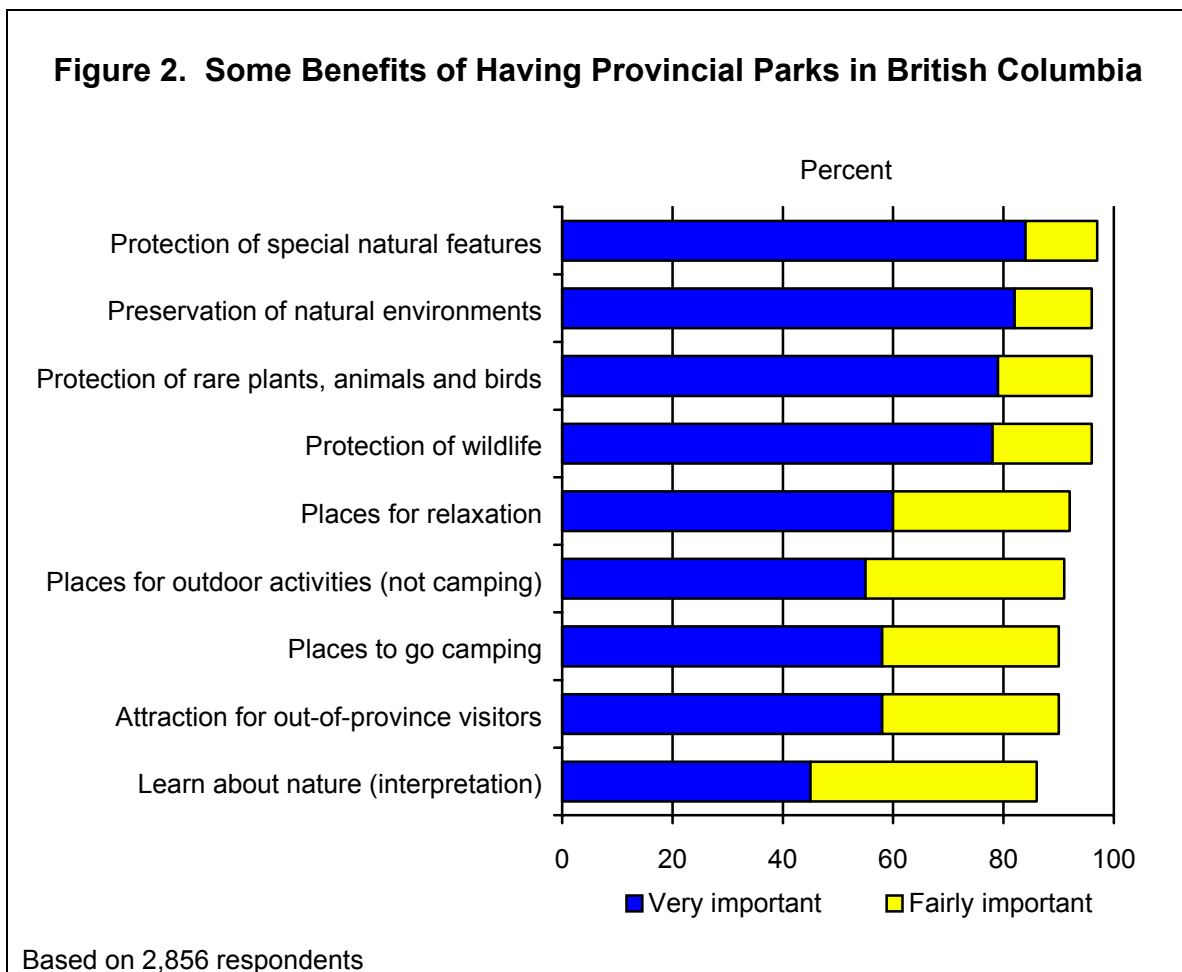
<sup>5</sup> The question was: How important is it to you personally that there are provincial parks in British Columbia? The response categories were: not very important, fairly important and very important.

## Benefits of Provincial Parks

To determine what British Columbians value about having a provincial park system in British Columbia, respondents were asked to rate the importance of four conservation benefits, four recreation benefits and one education benefit.<sup>6</sup>

British Columbians highly value the conservation benefits of provincial parks (see Figure 2). More than 8 in 10 British Columbians identified the protection of special natural features (84%) and the preservation of natural environments (82%) as being very important benefits of having provincial parks in British Columbia.

A majority of BC residents also value the recreation benefits of provincial parks as places for relaxation, an attraction for out-of-province visitors, places to go camping and places do other outdoor recreation activities.



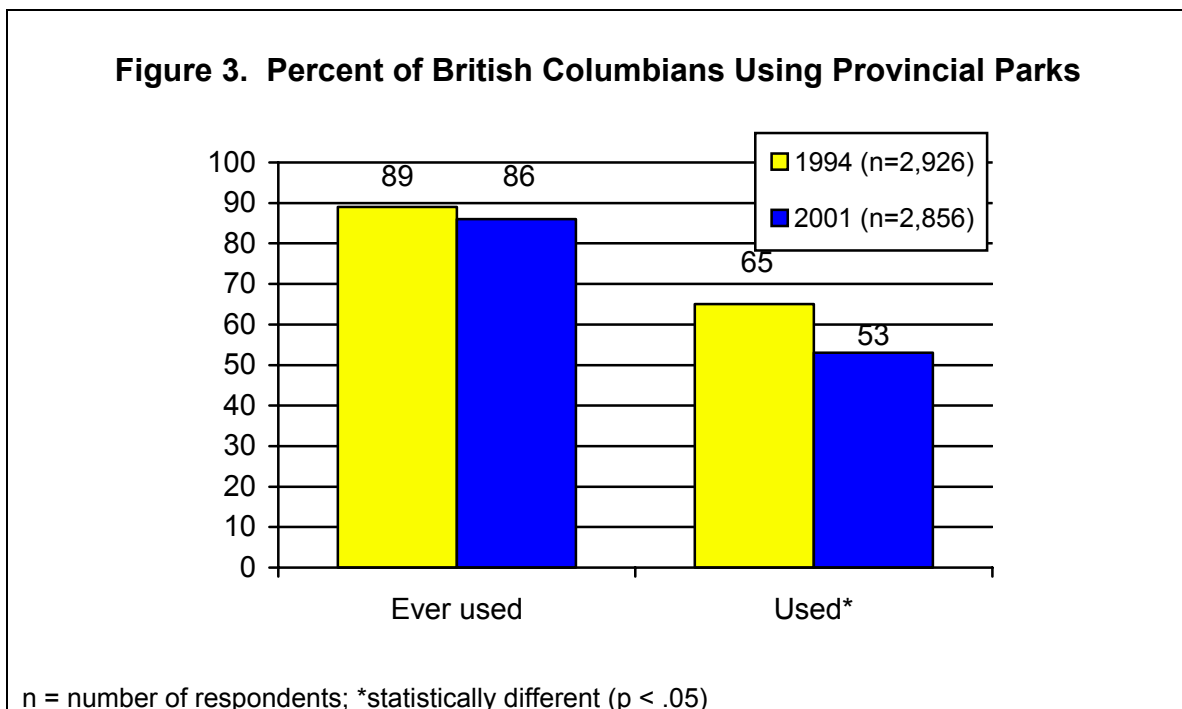
<sup>6</sup> The question was: Listed below are a few benefits that some British Columbians have told us they feel they receive from having provincial parks in British Columbia. For each benefit, please indicate if you think it is not a very important benefit, a fairly important benefit or a very important benefit to British Columbians?

The relative importance of conservation benefits compared to recreation benefits did not change between 1995 and 2001. British Columbians continue to value the conservation benefits of provincial parks.

### Use of Provincial Parks

While a considerable number of British Columbians (86%) have used a provincial park sometime in the past, slightly more than 5 in 10 British Columbians (53%) or approximately 2 million British Columbians indicated they had used a provincial park in 2001 (see Figure 3).<sup>7</sup>

The types of parks used by the largest number of British Columbians were day use areas (37%) and provincial park campgrounds (30%) followed by backcountry (or wilderness) areas (15%), visitor centres (13%) and marine parks (12%).<sup>8</sup>



<sup>7</sup> The questions were: First, have you ever used any provincial park in British Columbia? By provincial park, we mean a park managed by the provincial government and not a neighbourhood, city, regional, or national park. The response categories were: no (9%), not sure (5%) and yes (86%). Did you use any BC provincial park in the year 2001? The response categories were: no (43%), not sure (4%) and yes (53%).

<sup>8</sup> The question was: (If yes) which of the following types of parks or facilities did you use in 2001? The response categories were: marine park, provincial park campground, wilderness or backcountry areas, day use areas (beach/picnic areas), visitor centres. The percents above add to more than 100 percent because some people used more than one type of park.

Note: Respondents were asked to provide the name of a provincial park if they had used one in 2001. Over 160 individual provincial parks were identified.

Between 1994 and 2001, the number of British Columbians using provincial parks decreased 12 percent. Decreases occurred in all types of park facilities with the greatest decreases occurring in day use areas (-10%) and provincial park campgrounds (-7%).

*Demographic profile of park users and non-users*

Some demographic characteristics of park users and non-users are presented in Table 1. Park users tended to be younger, have higher levels of education and have higher income levels. Specifically:

- 52% of park users are under 45 years of age (versus 34% of non-users);
- 41% of park users had some university or a degree (compared to 31% of non-users); and
- 39% of park users had a total annual income of \$65,000 or greater (versus 30% of non-users).

The size of residential community and geographic location of residence was similar for both park users and non-users.

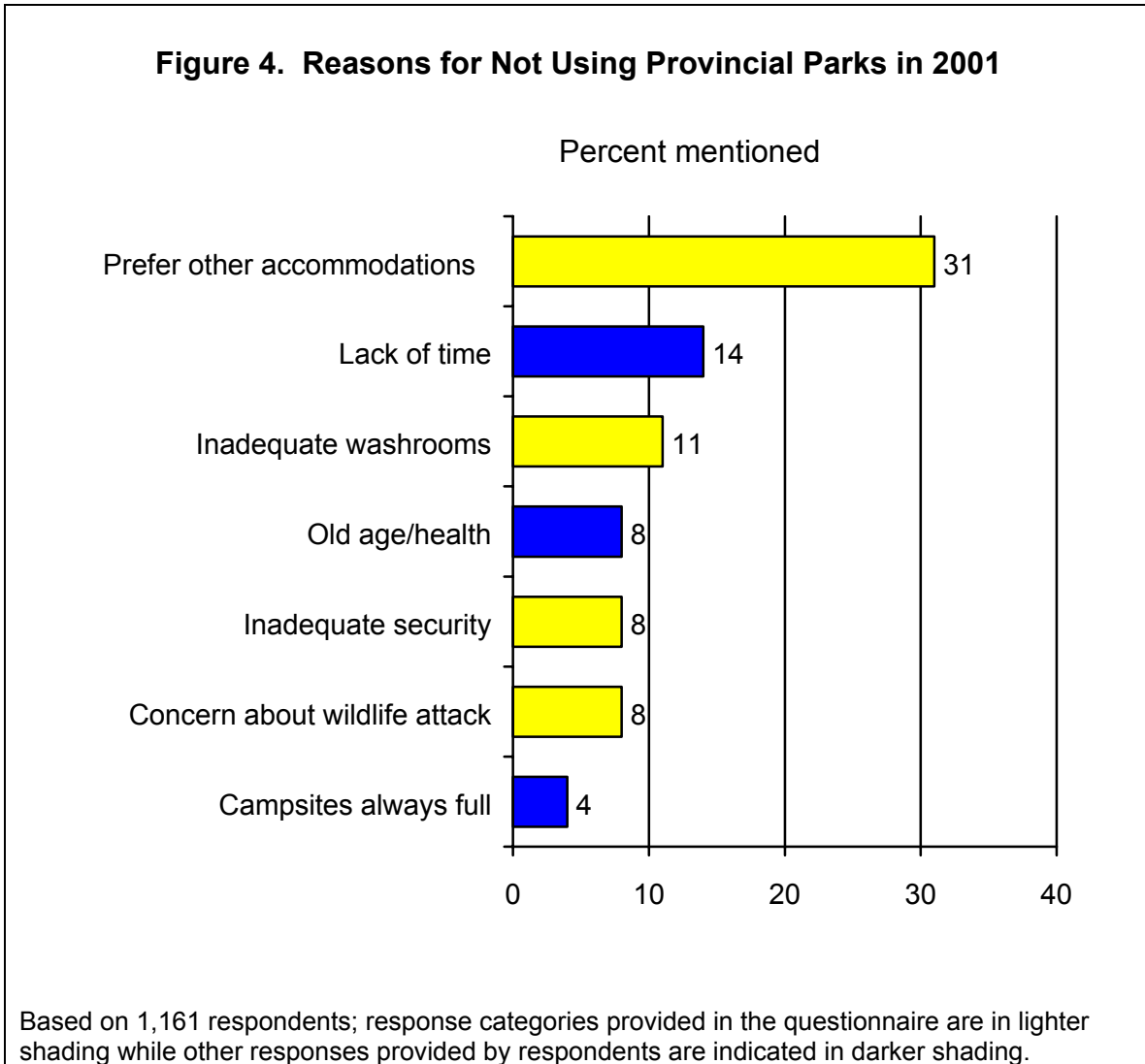
<b>Table 1. Demographic Characteristics of Provincial Park Users and Non-Users</b>		
<b>Characteristics</b>	<b>Used in 2001</b>	<b>Did Not Use in 2001</b>
	<b>Percent</b>	
Age		
• 18 - 34	25	14*
• 35 - 44	27	20*
• 45 - 64	38	46
• 65 +	10	20
Education		
• High school diploma or less	28	42
• College/trade school/tech school	31	27
• Some university/University degree	41	31*
Annual Income		
• Less than \$35, 000	24	35*
• \$35,000 - \$64,999	37	35
• \$65,000 or more	39	30*
Size of Community		
• Rural/Town (under 20,000 people)	17	17
• Small city (20,000 - 99,999)	30	28
• Large city (100,000 or more)	53	55
Economic Development Regions		
• Vancouver Island/Coast	18	17
• Mainland/Southwest	57	57
• Thompson/Okanagan/Kootenay	16	17
• Cariboo/North Coast/Nechako/Northeast	9	9
Number of respondents	1,400	848

Column percents (add down); \*statistically different (p < .001)

## Some Reasons for Not Using Provincial Parks in 2001

Respondents who had not used provincial parks in 2001 (i.e. non-users) were asked to identify the reasons that had kept them from using provincial parks in 2001.<sup>9</sup>

The reasons mentioned most frequently by non-users were the preference for other types of accommodation (31%), a lack of time (14%) and inadequate washroom facilities (see Figure 4).



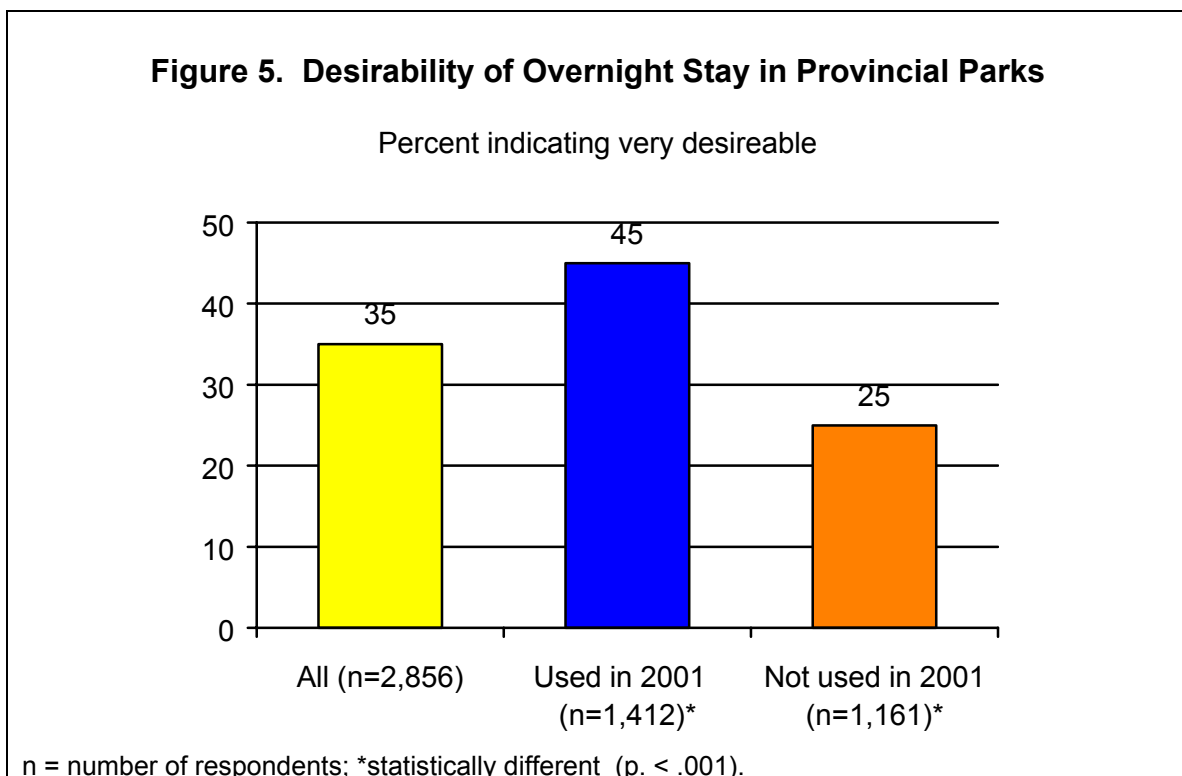
<sup>9</sup> The question was: (If no or not sure) Which of the following reasons, if any, kept you from using BC provincial parks in the year 2001? The response alternatives were: inadequacy of security services in parks (not safe from crime); concern about a possible wildlife attack (bear, cougar, etc.); prefer other forms of accommodation (motel, hotel, etc.); inadequacy of washroom facilities in parks; other (specify).

### *Desirability of overnight stay in provincial parks*

Respondents indicated that one reason they did not use a provincial park in 2001 was the preference for other types of accommodation. This finding was consistent with the result of another question asking respondents about the desirability of staying overnight in provincial parks for four nights or more during the summer months.<sup>10</sup>

Overall, about 35 percent of BC residents indicated they would find this overnight stay to be very desirable and 46 percent indicated somewhat desirable. When a comparison was made between park users and non-users (see Figure 5), the percent indicating very desirable was nearly twice as high among users (45%) than non-users (25%).

A similar question was asked in the BC Parks 1989 household survey. Between 1989 and 2001, the percent of British Columbians indicating very desirable dropped by 7 percent - from 42% in 1989 to 35% in 2001.



<sup>10</sup> The question in 2001 and 1989 was: Next, how desirable or undesirable do you find BC provincial parks as a place to spend an overnight stay of four nights or more during the summer months (June to September).

The results in 2001 were: very desirable (35%), somewhat desirable (46%); somewhat undesirable (12%); and very undesirable (7%). By comparison, the results in 1989 were: very desirable (42%); somewhat desirable (45%); somewhat undesirable (8%); and very undesirable (5%).

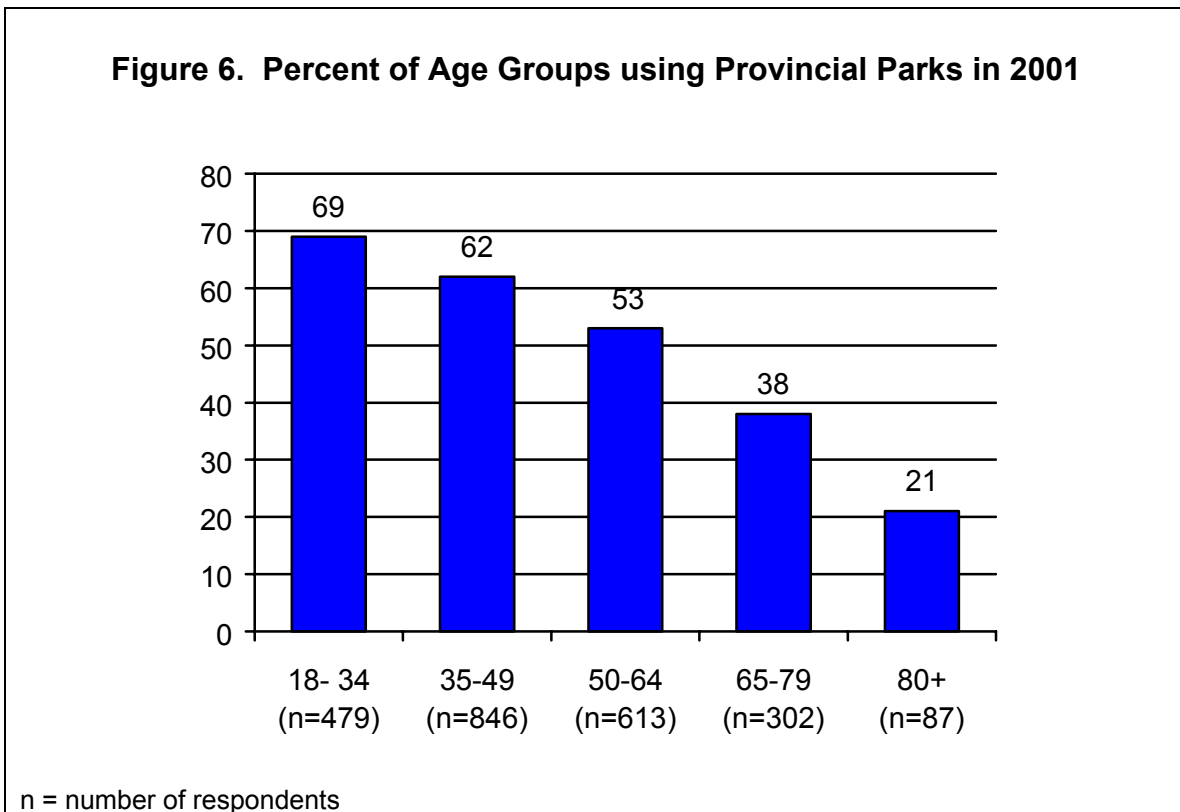


### Use of parks by age groups

Another reason given by British Columbians for not using provincial parks in 2001 was "old age." The percentage of residents in different age groups using provincial parks in 2001 is presented in Figure 6. This graph shows that the number of British Columbians using provincial parks in 2001 decreases with age.

This fact may impact the number of British Columbians using provincial parks in the future as the "baby boom" generation (those born from 1947-1966) moves through the provincial population structure.<sup>11</sup>

The baby boomers are the largest demographic segment of the BC population structure and in 10 to 20 years, when many of the baby boomers turn 65 years or older, there may be fewer British Columbians interested in using provincial parks.<sup>12</sup>



<sup>11</sup> In the year 2001, about 62% of adult population (18 years and older) was under 50 years of age. By the year 2017, about half (53%) of the adult population will be under 50 and about half (47%) will be 50 years or older.

<sup>12</sup> It is estimated that baby boomers represented about one-third of the BC population in 1996 (most recent census year). For a more detailed discussion about the baby boom generation, see *Boom Bust and Echo* by David Foot and Daniel Stoffman (1996), pp. 13-25.

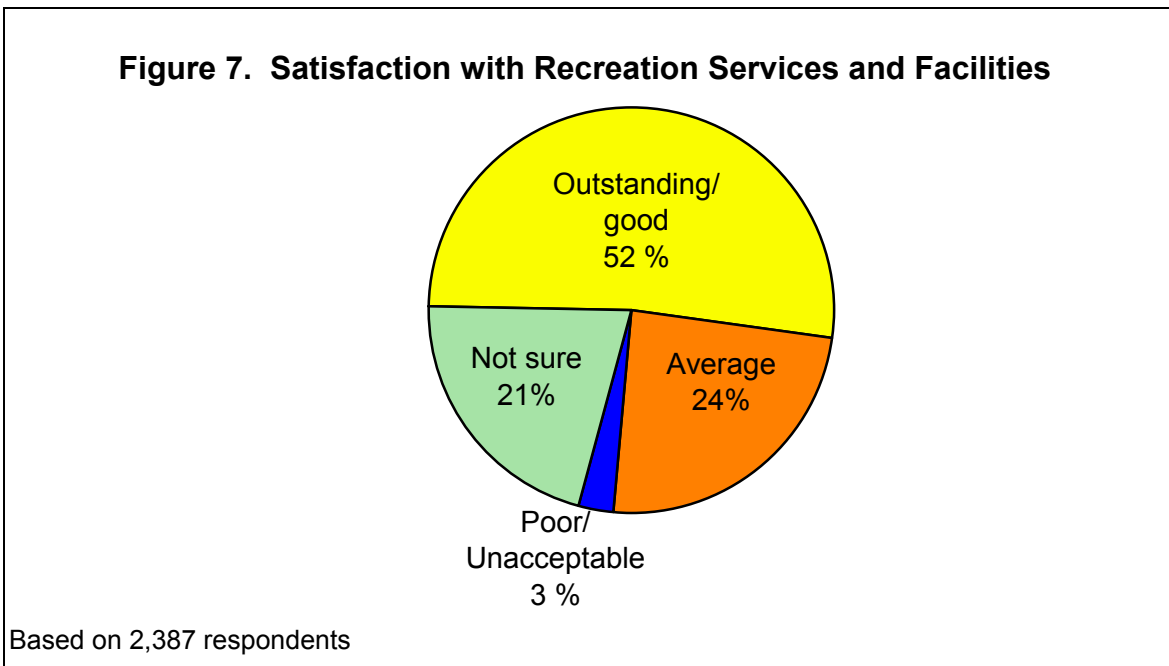
## Provision of Outdoor Recreation Opportunities

One challenge facing BC Parks is the provision of outdoor recreation opportunities that meet visitor (or client) expectations. In addressing this challenge it is important to know whether British Columbians are satisfied with the current facilities and services provided in provincial parks and to identify what changes, if any, residents would like to see in the future.

Respondents were asked to rate BC Parks job performance in providing recreation facilities and services over the past two years, to indicate their preferences for services in campgrounds and overnight accommodation and to identify the information sources they most prefer to use in planning trips to provincial parks.

### Satisfaction with Recreation Services and Facilities

A slight majority of British Columbians (52%) feel that BC Parks has done an outstanding or good job in providing recreation services and facilities over the past two years (see Figure 7).<sup>13</sup> By comparison, about 24 percent indicated that BC Parks had done an average job while 3 percent indicated either an unacceptable or poor job.



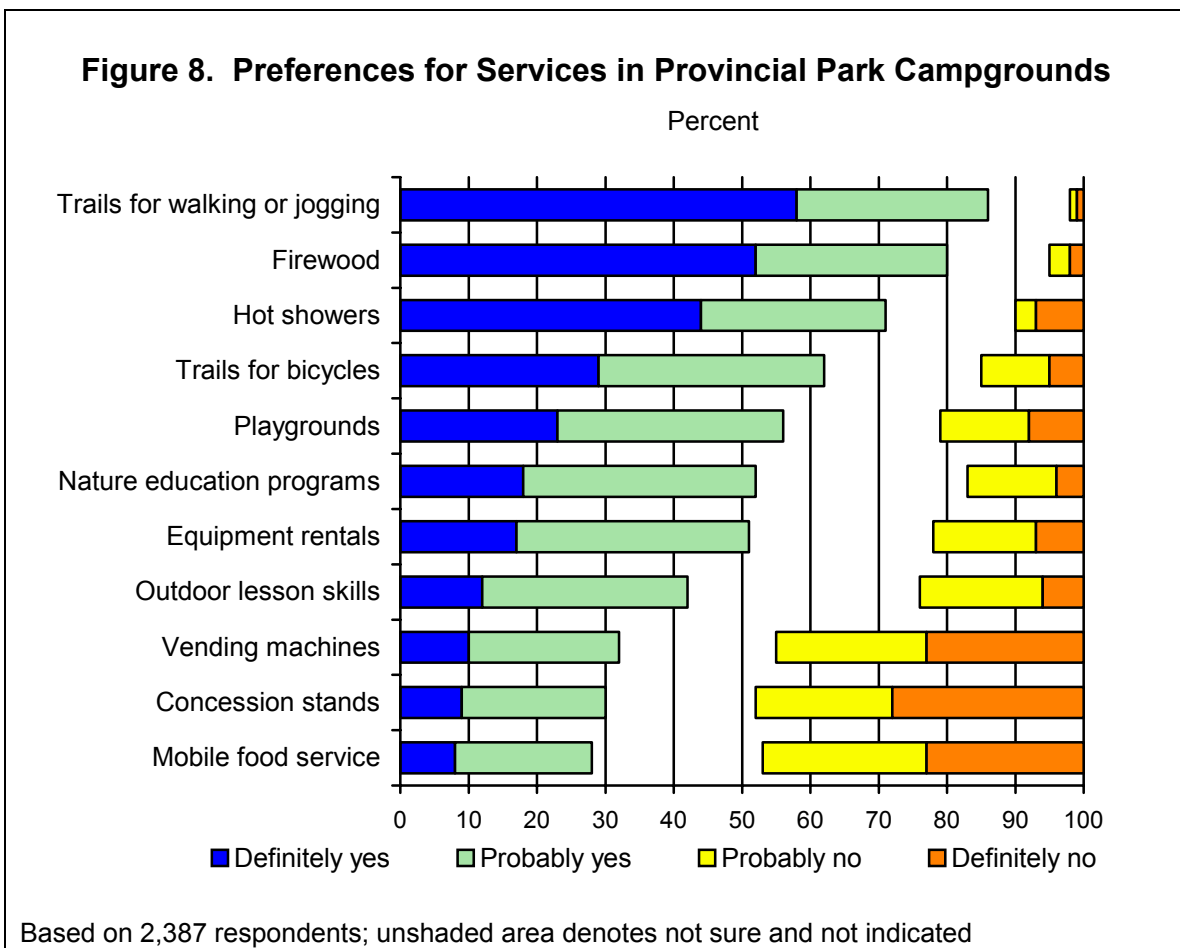
<sup>13</sup> The question was: Overall, how would you rate BC Park's performance over the past two years in providing recreation facilities and services in provincial parks. The response categories were: unacceptable (1%), poor (2%), average (24%), good (46%), outstanding (6%) and not sure (21%).

Note: The results for this section and the following ones are based on 2,387 respondents. These respondents expressed some interest in parks or had recently used them.

## Preferences for Services in Provincial Park Campgrounds

BC Parks is the largest supplier of campsites in the province with nearly 13,000 campsites. While some of these campgrounds have shower buildings with hot water and flush toilets and a telephone reservation service, others are more rustic (e.g. pit toilets, hand pump; served mostly on first-come first-serve basis).

Slightly over 60 percent of visitors to provincial park campgrounds are BC residents.<sup>14</sup> In order to determine if the current range of services and facilities is adequately meeting residents expectations, respondents were asked about their preferences for six traditional services and five proposed, new services in provincial park campgrounds (see Figure 8).<sup>15</sup>



<sup>14</sup> In 2001, it is estimated that 64 percent of all visitors to BC provincial park campgrounds were from British Columbia. For a more detailed discussion, please see The Management of BC Parks' Campground and Day Use Areas: Park Visitors Views, BC Parks, January, 2002.

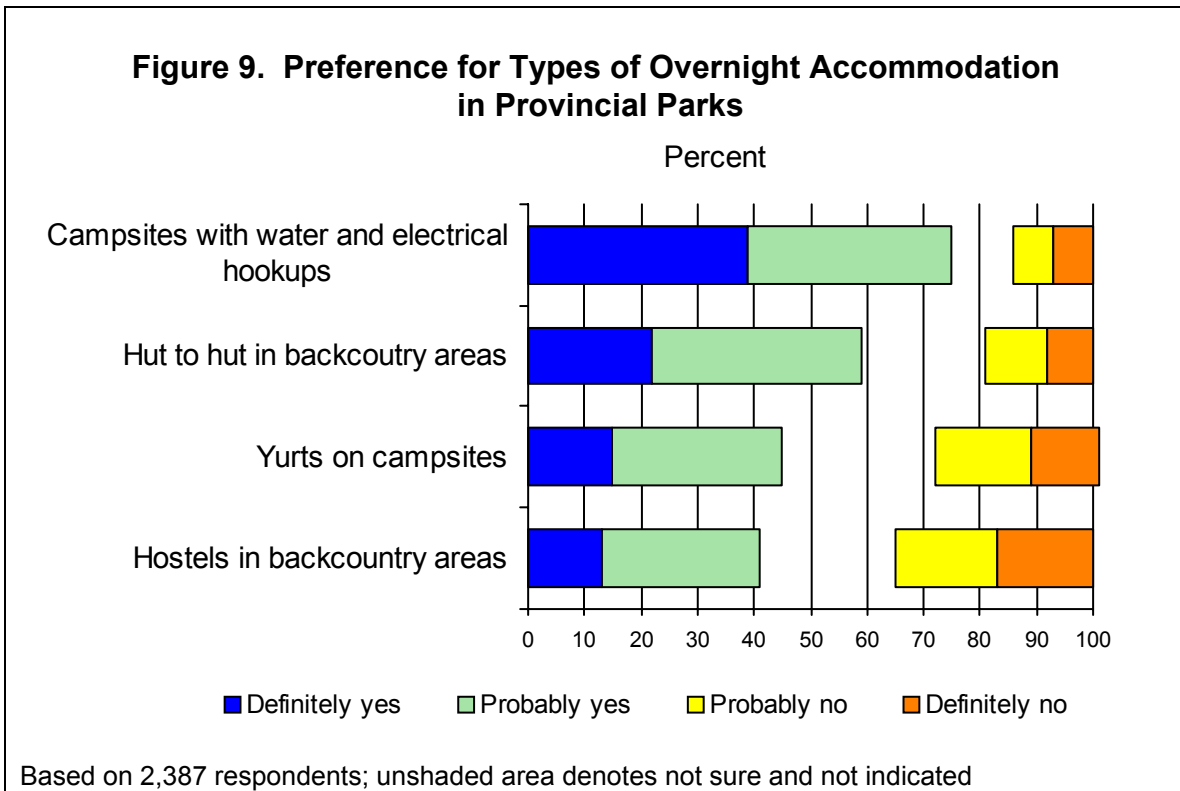
<sup>15</sup> The question was: Here are some specific services that some people want and others do not want in provincial park campgrounds. Please indicate if you would like to see or not like to see each of the following services provided in provincial park campgrounds? The response categories were: definitely no, probably no, not sure, probably yes, definitely yes.

British Columbians most preferred traditional services such as trails for walking and jogging (86% indicated definitely yes and probably yes), firewood (80%) and showers (71%). By contrast, there was considerably less interest in having food-related services such as vending machines (32%), concession stands (30%) and a mobile food service (28%).

### Preferences for Alternative Types of Overnight Accommodation

The primary type of overnight accommodation in provincial parks is campgrounds (road accessible, walk-in, backcountry). Respondents were asked if they would like to see four alternative types of overnight accommodations in some provincial parks (see Figure 9).<sup>16</sup>

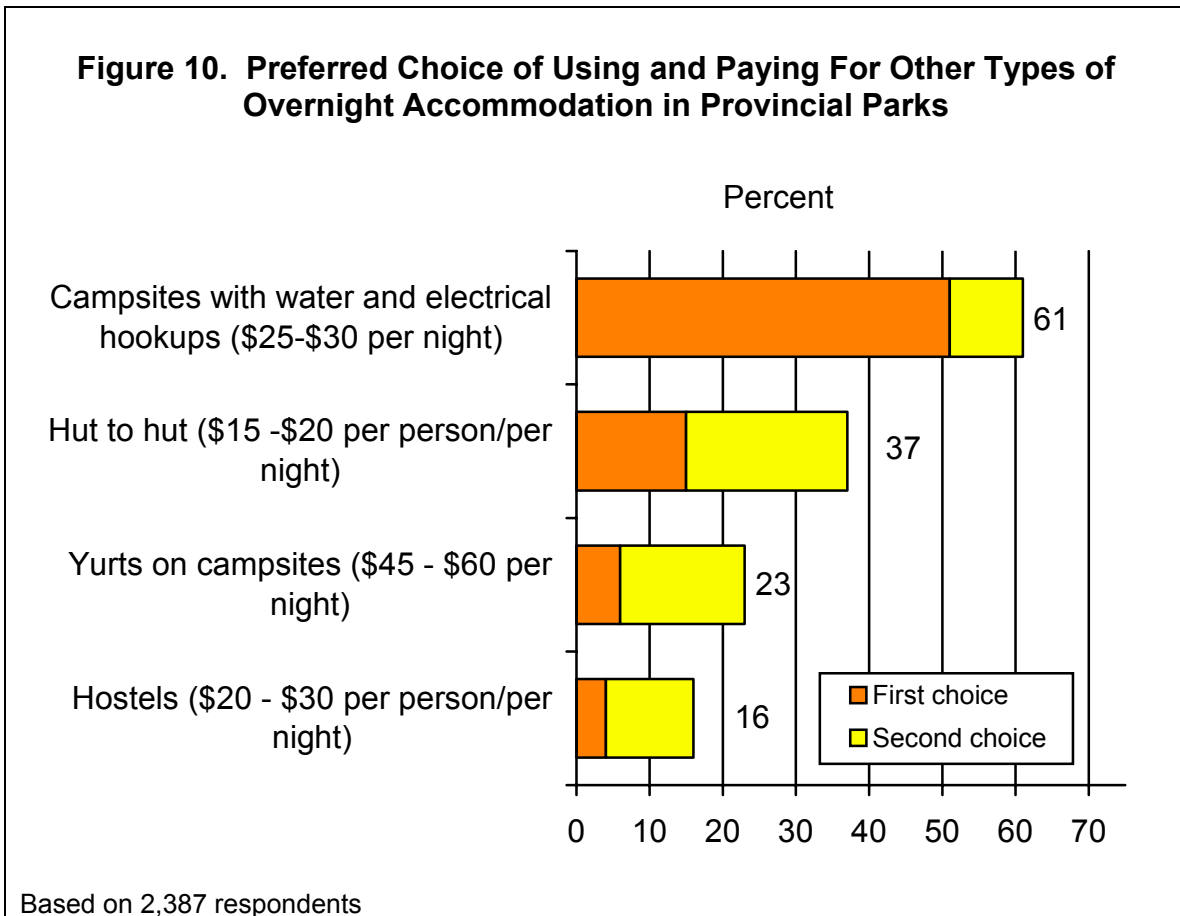
British Columbians indicated a strong preference for having campsites with water and electrical hookups in provincial parks (75%). This was followed by a preference for hut-to-hut accommodations (59%), yurts (or canvas tents on platforms) on campsites (45%) and hostels (41%).



<sup>16</sup> The question was: One type of overnight accommodation in provincial parks is campgrounds (with showers, without showers, walk-in). Below are some other types of accommodation that some British Columbians would like to see in provincial parks. Please look at each of the pictures and then indicate the extent to which you would or would not like to see each of these in some provincial parks? The response categories were: definitely no, probably no, not sure, probably yes, definitely yes.

Respondents were also asked if they would consider using these four types of accommodations at a specified fee level.<sup>17</sup>

A considerable number of respondents (61%) indicated they would consider using campsites with water and electrical hookups at \$25 to \$30 per night (see Figure 10). About 37 percent of the respondents also indicated they would consider using hut to hut accommodations at \$15 to \$20 per person/per night.



### Use and Preferences for Information Sources

BC Parks provides information to help BC residents and non-residents plan their trips to provincial parks. The public can obtain this information from BC Parks' offices, tourist information centres and the BC Parks web site.

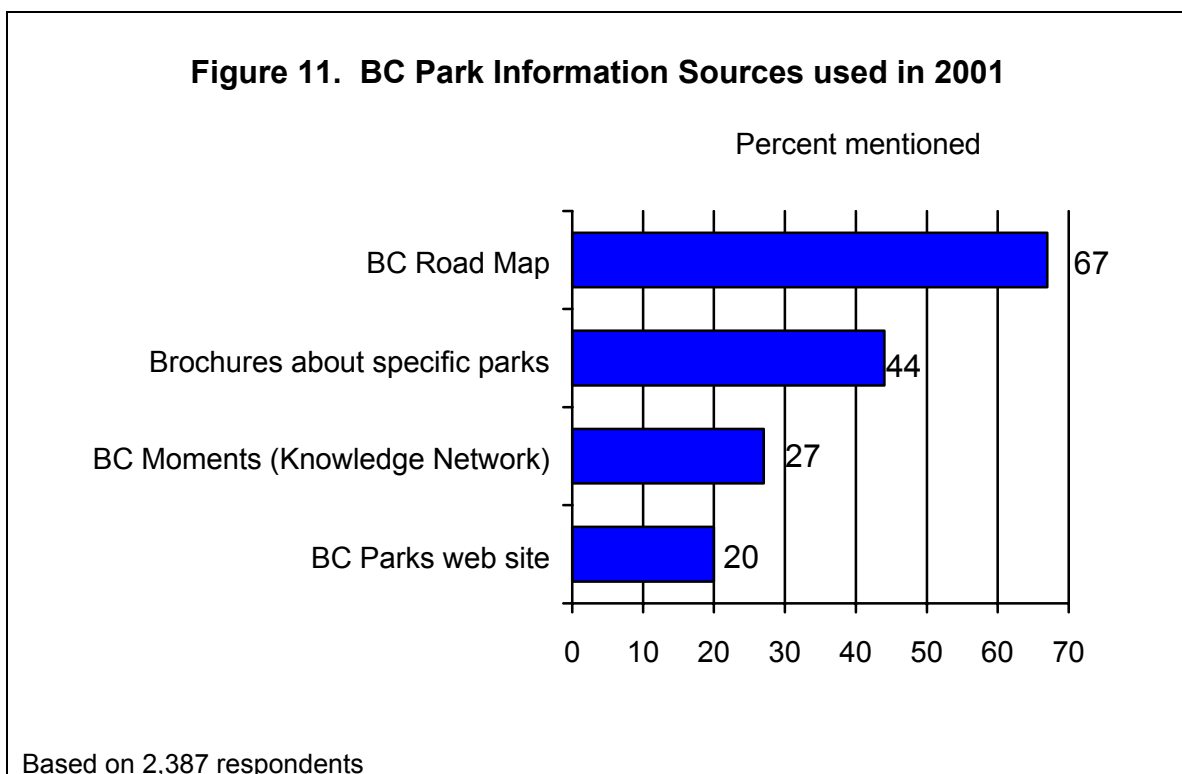
BC Parks is currently reviewing the ways information can be provided to potential park visitors in the most cost-effective manner. One consideration in evaluating the ways to distribute information is determining how many BC residents use

<sup>17</sup> The question was: Which of the following accommodation, if any, would you consider using over the next five years? The response categories were: first choice and second choice.

specific information sources. Respondents were asked to identify which sources of information they used in 2001.<sup>18</sup>

Nearly 7 in 10 respondents (67%) indicated they had used the BC Road Map showing provincial parks and facilities (see Figure 11). This was followed by the use of the brochures of specific parks (44%), watching BC Moments on the Knowledge Network (27%) and accessing the BC Parks web site (20%).

When the percent of BC residents using printed sources of information (BC Road Map, park brochures) in the 2001 household survey was compared to the BC Parks 1989 household survey, the percentage indicating they had used these sources were almost identical.<sup>19</sup> The BC Parks Road Map and park brochures continue to be used by a large number of British Columbians.



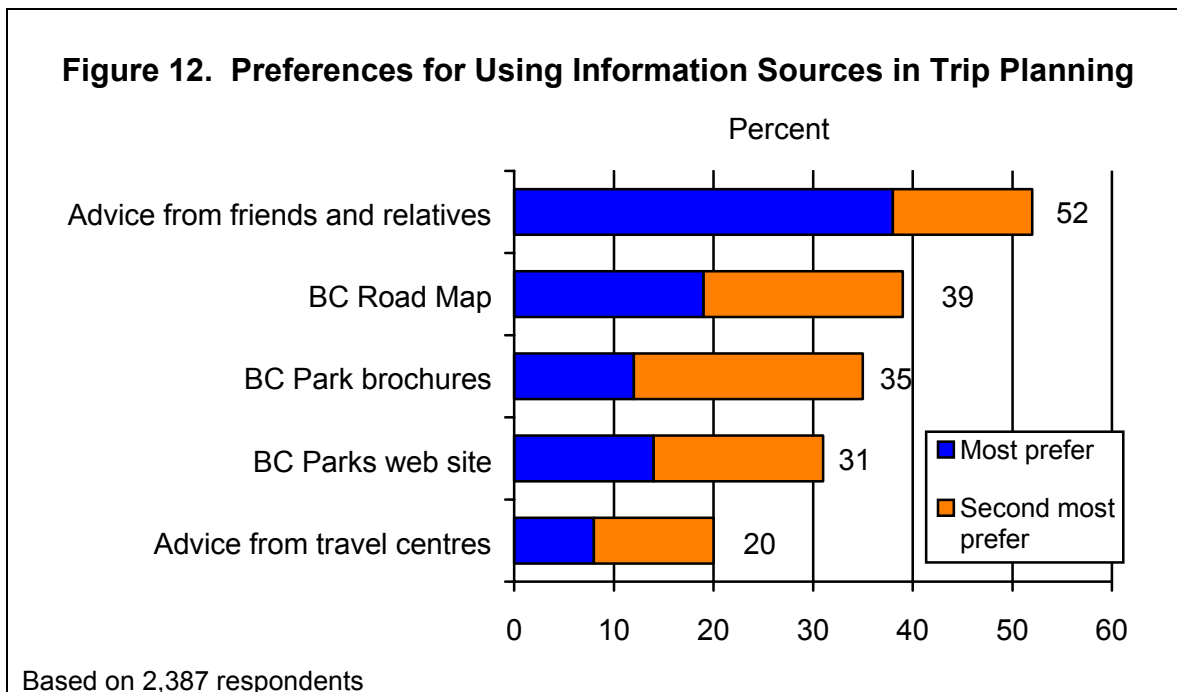
<sup>18</sup> The question in 2001 was: To the best that you can recall, did you look at or read any of the following during the year 2001? (Circle number of all that apply). The response categories were: BC Road Map showing provincial parks and facilities; brochures on specific BC provincial parks; BC Parks web site; BC Moments about provincial parks (Knowledge Network on television); other; none of the above.

<sup>19</sup> The question in 1989 was: To the best of your knowledge, did you happen to look at or read any of the following publications in the past 12 months? (Please circle all that apply). The response alternatives were: BC Road Map showing the location of park facilities; a report entitled "Striking the Balance"; brochures on specific provincial parks; special BC Parks issue in Beautiful British Columbia magazine; other; none of the above.

Respondents were also asked which information source they would most prefer to use in planning an overnight trip to provincial parks (see Figure 12).<sup>20</sup>

Advice from friends and relatives (52%) was the most preferred information source. The next most preferred information sources were the BC Parks Map (39%), BC Park Brochures (35%), the BC Parks Web site (31%) and advice from travel centres (20%).

About 63 percent of the respondents indicated they had access to the internet at home. This suggests there may be potential for increased use of the BC Parks web site.<sup>21</sup>



<sup>20</sup> Suppose you were planning an overnight trip to a provincial park in the next two years. Which of the following information sources would you most prefer to use to plan this trip? The response categories were: most prefer; and second most prefer. The response alternatives were: advice from friends and relatives; advice from staff at travel information centres; BC road map showing provincial parks and facilities; brochures on specific BC provincial parks; BC Parks web sites.

<sup>21</sup> The question was: Do you currently have access to the internet? The response alternatives were: in your home (63%), at your job (37%), other (6%) none (25%). It should be noted that this adds to more than 100% because of multiple mentions and is based on respondents who have recently used parks or have some interest in them. A survey by Statistics Canada in 1999 indicates that about 50 percent of BC households had access to the internet at home. So, the estimate in the BC Parks 2001 survey may be slightly high.

It should be noted that the percentage of BC residents with access to the internet at home is significantly lower for those residents 60 years and older (18-34 years, 69% had access to the web; 40-59 years, 72%; 60-74 years, 49%; 75 years and older, 31%).

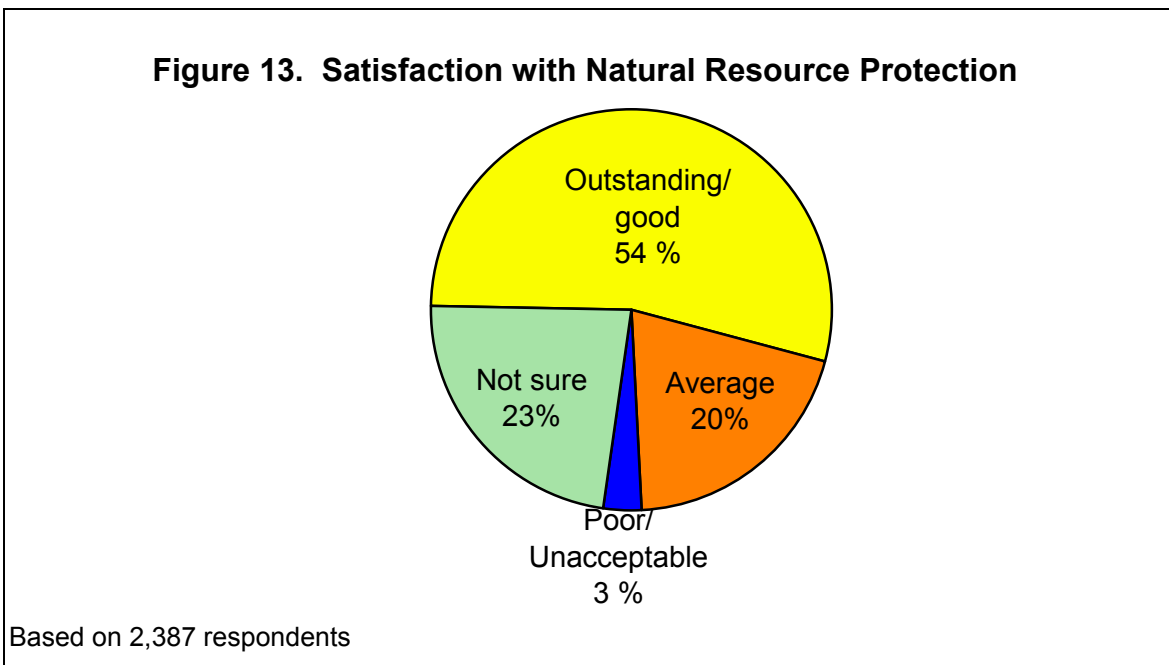
## Protection of Natural Resources

A second challenge facing BC Parks is the protection of natural resources in provincial parks from activities that may damage the natural condition of these resources. In protecting these resources, BC Parks is currently reviewing several issues: the appropriateness of different human uses in backcountry areas; ensuring the fishery resource is sustained; and the more active use of its fire management policy in backcountry areas.

Respondents were asked to rate BC Parks job performance in resource protection, to indicate how acceptable different recreation activities and guiding services are in backcountry areas, to indicate if they had fished in a provincial park in 2001 and to indicate if they were aware of BC Parks' fire management policy.

### Satisfaction with Natural Resource Protection

A slight majority of British Columbians (54%) feel that BC Parks has done an outstanding or good job in conserving and protecting the natural conditions in provincial parks over the past two years (see Figure 13).<sup>22</sup> By comparison, about 20 percent of the respondents indicated that BC Parks had done an average job while 3 percent indicated either an unacceptable or a poor job.

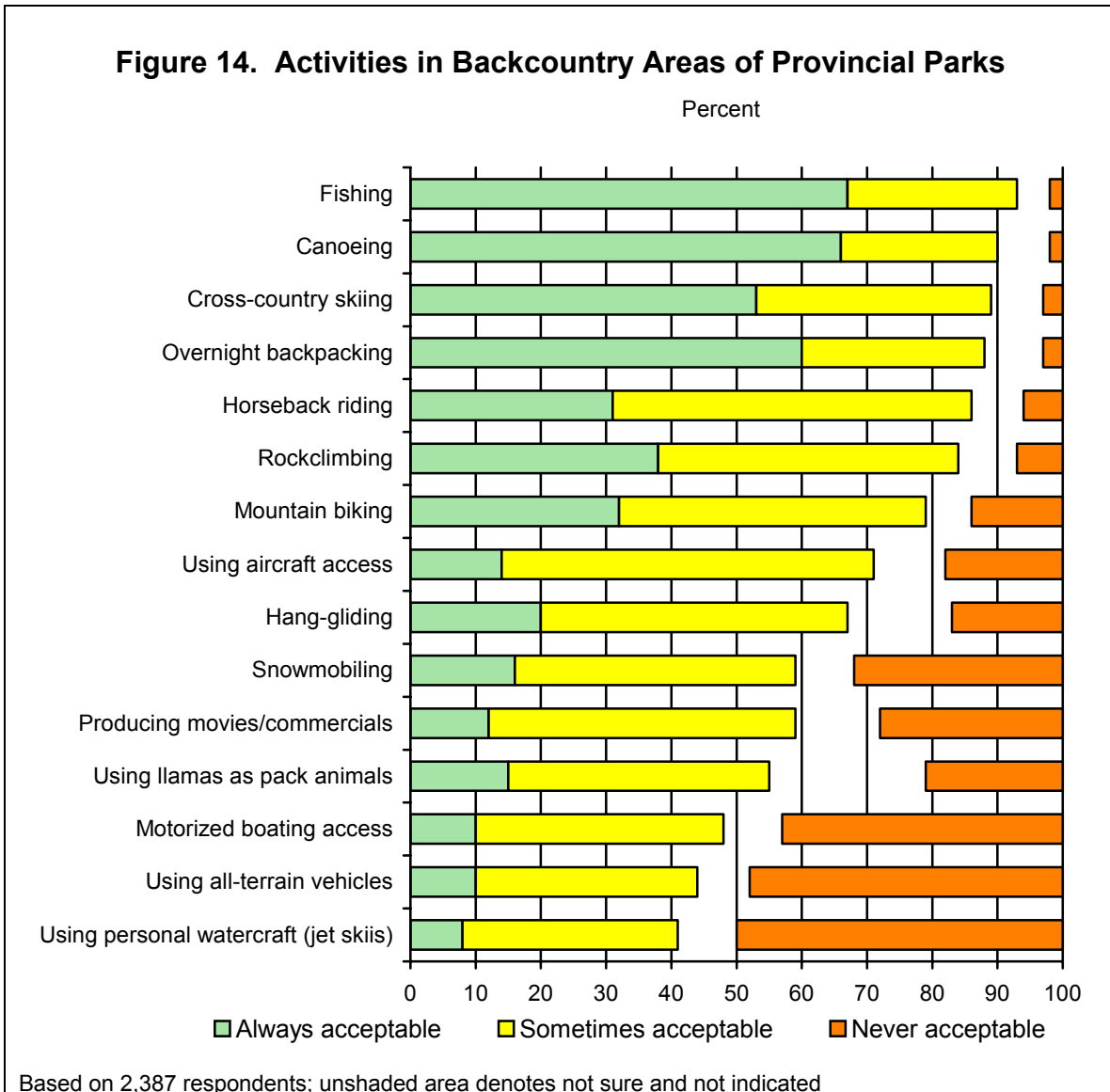


<sup>22</sup> One job of BC Parks is to protect the plants, animals, water, air and natural features in provincial parks from activities that could damage the natural conditions of provincial parks. Overall, how would you rate BC Park's performance over the past two years in conserving and protecting the natural conditions of provincial parks? The response categories were: unacceptable (1%), poor (2%), average (20%), good (47%) and outstanding (7%) and not sure (23%).



## Acceptability of Activities in Backcountry Areas

Some provincial parks contain large wilderness or backcountry areas. Although decisions about human uses in these areas are usually site-specific, it is useful for planning purposes to have a general understanding of BC resident's views about the acceptability of activities in backcountry areas. Respondents were asked to indicate the acceptability of fifteen possible activities (see Figure 14).<sup>23</sup>



<sup>23</sup> The question was: Next, some large provincial parks contain wilderness or backcountry areas. People have different views about the kinds of activities that should occur in these areas. Please indicate the extent to which you feel EACH of the following activities is acceptable in backcountry areas of provincial parks? The response categories were: never acceptable, sometimes acceptable, always acceptable and not sure.

In general, British Columbians viewed non-motorized activities as being more acceptable activities than motorized activities in the backcountry areas of provincial parks. A majority of respondents indicated four of the fifteen activities as being always acceptable. These activities were fishing (67%), canoeing (66%), backpacking (60%) and cross-country skiing (53%). By contrast, 10 percent of the respondents, or less, felt that three activities were always acceptable. These activities were using jet-skiis (8%), using all-terrain vehicles (10%) and motorized boating access (over 10 hp; 10%).

For the remaining eight activities, a considerable number of respondents indicated these activities were sometimes acceptable. This suggests BC residents feel there may be circumstances where it may or may not be acceptable to permit these activities or where these activities may need to be controlled and monitored to ensure the resources are adequately protected.

### **Guiding Services in Backcountry Areas**

BC Parks currently permits some guided services in backcountry areas. These services are usually provided by professional guides and involve a fee for service. Respondents were asked about the acceptability of five specific guiding services (see Figure 15).<sup>24</sup>

BC residents viewed non-motorized guiding activities as being more acceptable than motorized guiding activities in backcountry areas. Of five activities, two activities were viewed as being always acceptable by a majority of respondents (day hikes led by a guide, 53%; canoeing trips led by a guide, 53%). By contrast, there were considerably fewer respondents who indicated the other three activities were always acceptable (whitewater rafting trips, 39%; aircraft sight-seeing tours, 16%; aircraft landings, 14%).

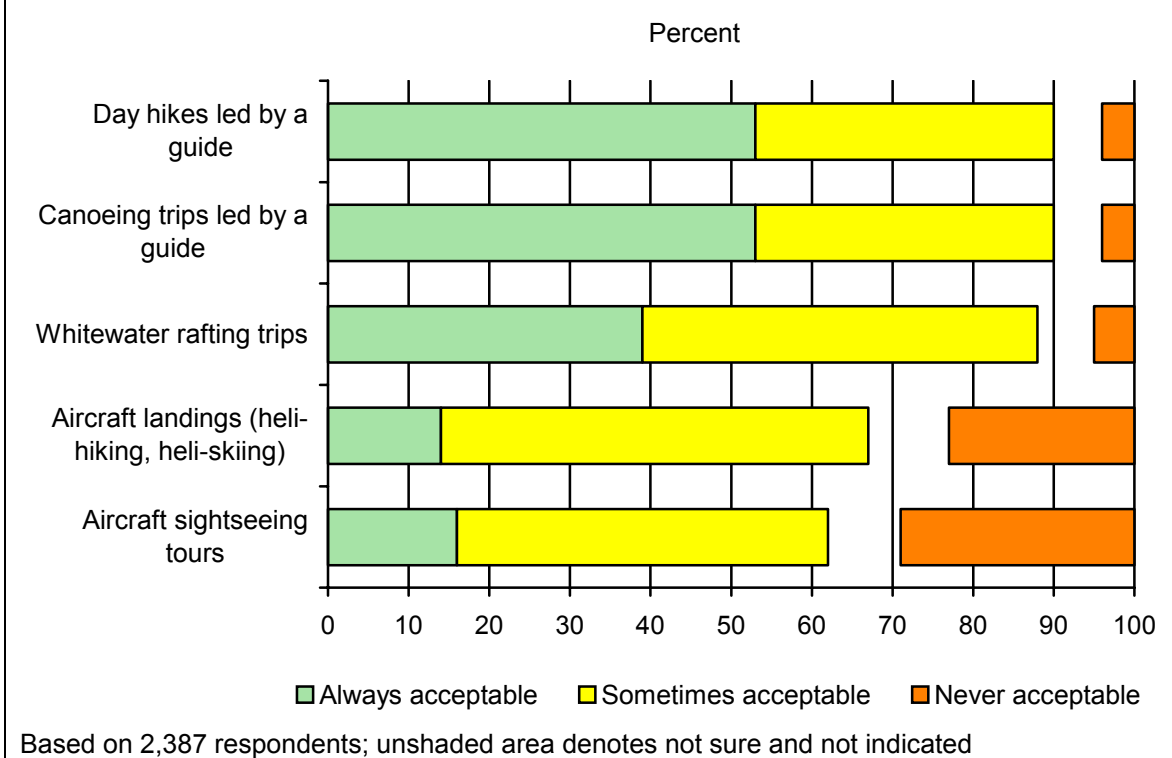
While the purpose of this study was not to determine the reasons for why motorized activities are less acceptable to a majority of respondents, other studies have shown that excessive noise can have a negative impact on wildlife and can affect the solitude that many wilderness users seek.<sup>25</sup>

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<sup>24</sup> The question was: Here are some types of commercial guiding services that some people would like to see and others would not like to see in **backcountry areas** of provincial parks. By commercial, we mean a service provided by a private company or guide outfitter usually involving a fee. To what do you feel EACH service is acceptable in these areas? The response categories were: never acceptable; sometimes acceptable; always acceptable; not sure.

<sup>25</sup> For a more detailed discussion on this topic, please see a report entitled "Potential Impacts of Aircraft Overflights of the National Forest System Wildernesses, Report to Congress" USDA Forest Service, July 1992. See also Visitor Impact Management: A Review of Research (chapter 5) by F. R. Kuss, A Graefe and J. Vaske, National Parks and Conservation Association, 1990.

**Figure 15. Guiding Services in Backcountry Areas**



### Fishing in Provincial Parks

One management responsibility of BC Parks is to help ensure that the fishery resource in provincial parks is sustained. An important consideration in sustaining this resource is identifying the recreational demand for fishing in provincial parks. In order to establish a recent estimate of the number of British Columbians who fish in provincial parks, respondents were asked if they had fished in any provincial park in 2001?

About 2 in 10 residents (20%) indicated they had fished in a provincial park in 2001 (see Figure 16).<sup>26</sup> This is about half of the total number of BC residents who indicated they had fished (38%) in 1998.<sup>27</sup> Thus, provincial parks provide opportunities to fish for a considerable number of residents.

<sup>26</sup> The question was: Did you go fishing in any BC provincial park in 2001? The response categories were: no (75%), not sure (5%) and yes (20%).

<sup>27</sup> Based on a province-wide telephone survey of 500 adult BC residents conducted in March, 1998 by Marktrend Research.

## Views About BC Parks' Fire Management Policy

Historically, fire has been one of nature's ways of shaping the rich vegetation mosaic of grasslands and forests in British Columbia. Over the recent 50 years, however, fire suppression efforts have led to less and less fire being used to maintain ecosystems.

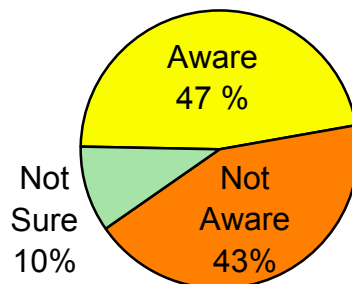
To help restore this natural process for maintaining ecosystems in provincial parks, BC Parks recently established a two-part fire management policy. This policy is to let wildfires (or fires started by nature) burn and to allow the occasional use of prescribed fire (a planned fire started by staff) when those fires are not a threat to people's lives or personal property.

Over the next few years, BC Parks is planning to implement this policy more actively. To provide baseline information on public awareness of this policy, BC Parks wanted to learn how many BC residents were aware of this policy, what they see as the benefits of implementing the policy, what their specific concerns might be and to what extent British Columbians support this policy.

### *Awareness of fire management policy*

Less than half (47%) of BC residents were aware of the BC Parks fire management policy (see Figure 16).<sup>28</sup> By contrast, slightly more than half (53%) of the respondents indicated they were not aware or not sure if they had heard of this policy.

**Figure 16. Awareness of BC Parks Fire Management Policy**



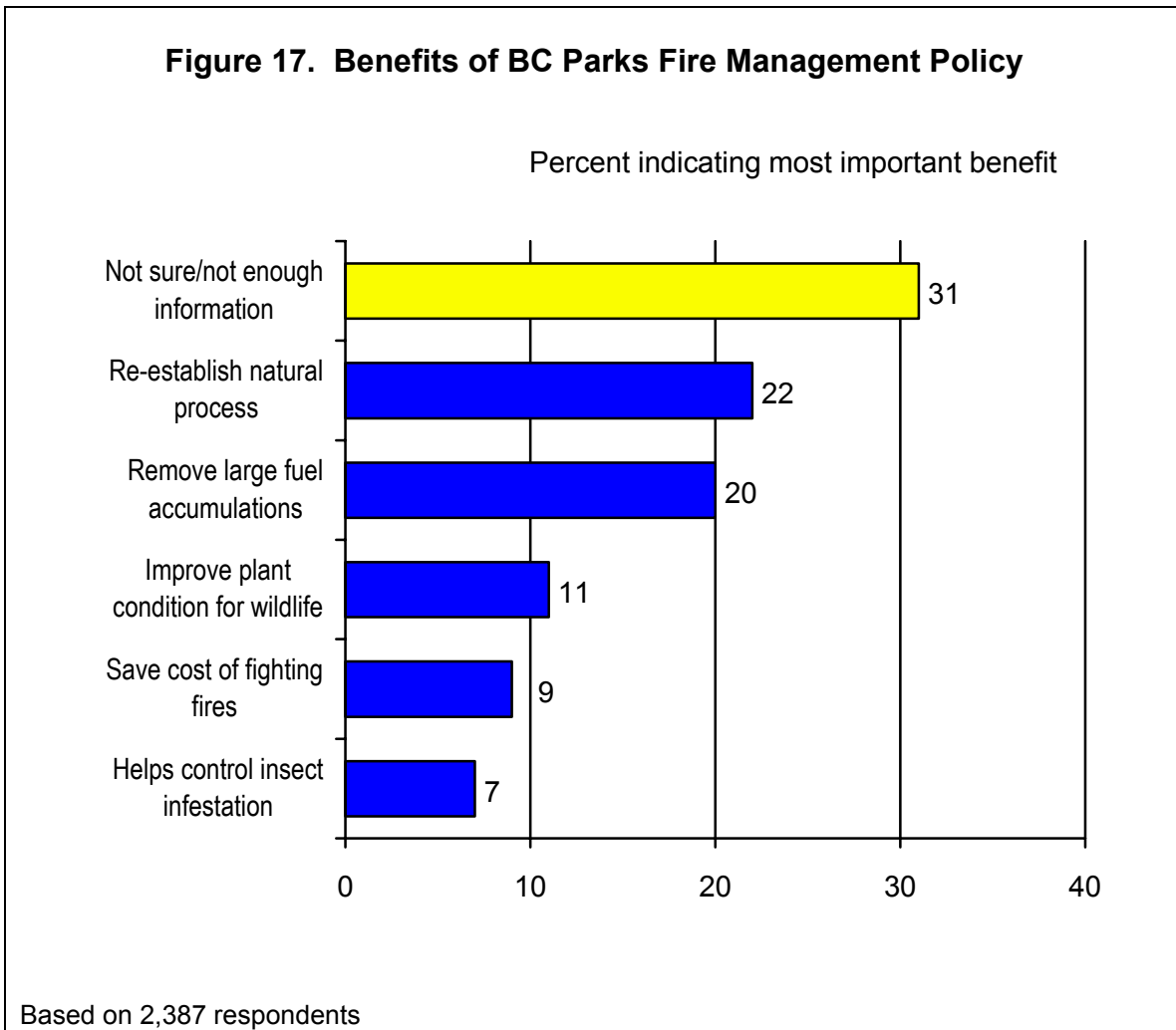
Based on 2,387 respondents

<sup>28</sup> The question was: BC Parks currently has a two-part fire management policy for backcountry areas. First, this policy allows fire started naturally by lightning to burn itself out when it is not a threat to people's lives or personal property. Second, it allows the occasional use of prescribed fire, a method of conservation management, when it is not a threat to people's lives or personal property. By prescribed fire, we mean a fire started and controlled by staff. Prior to this survey, were you aware or not aware of this policy? The response categories were: aware, not aware and not sure.

### Benefits of fire management policy

Respondents were presented with five potential benefits of more actively implementing the BC Parks' fire management policy and asked to indicate which they thought was the most important benefit (see Figure 17).<sup>29</sup>

BC residents indicated that the most important benefits were re-establishing a natural process (22%) and removing large fuel accumulations (20%). However, nearly one-third of the respondents (31%) indicated they were not sure or they did not have enough information to answer this question.

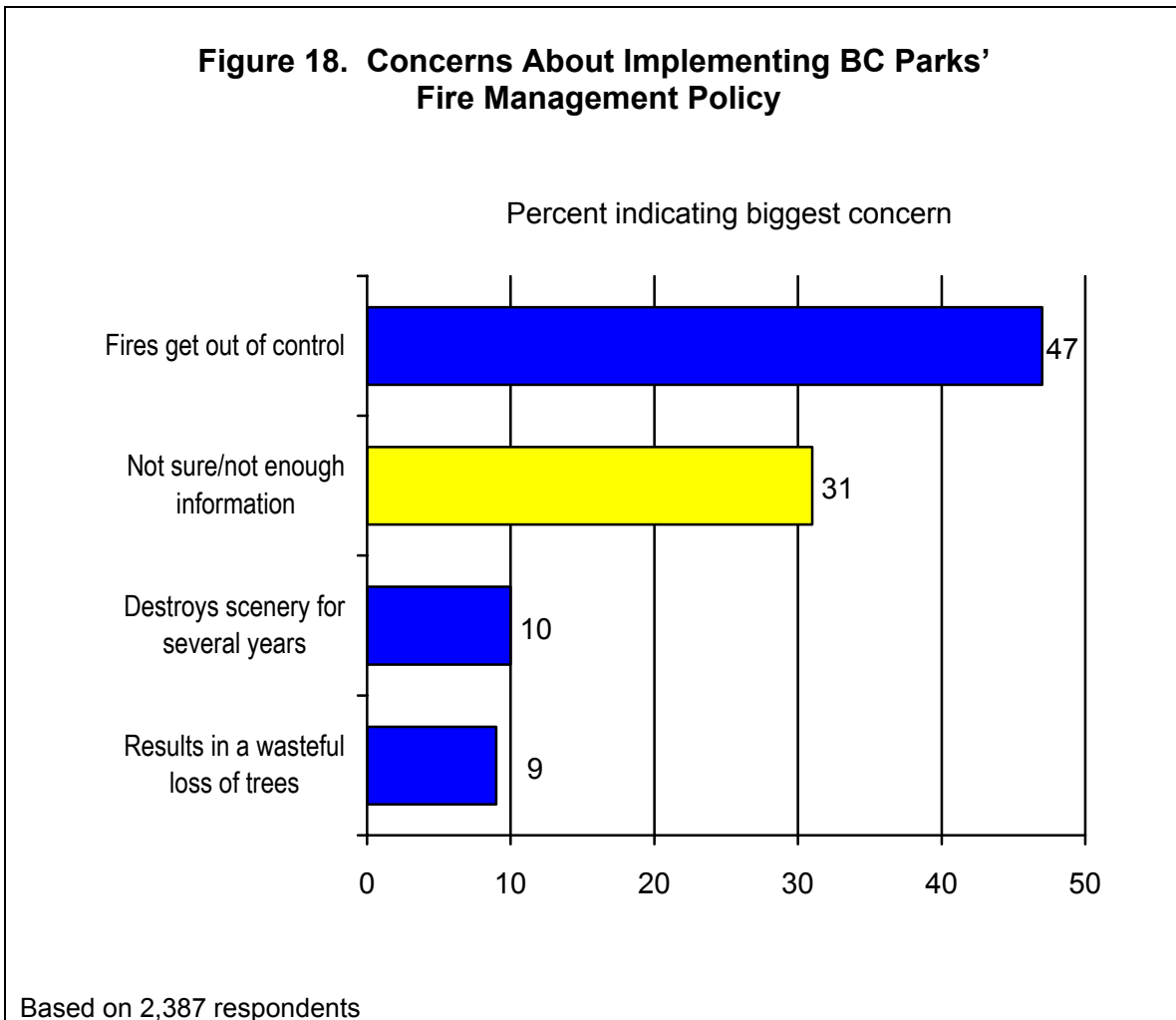


<sup>29</sup> The question was: Over the next few years, BC Parks is planning to more actively implement this fire management policy in backcountry areas. Which of the following do you think are the most important and second most important benefits of implementing this policy in backcountry areas? (Put letter in appropriate box; if none, put "0" in the box). If you are not sure or feel you do not have enough information about this issue, put an "X" here. The response categories were: most important benefit and second most important benefit.

### Concerns about implementing the fire management policy

Respondents were presented with three potential concerns about implementing the fire management policy more actively and asked to indicate which of these was their biggest concern (see Figure 18).<sup>30</sup>

BC residents were most concerned about fires getting out of control and posing a threat to people's lives and neighbouring private property (47%). Nearly one-third of the respondents (31%) also indicated they were not sure or did not have enough information to answer the question.



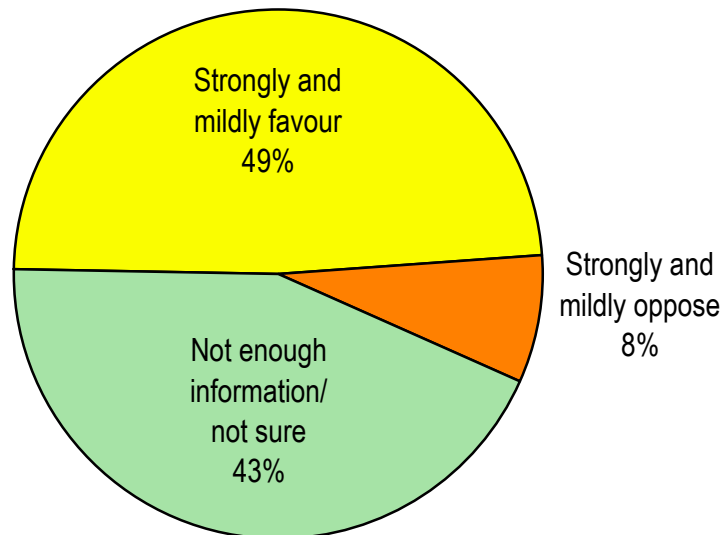
<sup>30</sup> The question was: Some British Columbians have mentioned some concerns about implementing this policy in backcountry areas. Which of the following would be your biggest and second biggest concerns if BC Parks were to more actively implement this policy in backcountry areas over the next few years? (Put letter in appropriate box; if none, put "0" in the box). If you are not sure or feel you do not have enough information about this issue, put an "X" here. The response categories were: biggest concern and second biggest concern.

### *Attitude towards fire management policy*

Nearly half of the respondents (49%) indicated they favour the intent of BC Parks fire management policy (see Figure 19).<sup>31</sup> By comparison, about 8 percent indicated they oppose the policy and about 43 percent indicated they were not sure or did not have enough information about the policy to answer the question.

The support for the policy was much higher among residents who indicated they were aware of the policy (65%) than those who were not aware of the policy (35%).<sup>32</sup> However, of those who were not aware of the policy, a large number (55%) indicated they did not have enough information about the policy to answer the question.

**Figure 19. Attitude Toward BC Parks Fire Management Policy, 2001**



Based on 2,387 respondents

<sup>31</sup> The question was: Overall, to what extent do you oppose or favour the fire management policy for BC Parks? The response categories were: strongly oppose (3%), mildly oppose (4%), Not sure/not enough information (43%), mildly favour (21%) and strongly favour (25%).

<sup>32</sup> For a more detailed discussion on this topic in the United States, please see "Attitudes Toward Prescribed Fire Policies" by Michael J. Manfreda, Martin Fishbein, Glenn E. Haas and Alan E. Watson in *Journal of Forestry*, July 1990, pp. 18-23.

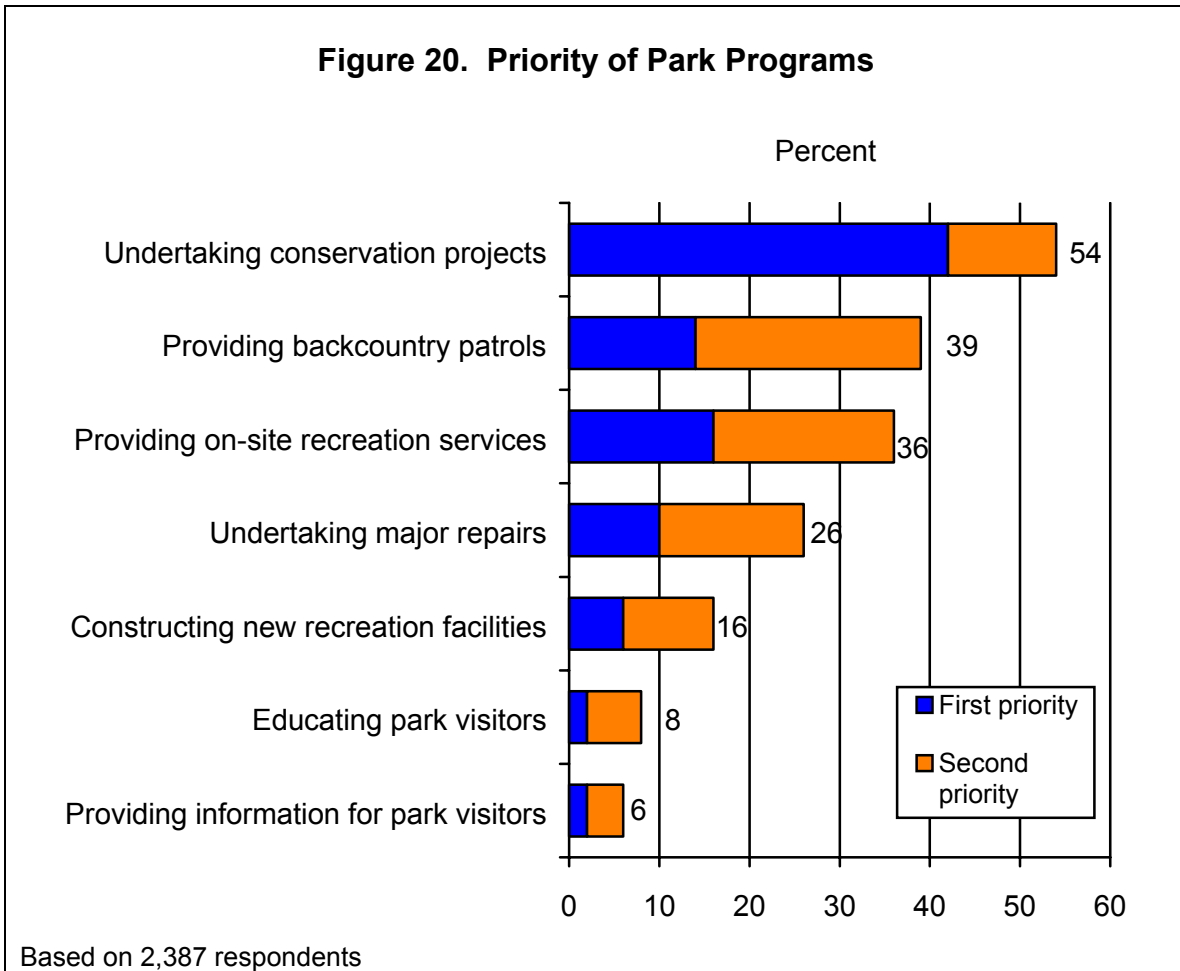
## Funding of Park Programs

The third major challenge facing BC Parks is the funding of park programs. Currently, about 80 percent of BC Parks funding comes from taxes and the remaining 20 percent comes primarily from campground fees. With a trend of decreasing operating resources, BC Parks is considering other ways to fund park programs.

Respondents were asked about the priority that should be given to seven broad park programs and their views about options to fund park programs over the next few years.

### Priority of Park Programs

British Columbians felt that BC Parks should give the highest priority to undertaking conservation projects to protect animals and plants (54%) over the next few years (see Figure 20). The next highest priorities were for providing





backcountry patrols (39%) and providing on-site services (security, cleaning, maintenance) in high use areas (36%).<sup>33</sup>

## **Views About Funding Options**

Before asking respondents to answer the questions about options for funding park programs, they were informed that:

- since 1992, the size of the park system had doubled from 6 percent to 12 percent of BC's land base;
- provincial parks had received nearly 24 million visits in 2000;
- the parks budget was about \$40 million and that about 80 percent of this was paid by taxpayers and about 20 percent came from camping fees; and
- an independent advisory committee had recommended doubling the parks budget over the next five years.

### *Fees and service reductions*

In general, there was greater support among British Columbians for new or increased fees than for reducing costs through service reductions or long-term leases (see Figure 21).

The highest support (60% agree) was for a small increase in the camping fee (\$1-\$4) followed by establishing a separate fee for firewood (56%), for an annual parking pass (50%) and for a daily parking fee (50%).

There was very little support for reducing the frequency of maintenance (10%) or for a long-term lease (15 years) of campgrounds (23%).

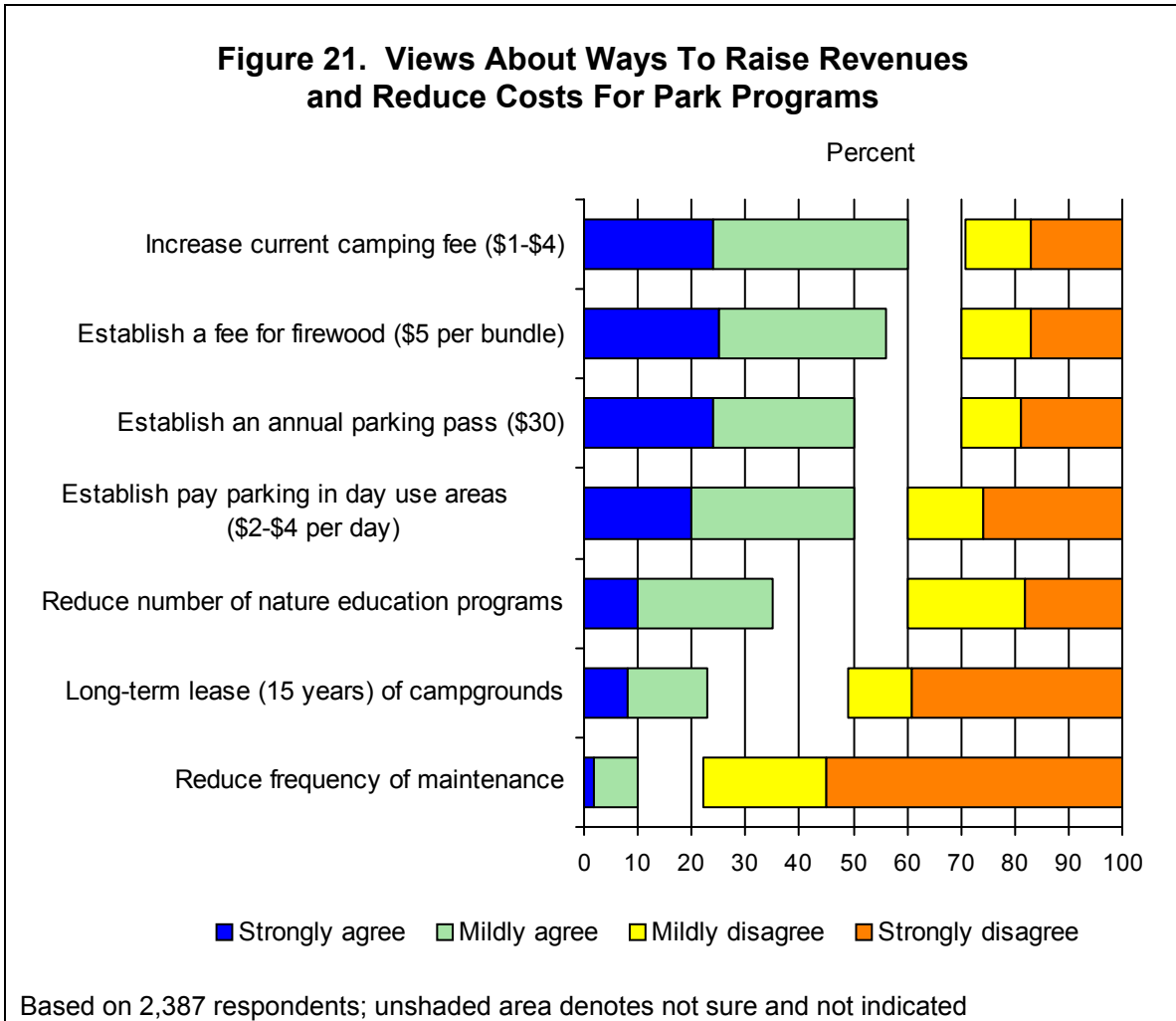
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<sup>33</sup> The question was: Now, we would like to know which of the following provincial park programs you feel BC Parks should give the highest priority to over the next few years. (Put letter in appropriate box)

The wording of the programs were: undertaking specific conservation projects to protect animals and plants (control forest infestations, identify rare plants and animals, restore damaged environments); providing backcountry patrols (prevent illegal activities like poaching, provide emergency services, trail upkeep, maintenance); providing security services, cleaning and maintenance in high use areas (campgrounds, day use areas); constructing new recreation facilities (showers, wharves, trails); undertaking major repairs of existing facilities (campgrounds, wharves, sewage system); providing public information for park visitors (facilities, things to see and do); educating park visitors and citizens about park values (talks or slide shows about plants, animals and history of park).

When it came to reducing the number of nature education programs the views were mixed (35% agree compared to 40% disagree).<sup>34</sup>

The views of raising fees and reducing costs were similar between park users and non-users.



<sup>34</sup> The question was: Here are a few specific suggestions for funding BC Parks programs. That is, ways to raise revenues and ways to decrease costs. Please tell us if you would disagree or agree with EACH of the following? The response categories were: strongly disagree, mildly disagree, not sure, mildly agree and strongly agree.

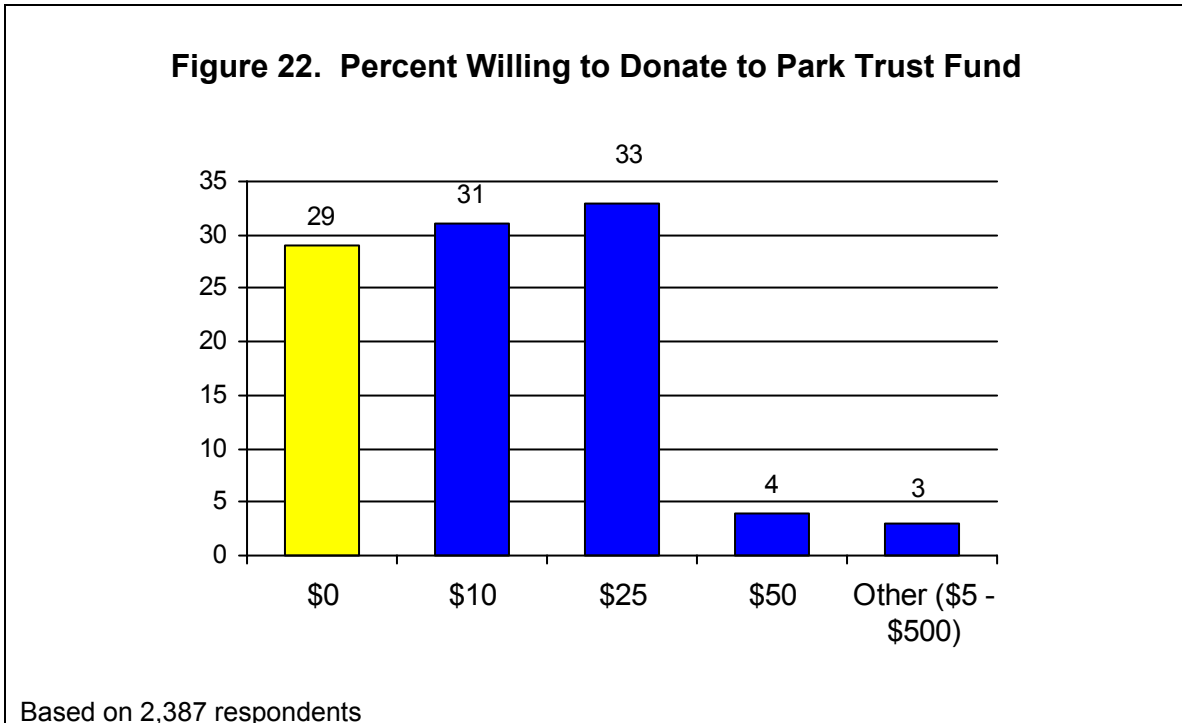
The wording of the items were: increase current camping fees in provincial parks campgrounds by \$1-\$4 per night (current fees: \$8.00 to \$18.50); establish pay parking in heavily used day use or beach/picnic areas (\$2-\$4 per day); establish an annual parking pass for day use areas and backcountry trailheads (\$30 per year); establish a fee for firewood (\$5 per 1 1/2 cubic ft bundle of firewood; that is, about 1 1/2ft wide by 1 1/2ft long by 1 1/2ft high); reduce the number of nature education programs that are provided; reduce frequency of maintenance (garbage pick-up, cleaning); long-term lease (about 15 years) of provincial park campgrounds to private business operators.

### *Parks trust fund*

BC residents were asked if they would support the establishment of a trust fund for specific park projects and whether they would be willing to donate to the fund.

Nearly three-quarters (73%) of British Columbians thought that it was a good idea to establish a Park Trust Fund that people could donate to for specific in-park services or projects.<sup>35</sup> There was greater support for the idea among park users (78%) than among non-users (66%).

About 71 percent of the respondents indicated they would be willing to donate to such a fund if it was established. Both park and non-park users indicated a willingness to donate to a Park Trust Fund. The average annual donation was about \$15 per household (see Figure 22).<sup>36</sup>



<sup>35</sup> The question was: Another suggestion for funding BC Parks programs is to establish a special trust fund (e.g. a "Park Trust Fund") that people could donate to. It would be run by an independent foundation and the funds would be used for specific in-park services or projects. In general, do you think establishing a "trust fund" for BC Parks would be...? The response categories were: a good idea (73%); not a good idea (7%); not sure (17%). About 3 percent of the respondents did not answer the question.

<sup>36</sup> The question was: Suppose such a special trust fund was established for BC Parks. It is estimated that a donation of \$25 per household to this fund would raise the additional \$40 million required by BC Parks. How much, if anything, would you be willing to donate to such a trust fund per year? (Put an "X" in an appropriate box; if none, put "O" in the last box). The response categories were: \$10; \$25; \$50; Other \$.

### *Other funding suggestions*

Respondents were also asked about any other suggestions they had for funding BC Park programs.<sup>37</sup> Some of the most frequently mentioned suggestions were using lottery funds, requesting corporate donations and sponsorship, using more volunteers, selling recreational equipment (tarps, blankets, etc) at ranger stations and a fuel tax.

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<sup>37</sup> The question was: Do you have any OTHER suggestions about ways to fund BC Parks programs?

## Conclusions

Based on these initial findings, several conclusions may be drawn. First, provincial parks provide a variety of benefits for British Columbians. Two main benefits are the preservation of natural environments and the protection of special natural features.

Second, a slight majority of British Columbians are satisfied with the job BC Parks has done in protecting the natural resources in provincial parks. A slight majority of British Columbians are also satisfied with the job BC Parks has done in the provision of recreation services and facilities in provincial parks.

Third, British Columbians would like to see BC Parks give the highest priority to undertaking specific conservation projects to protect animals and plants. This includes controlling forest infestations, identifying rare plants and animals and restoring damaged environments.

Fourth, a high priority was given to providing backcountry patrols that prevent illegal activities like poaching and provide emergency services and trail upkeep. In managing human uses of these areas, there is considerable support for allowing most forms of non-motorized recreation. By contrast, there is less support for activities that are either motorized, have a high-risk element or potentially could have a detrimental effect on the natural resources.

Fifth, a high priority was given to providing on-site recreation services (security, cleaning, maintenance) of high use areas (campgrounds and day use areas). There was a strong preference for having traditional services (walking trails, firewood, showers) in provincial park campgrounds. At the same time, there is considerably less interest in having food-related services in provincial park campgrounds.

Sixth, the number of British Columbians using provincial parks has decreased. One reason that has kept British Columbians from using provincial parks is the preference for alternative types of accommodations. There is considerable interest and willingness to pay for other types of overnight accommodation, particularly campsites with water and electrical hookups.

Seventh, British Columbians are generally supportive of alternative ways of funding park programs. When it comes to increasing revenues, there is strong support for raising camping fees and establishing a fee for firewood. There is also strong support for establishing a Park Trust Fund that would be run by an independent foundation and would be used for specific park projects. A considerable number of British Columbians are willing to donate to this fund if it were established. When it comes to reducing costs, British Columbians strongly oppose a reduction in park maintenance (cleaning, garbage collection) and long-term leases (15 year) of provincial park campgrounds to private businesses.

Appendix A  
Survey Methodology

## Appendix A: Survey Methodology

### Sampling Procedures

The target sample size for this survey was 4,200 potential respondents based on an assumed response rate and the precision of the estimates (i.e. confidence intervals) for the provincial results and sub-group analysis.<sup>38</sup> The target sample was proportionally allocated among 28 census regional districts in British Columbia. Within each census regional district, the number of people in each postal code was identified and the target sample was proportionally allocated.

Dominion Directories, an affiliate of Telus, used a systematic interval (every nth name) to select a sample for each regional district from a total sampling frame of 1,243,941 residential listings in August, 2001 (i.e. the most recent update of the sampling frame). The sample includes mailable residential listings (complete name and address) and people who had a listed telephone number. It does not include people with unlisted telephone numbers or with incomplete mailing addresses.

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<sup>38</sup> The formulae for estimation of sample size for proportions are:

$$n = \frac{t^2 PQ}{d^2} \left( 1 + \frac{1}{N} \left( \frac{t^2 PQ}{d^2} - 1 \right) \right) \quad (1)$$

where,

n = initial sample size with the finite correction factor  
t = is the critical t factor at a specified confidence level  
P = is the estimated proportion of the population with a characteristic (e.g. proportion of population using parks in 2001)  
Q = is the estimated proportion of the population without the characteristic (e.g. proportion of the population not using parks in 2001)  
d = tolerable margin of error  
N = size of population

$$n^\circ = n / (r/100) \quad (2)$$

where,

n° = adjusted sample size based on assumed response rate  
n = initial sample size with the finite correction factor  
r = assumed response rate

For a fuller discussion of sample size estimation, see Sampling Techniques by William Cochran, John Wiley and Sons, 1977, pp 72-82.



Dominion Directories estimates that the population with unlisted numbers is between 7-9 percent of the BC population (see Table A1). The percentage is slightly higher in the largest urban areas than in other areas of the province.

<b>Table A1. Percentage With Unlisted Telephone Numbers Not Included In 2001 Survey</b>	
Greater Vancouver Regional District	9
Victoria	9
Rest of BC	7

The Dominion Directories sampling frame did not contain any potential respondents from the Northern Rockies census region because this area is serviced by NorthwestTel. Using a similar sampling procedure, a small sample was selected for the Northern Rockies census region using a current telephone book of the region. The final sample size was 4,198 potential respondents.

The selection of an adult respondent within the household (18 years and older) for this survey was based on the "most recent birthday method." It has been found to be a simple and effective randomization procedure for selecting respondents within households.

### **The Questionnaire**

A copy of the mail questionnaire for the 2001 household survey is presented in Appendix B. The questionnaire was developed by a working committee of BC Park staff and included 35 questions (about 100 items requiring answers from respondents) that covered topics on the benefits of parks, use of parks, preferences for facilities, services and accommodations, the BC Parks fire management policy, funding and demographics.

The overall design of the questionnaire and implementation procedures were based on the Tailored Design Method (Dillman, 2000).<sup>39</sup> A pretest of the questionnaire was conducted with students in a parks and tourism class at Malaspina College and reviewed by several survey experts.<sup>40</sup>

<sup>39</sup> Don Dillman Mail and Internet Surveys The Tailored Design Method John Wiley and Sons, New York, New York. 2000. See also "Best Practices for Survey and Public Opinion Research and Survey Practices APPOR Condemns" American Association for Public Opinion Research, May 1997.

<sup>40</sup> These included Dr. Don Dillman and Dr. Danna Moore of the Social and Economic Sciences Research Centre of Washington State University, Dr. Jerry Vaske of Colorado State University and Dr. Rick Rollins of Malispina College.

The implementation schedule included four separate mailouts (see Table A2). The schedule was intended to optimize response and minimize costs of follow-ups.

<b>Table A2. 2001 Household Survey Implementation</b>			
<b>Mailout</b>	<b>Recipients</b>	<b>Contents</b>	<b>Date</b>
Initial	Entire sample	<ul style="list-style-type: none"> <li>• Individually signed cover letter in blue</li> <li>• Questionnaire</li> <li>• Return envelope with real stamp</li> <li>• BC Road map (token of appreciation)</li> </ul>	September 18, 2001
2 <sup>nd</sup>	Non-respondents	<ul style="list-style-type: none"> <li>• Postcard (reminder) signed in blue</li> </ul>	September 27
3 <sup>rd</sup>	Non-respondents	<ul style="list-style-type: none"> <li>• Individually signed cover letter in blue</li> <li>• Replacement questionnaire</li> <li>• Return envelope with real stamp</li> </ul>	October 17
4 <sup>th</sup>	Non-respondents	<ul style="list-style-type: none"> <li>• Same as 3<sup>rd</sup>, but handwritten postscript</li> </ul>	November 14

Questionnaires were received from September 18, 2001 to January 11, 2002. All questionnaires were entered using double entry keying. Only questionnaires meeting sampling requirements (i.e. respondent being 18 years and older, substitutions not permitted, etc.) were included in the analysis.

### **Accuracy of the Results**

#### *Response rate*

One type of error that can affect the accuracy of survey results is non-response error. It occurs when a significant number of people in the sample do not respond to the survey and are different from those who did respond. One indicator of the accuracy of the results is the response rate.

The overall response rate was 72 percent. The breakdown of the original sample is presented in table A.3.

<b>Table A3. Breakdown of Original Sample</b>	
Questionnaires mailed	4, 198
Ineligible questionnaires	
• Address problem	161
• Deceased	14
• Non-resident	2
• Physically/Mentally incapable	62
Total	239
Eligible questionnaires	3,959
Unuseable questionnaires	
• No returns	1,066
• Incorrectly completed	16
• Substitution	6
• Language Problem	15
Total	1,103
Useable	
• Completed questionnaire	2,387
• Partially completed	259
• Telephone interviews/note	210
Total	2,856
<b>Response rate</b> (useable/eligible)X100	<b>72</b>

### *Representativeness*

A second type of error that can affect the accuracy of the survey results is coverage error. It occurs when the characteristics of the general population are different from those in the sampling frame. One way to determine the possible effect of this type of error is to compare demographic characteristics between the most recent census (1996 adult population 18 years and older) and the 2001 sample (see table A4).

This comparison indicates a slight bias towards males and those in the middle age category (35-54 years). Characteristics of annual family income and location of residence in the sample, however, are nearly identical to the census characteristics. Based on this comparison and checks on the data, it was thought appropriate not to weight the data.

<b>Table A4. Comparison of Characteristics of the Census and Sample</b>		
<b>Characteristics</b>	<b>1996 Census %</b>	<b>2001 Sample %</b>
Gender		
• Male	49	59
• Female	51	41
Age		
• 18-34	32	21
• 35-54	40	49
• 55+	28	29
Annual Family Income		
• Less than \$20,000	15	13
• \$20,000 to 49,999	36	34
• \$50,000 to 79,999	29	29
• \$80,000 for more	20	23
Economic Development Regions <sup>41</sup>		
• Vancouver Island/Coast	18	18
• Mainland/Southwest	57	58
• Thompson/Okanagan	12	12
• Kootenay	4	4
• Cariboo	4	4
• North Coast	2	2
• Nechako	1	1
• Northeast	2	1

#### *Item non-response*

A third type of error that can affect the accuracy of results is measurement error. It occurs when respondent's answer to a given question is inaccurate, imprecise and cannot be compared in any useful way to other respondents' answers.

One indicator of the possible effect of this type of error is item non-response. The number of items is defined as the number of responses that a respondent is required to make. The average item non-response for this survey is presented in Table A.5.

<sup>41</sup> The census districts contained in these economic development regions are: Vancouver Island/Coast (Alberni-Clayoquot, Capital, Central Coast, Comox-Strathcona, Cowichan Valley, Mount Waddington, Nanaimo, Powell River); Mainland/Southwest (Fraser Valley, Greater Vancouver, Squamish-Lillooet, Sunshine Coast); Thompson/Okanagan (Central Okanagan, Columbia-Shuswap, North Okanagan, Okanagan-Similkameen, Thompson-Nicola); Kootenay (Central Kootenay, East Kootenay, Kootenay Boundary); Cariboo (Cariboo, Fraser-FortGeorge); North Coast (Kitimat-Stikine, Skeena-Queen Charlotte); Nechako (Bulkley-Nechako, Stikine); Northeast (Fort Nelson-Liard, Peace River).

It should be noted that the average item non-response was higher for the first nine questions because some respondents telephoned and indicated they had little interest in the topic due to health, old age or other reasons. A brief telephone interview was conducted with these respondents to find out if they had ever used a provincial park, used a provincial park in 2001, their reasons for not using a provincial park in 2001, their gender and their age. So, several of the first nine questions were not answered by these respondents thereby increasing item non-response. The average item non-response was viewed as being acceptable for this report.<sup>42</sup>

<b>Table A5. 2001 Item Non-response*</b>				
<b>Questions</b>	<b>Sample Size</b>	<b>Number of Items</b>	<b>Item Non-response (in %)</b>	
			<b>Range</b>	<b>Average</b>
Q.1- Q.9	2,856	14	6.4 - 17.3	8.7
Q.10 - Q.35	2,387	68	.04 - 13.1	3.7

\* Based on close-ended questions.

### *Statistical reliability*

A fourth type of error that affects the accuracy of survey results is sampling error. It occurs when only a sample of all the people in a population are surveyed instead of conducting a census. Sampling error can be measured and is influenced by sample size, variability (e.g. percentage expressed in the results) and the desired level of precision (i.e. confidence level).

The approximate margin of error associated with the percentage results of the 2001 household survey is presented in Table A6. The chances are 95 in 100 that the survey result does not vary, plus or minus, by more than the indicated number of percentage points from the result that would be obtained if the survey would have been conducted with all persons 18 years and older in British Columbia.

<sup>42</sup> Imputation procedures are sometimes used to assign values to missing items. Based on a general guideline used by BC Parks to keep average item non-response at 5 percent or lower on an overall basis, it was thought appropriate not to use imputation procedures for this report. For a fuller discussion on the appropriateness of imputation procedures in dealing with item non-response, the interested reader is referred to Sampling Design and Analysis by Sharon L. Lohr, Duxbury Press, 1999, pp. 272- 278.

<b>Table A6. Approximate Sampling Tolerances Applicable To Percentages At Or Near These Levels</b>			
Size of sample on which survey result is based	Percentage expressed in the results		
	10 or 90	30 or 70	50
	Margin of error in percent		
4000	1	2	2
3000	1	2	2
2000	2	2	3
1000	2	3	4
500	3	4	5
250	4	6	7
100	6	9	10
50	9	13	15
25	13	19	21

\*The figures in this table represent two standards errors. Hence, the chances are 95 in 100 that the value being estimated lies within the range equal to the reported percentage, plus or minus the sampling error.

### **Statistical analysis**

Frequency runs and cross-tabulations were performed using Survey.It. Adjusted frequencies (no response omitted) were used for questions 1-9 due to higher item non-response. Unadjusted frequencies were used for all remaining questions.

In determining statistical differences for these initial results, the z-test of proportions was used at the 95 percent confidence level or higher.<sup>43</sup>

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<sup>43</sup>The formula for the z-test is:

$$z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\bar{p}(1 - \bar{p})(1/n_1 + 1/n_2)}} \quad (3)$$

$$\hat{p}_1 = \frac{y_1}{n_1} \quad \hat{p}_2 = \frac{y_2}{n_2} \quad \bar{p} = \frac{y_1 + y_2}{n_1 + n_2}$$

where,

z = test statistic

$y_1$  = the number of respondents with a certain characteristic in one sample or subgroup (e.g. ever used provincial park asked in the 2001 survey)

$y_2$  = the number of respondents with a certain characteristic in another sample or subgroup (e.g. ever used provincial park asked in 1995 survey)

$n_1$  = the total number of respondents in one sample or subgroup (e.g. in the 2001 survey)

$n_2$  = the total number of respondents in another sample or subgroup (e.g. in the 1995 survey)

For more information, see [Statistical Analysis: An Interdisciplinary Introduction to Univariate and Multivariate Methods](#) by Sam K. Kachigan, New York, Raidus Press, 1986. See also Alan Stuart "Standard Errors For Percentages" in [Applied Statistics](#) Vol 12, No. 2, June, 1963, pp. 87-101. The Royal Statistical Society.

## Appendix B

### 2001 Questionnaire



# PLANNING FUTURE DIRECTIONS

## *For Your Provincial Parks*



A province-wide survey of  
British Columbia households

Please return your completed questionnaire  
in the enclosed envelope to:

### BC Parks

Government of British Columbia  
PO Box 9398 Stn Prov Govt  
Victoria, British Columbia  
V8W 9M9



## YOUR PROVINCIAL PARKS

-1-

Q.1 First, have you ever used any BC provincial park? By provincial park, we mean a park managed by the provincial government and not a neighborhood, city, regional, or national park. (Please circle number of your answer)

- 1 NO
- 2 NOT SURE
- 3 YES

Q.2 How important is it to you personally that there are provincial parks in British Columbia? (Circle number of your answer)

- 1 NOT VERY IMPORTANT
- 2 FAIRLY IMPORTANT
- 3 VERY IMPORTANT

Q.3 Listed below are a few benefits that some British Columbians have told us they feel they receive from having provincial parks in British Columbia. For each benefit, please indicate if you think it is not a very important benefit, a fairly important benefit or a very important benefit to British Columbians. (Circle number)

<b>A FEW BENEFITS</b>	NOT VERY IMPORTANT BENEFIT ▼	FAIRLY IMPORTANT BENEFIT ▼	VERY IMPORTANT BENEFIT ▼	DON'T KNOW ▼
A. Protection of wildlife . . . . .	1	2	3	4
B. Places to go camping . . . . .	1	2	3	4
C. Places for outdoor activities other than camping . . . . .	1	2	3	4
D. Preservation of natural environments (forests, etc.) . . . . .	1	2	3	4
E. Places for relaxation with family and friends . . . . .	1	2	3	4
F. Protection of special natural features (waterfalls, etc.) . . . . .	1	2	3	4
G. Places to learn about nature through interpretation programs (nature walks, slide shows, etc.) . . . . .	1	2	3	4
H. Protection of rare plants, animals and birds . . . . .	1	2	3	4
I. Attraction for out-of-province visitors to British Columbia (bring in tourism revenue, etc.) . . . . .	1	2	3	4
J. Other (Specify) _____	1	2	3	4

## USE OF PROVINCIAL PARKS

-2-

Q.4 Next, how desirable or undesirable do you find provincial parks as a place to spend an overnight stay of four nights or more during the summer months (June to September)? (Circle number of your answer)

- 1 VERY UNDESIRABLE
- 2 SOMEWHAT UNDESIRABLE
- 3 SOMEWHAT DESIRABLE
- 4 VERY DESIRABLE

Q.5 Did you use any BC provincial park in the year 2001? (Circle **ONE** number and then follow arrow to next question)

- 1 NO
- 2 NOT SURE
- 3 YES

Q.6 (If yes in Q.5) which of the following types of parks or facilities did you use in 2001?  
(Circle number of **ALL** that apply)

- 1 MARINE PARKS
- 2 PROVINCIAL PARK CAMPGROUNDS
- 3 WILDERNESS OR BACKCOUNTRY AREAS
- 4 DAY USE AREAS (Beach/Picnic Areas)
- 5 VISITOR CENTRES
- 6 OTHER (Please specify) \_\_\_\_\_

Q.7 (If yes in Q.5) can you recall the name of one BC provincial park you used in 2001? (Put name of park in space below)

\_\_\_\_\_ **Go to Q.9**

Q.8 (If no or not sure in Q.5) which of the following reasons, if any, kept you from using BC provincial parks in the year 2001? (Circle number of **ALL** that apply)

- 1 INADEQUACY OF SECURITY SERVICES IN PARKS (not safe from crime)
- 2 CONCERNED ABOUT A POSSIBLE WILDLIFE ATTACK (bear, cougar, etc.)
- 3 PREFER OTHER FORMS OF ACCOMMODATIONS (motel, hotel, etc.)
- 4 INADEQUACY OF WASHROOM FACILITIES IN PARK
- 5 OTHER (Specify) \_\_\_\_\_

**Go to Q.9**

Q.9 Do you plan to use a provincial park: (Circle **NUMBER** of your answer)

- 1 IN THE NEXT 12 MONTHS \_\_\_\_\_ **Go to Q.10**
- 2 SOMETIME IN THE FUTURE, BUT NOT IN THE NEXT 12 MONTHS \_\_\_\_\_
- 3 PROBABLY NEVER

→ If you think you will never use a provincial park in the future under any circumstance and have little or no interest in provincial parks, then please feel free to skip the remainder of the questions. Any comments you might have about provincial parks, however, would be appreciated on the back cover of the questionnaire. Above all, **PLEASE RETURN THE QUESTIONNAIRE** to us in the postage-paid envelope so we can determine how many British Columbians did or did not use provincial parks in 2001. Thanks!

## RECREATION SERVICES

Q.10 To the best that you can recall, did you look at or read any of the following during the year 2001? (Circle number of **ALL** that apply)

- 1 BC ROAD MAP SHOWING PROVINCIAL PARKS AND FACILITIES
- 2 BROCHURES ON SPECIFIC BC PROVINCIAL PARKS
- 3 BC PARKS WEB SITE
- 4 BC MOMENTS ABOUT BC PROVINCIAL PARKS (Knowledge Network on Television)
- 5 OTHER (Specify) \_\_\_\_\_
- 6 NONE OF THE ABOVE

Q.11 Suppose you were planning an overnight trip to a provincial park in the next two years. Which of the following information sources would you most prefer to use to plan this trip? (Put letter in appropriate box; if none, put "0" in the box)

- |   |   |
|---|---|
| <input type="checkbox"/> MOST PREFER        | A ADVICE FROM FRIENDS AND RELATIVES                   |
|   | B ADVICE FROM STAFF AT TRAVEL INFORMATION CENTRES     |
|   | C BC ROAD MAP SHOWING PROVINCIAL PARKS AND FACILITIES |
| <input type="checkbox"/> SECOND MOST PREFER | D BROCHURES ON SPECIFIC BC PROVINCIAL PARKS           |
|   | E BC PARKS WEB SITE                                   |
|   | F OTHER (Specify) _____                               |

Q.12 Here are some specific services that some people want and others do not want in **BC provincial park campgrounds**. Please indicate if you would like to see or not like to see each of the following services provided in provincial park campgrounds? (Circle number). If you have no interest in using provincial park campgrounds, please put an "X" in this box  and then go to Q.13.

<b>SERVICES</b>	DEFINITELY NO	PROBABLY NO	NOT SURE	PROBABLY YES	DEFINITELY YES
	▼	▼	▼	▼	▼
A. Playgrounds . . . . .	1	2	3	4	5
B. Trails for walking and jogging . . . . .	1	2	3	4	5
C. Trails for bicycles . . . . .	1	2	3	4	5
D. Hot showers . . . . .	1	2	3	4	5
E. Firewood . . . . .	1	2	3	4	5
F. Nature education programs by a naturalist . . . . .	1	2	3	4	5
G. Lessons on outdoor skills (how to kayak, etc.) . . . . .	1	2	3	4	5
H. Rental of recreation equipment (canoe, etc.) . . . . .	1	2	3	4	5
I. Vending machines (ice, pop, etc.) . . . . .	1	2	3	4	5
J. Mobile food service (van providing milk, bread, etc.) . . . . .	1	2	3	4	5
K. Concession stands (hot dogs, etc.) in beach areas . . . . .	1	2	3	4	5
L. Other (Specify) _____	1	2	3	4	5

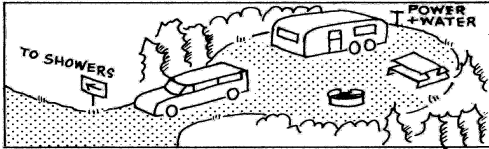
## ACCOMMODATIONS IN PROVINCIAL PARKS

Q.13 One type of overnight accommodation in provincial parks is campgrounds (with showers, without showers, walk-in). Below are some other types of accommodations that some British Columbians would like to see in provincial parks. Please look at each of the pictures and then indicate the extent to which you would or would not like to see each of these in some provincial parks.

### TYPES OF ACCOMMODATIONS

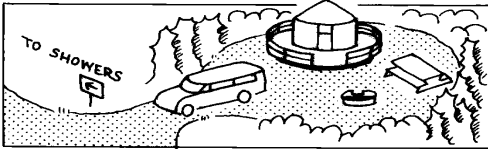
Would you like to see these in some provincial parks?  
(Circle number of your answer)

- A. CAMPSITES WITH WATER AND ELECTRICAL HOOKUPS  
(accessible by car; showers)



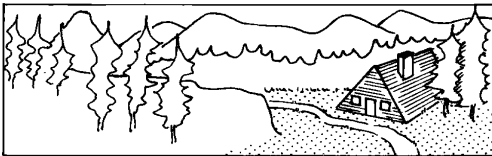
- 1 DEFINITELY NO
- 2 PROBABLY NO
- 3 NOT SURE
- 4 PROBABLY YES
- 5 DEFINITELY YES

- B. YURTS ON CAMPSITES (accessible by car; canvas tents on platforms; bed; showers)



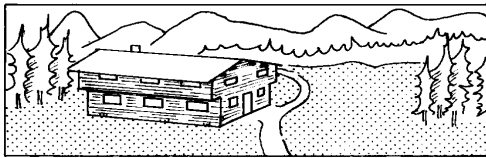
- 1 DEFINITELY NO
- 2 PROBABLY NO
- 3 NOT SURE
- 4 PROBABLY YES
- 5 DEFINITELY YES

- C. HUT TO HUT (accessible by foot, water or air; bring own food and bedding; about 6-8 people)



- 1 DEFINITELY NO
- 2 PROBABLY NO
- 3 NOT SURE
- 4 PROBABLY YES
- 5 DEFINITELY YES

- D. HOSTELS (accessible by foot, water or air; showers; common cooking area; bring own food and bedding; about 20 people)



- 1 DEFINITELY NO
- 2 PROBABLY NO
- 3 NOT SURE
- 4 PROBABLY YES
- 5 DEFINITELY YES

- E. OTHER (Specify) \_\_\_\_\_

Q.14 Which of the following accommodations, if any, would you consider using over the next five years? (Put letter in appropriate box; if none, put "0" in the box)

FIRST CHOICE

SECOND CHOICE

- A CAMPSITES - WATER & ELECTRICAL HOOKUPS (\$25 - \$30 per night)
- B YURTS ON CAMPSITES (\$45 - \$60 per night)
- C HUT TO HUT (\$15 - \$20 per person/per night)
- D HOSTELS (\$20 - \$30) per person/per night)
- E OTHER (Specify) \_\_\_\_\_

## ACTIVITIES IN BACKCOUNTRY AREAS

Q.15 Next, some large provincial parks contain wilderness or **backcountry areas**. People have different views about the kinds of activities that should occur in these areas. Please indicate the extent to which you feel EACH of the following activities is acceptable in backcountry areas of provincial parks? (Circle number)

ACTIVITIES	NEVER ACCEPTABLE ▼	SOMETIMES ACCEPTABLE ▼	ALWAYS ACCEPTABLE ▼	NOT SURE ▼
A. Overnight backpacking . . . . .	1	2	3	4
B. Canoeing . . . . .	1	2	3	4
C. Horseback riding . . . . .	1	2	3	4
D. Using llamas as pack animals . . . . .	1	2	3	4
E. Mountain biking . . . . .	1	2	3	4
F. Cross-country skiing . . . . .	1	2	3	4
G. Rockclimbing . . . . .	1	2	3	4
H. Hang-gliding . . . . .	1	2	3	4
I. Fishing . . . . .	1	2	3	4
J. Snowmobiling . . . . .	1	2	3	4
K. Using all-terrain vehicles (4-wheel drives, etc.) . . . . .	1	2	3	4
L. Motorized boating access (over 10 hp, jet boats, etc.) . . . . .	1	2	3	4
M. Using personal watercraft (jet-skis, etc.) . . . . .	1	2	3	4
N. Using aircraft access (drop off/pick-up visitors) . . . . .	1	2	3	4
O. Producing entertainment movies or commercials . . . . .	1	2	3	4
P. Other (Specify)_____	1	2	3	4

Q.16 Here are some types of commercial guiding services that some people would like to see and others would not like to see in **backcountry areas** of provincial parks. By commercial, we mean a service provided by a private company or guide outfitter usually involving a fee. To what extent do you feel EACH service is acceptable in these areas?

TYPES OF GUIDING SERVICES (Provided by a private business)	NEVER ACCEPTABLE ▼	SOMETIMES ACCEPTABLE ▼	ALWAYS ACCEPTABLE ▼	NOT SURE ▼
A. Day hikes led by a guide . . . . .	1	2	3	4
B. Canoeing trips led by a guide . . . . .	1	2	3	4
C. Aircraft landings (heli-hiking, heli-skiing, etc.) . . . . .	1	2	3	4
D. Aircraft sightseeing tours (low helicopter over-flights) . . . . .	1	2	3	4
E. Whitewater rafting trips led by a guide . . . . .	1	2	3	4
F. Other (Specify)_____	1	2	3	4

## FIRE MANAGEMENT IN BACKCOUNTRY AREAS

Q.17 BC Parks currently has a two-part fire management policy for **backcountry areas**. First, this policy allows a fire started naturally by lightning to burn itself out when it is not a threat to people's lives or personal property. Second, it allows the occasional use of prescribed fire, as a method of conservation management, when it is not a threat to people's lives or personal property. By prescribed fire, we mean a fire started and controlled by staff. Prior to this survey, were you aware or not aware of this policy? (Circle number)

- 1 AWARE
- 2 NOT AWARE
- 3 NOT SURE

Q.18 Over the next few years, BC Parks is planning to more actively implement this fire management policy in **backcountry areas**. Which of the following do you think is the most important and second most important benefit of implementing this policy in backcountry areas? (Put letter in box; if "none", please put "0" in the box). If you are not sure or feel you do not have enough information about this issue, please put "X" in this box .

- |  |   |
|--|---|
| <input type="checkbox"/> MOST IMPORTANT BENEFIT        | A. IMPROVES PLANT (OR FOOD) CONDITIONS FOR SOME WILDLIFE<br>B. SAVES POTENTIAL COST OF FIGHTING FOREST FIRES<br>C. HELPS RE-ESTABLISH A NATURAL PROCESS IN THESE AREAS<br>D. REMOVES LARGE FUEL ACCUMULATIONS SUCH AS DEAD WOOD AND NEEDLES WHICH COULD BECOME A LARGE, UNCONTROLLABLE FIRE |
| <input type="checkbox"/> SECOND MOST IMPORTANT BENEFIT | E. HELPS CONTROL MAJOR FOREST INSECT INFESTATIONS<br>F. OTHER (Specify) _____   |

Q.19 Some British Columbians have mentioned some concerns about implementing this policy in **backcountry areas**. Which of the following would be your biggest and second biggest concern if BC Parks were to more actively implement this policy in backcountry areas over the next few years? (Put letter in box; if "none", please put "0" in the box). If you are not sure or feel you do not have enough information about this issue, please put "X" here .

- |   |  |
|---|--|
| <input type="checkbox"/> BIGGEST CONCERN        | A. DESTROYS SCENERY FOR SEVERAL YEARS<br>B. FIRES CAN SOMETIMES GET OUT OF CONTROL (Poses a threat to people's lives, neighbouring private property, etc.) |
| <input type="checkbox"/> SECOND BIGGEST CONCERN | C. RESULTS IN A WASTEFUL LOSS OF TREES<br>D. OTHER (Specify) _____   |

Q.20 Overall, to what extent do you oppose or favour the fire management policy (in Q.17) for BC Parks?

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1 STRONGLY OPPOSE</li> <li>2 MILDLY OPPOSE</li> <li>3 NOT SURE</li> <li>4 MILDLY FAVOUR</li> <li>5 STRONGLY FAVOUR</li> <li>6 I DON'T HAVE ENOUGH INFORMATION ON THIS POLICY</li> </ul> | Any comments?<br><br><br><br><br><br><br><br><br><br>_____ |
|--|--|

## FUTURE PRIORITIES

-7-

Q.21 Now, we would like to know which of the following provincial park programs you feel BC Parks should give the highest priority to over the next few years. (Put letter in appropriate box)

HIGHEST  
PRIORITY

SECOND  
HIGHEST  
PRIORITY

THIRD  
HIGHEST  
PRIORITY

- A. UNDERTAKING SPECIFIC CONSERVATION PROJECTS TO PROTECT ANIMALS AND PLANTS (control forest infestations, identify rare plants and animals, restore damaged environments)
- B. PROVIDING BACKCOUNTRY PATROLS (prevent illegal activities like poaching; provide emergency services, trail upkeep, maintenance)
- C. PROVIDING SECURITY SERVICES, CLEANING AND MAINTENANCE IN HIGH USE AREAS (campgrounds, day use areas)
- D. CONSTRUCTING NEW RECREATION FACILITIES (showers, wharves, trails)
- E. UNDERTAKING MAJOR REPAIRS OF EXISTING FACILITIES (campgrounds, wharves, sewage systems)
- F. PROVIDING PUBLIC INFORMATION FOR PARK VISITORS (facilities, things to see and do)
- G. EDUCATING PARK VISITORS AND CITIZENS ABOUT PARK VALUES (like talks or slide shows about plants, animals and history of park)
- H. OTHER (Specify) \_\_\_\_\_

Q.22 Suppose you were responsible for planning the future direction of provincial parks. What one or two changes, if any, would you most like to see happen over the next five years?

**Next**, we have a few questions about funding BC Parks over the next few years. To provide some context for these questions, please keep in mind the following:

- Since 1992, the size of the provincial park system has doubled from 6 to 12 percent of BC's land base.
- Park visitor use is growing. In 2000, BC Parks received nearly 24 million visits.
- The projected expenditures for BC Parks is about \$40 million. About 80 cents out of every dollar spent on provincial parks is paid by taxpayers while about 20 cents is paid by park users. Most of the money paid by park users comes from camper fees.
- A recent, independent report (the Legacy report) prepared by a public advisory committee recommended that the BC Parks budget should be doubled within the next five years to adequately manage the expanded park system. By manage, we mean all activities and services for the operation of parks.

We would like to know your views about several suggestions for funding BC Parks programs.



## FUNDING CONSIDERATIONS

Q.23 Here are a few specific suggestions for funding BC Parks programs. That is, ways to raise revenues and ways to decrease costs. Please tell us if you would disagree or agree with establishing EACH of the following? (Circle number)

	STRONGLY DISAGREE	MILDLY DISAGREE	NOT SURE	MILDLY AGREE	STRONGLY AGREE
<b>WAYS TO RAISE REVENUE FOR PARKS</b>					
A. Increase <u>current</u> camping fees in provincial parks campgrounds by \$1 - \$4 per night (current fees: \$8.00 to \$18.50) . . . . .	1	2	3	4	5
<u>Proposed new fees:</u>					
B. Establish pay parking in heavily used day use or beach/picnic areas ( \$2 - \$4 per day) . . . . .	1	2	3	4	5
C. Establish an annual parking pass for day use areas and backcountry trailheads (\$30 per year)	1	2	3	4	5
D. Establish a fee for firewood (\$5 per 1 1/2 cubic ft bundle of firewood; that is, about 1 1/2 ft. wide by 1 1/2 ft. long by 1 1/2 ft. high) . . . . .	1	2	3	4	5
<b>WAYS TO REDUCE COSTS FOR PARKS</b>					
E. Reduce the number of nature education programs that are provided . . . . .	1	2	3	4	5
F. Reduce frequency of maintenance (garbage pick-up, cleaning, etc.) . . . . .	1	2	3	4	5
G. Long-term lease (about 15 years) of provincial park campgrounds to private business operators	1	2	3	4	5

Q.24 Another suggestion for funding BC Park's programs is to establish a special trust fund (e.g. a "Park Trust Fund") that people could donate to. It would be run by an independent foundation and the funds would be used for specific in-park services or projects. In general, do you think establishing a "trust fund" for BC Parks would be...? (Circle one)

- 1 A GOOD IDEA
- 2 NOT A GOOD IDEA
- 3 NOT SURE

Any comments?

\_\_\_\_\_

Q.25 Suppose such a special trust fund was established for BC Parks. It is estimated that a donation of \$25 per household to this fund would raise the additional \$40 million required by BC Parks. How much, if anything, would you be willing to donate to such a trust fund per year? (Please put an "X" in appropriate box; if none put "0" in the last box)

\$10                     
  \$25                     
  \$50                     
  other \$\_\_\_\_\_

Q.26 Do you have any OTHER suggestions about ways to fund BC Parks programs? (Use back cover if more space needed)



## BACKGROUND

-9-

Finally, we would like to ask some questions about yourself to help us interpret the results from this survey.

Q.27 In (or near) what town or city is your home located?

\_\_\_\_\_ NAME OF TOWN OR CITY

Q.28 How many years have you lived in British Columbia?

\_\_\_\_\_ NUMBER OF YEARS

Q.29 Did you go fishing in any BC provincial park in 2001?

- 1 NO
- 2 NOT SURE
- 3 YES

Q.30 One job of BC Parks is to protect the plants, animals, water, air and natural features in provincial parks from activities that could damage the natural conditions of provincial parks. Overall, how would you rate BC Park's performance over the past two years in conserving and protecting the natural conditions of provincial parks?

- 1 UNACCEPTABLE
  - 2 POOR
  - 3 AVERAGE
  - 4 GOOD
  - 5 OUTSTANDING
  - 6 NOT SURE
- Any comments? \_\_\_\_\_

Q.31 Overall, how would you rate BC Park's performance over the past two years in providing recreation facilities and services in provincial parks?

- 1 UNACCEPTABLE
  - 2 POOR
  - 3 AVERAGE
  - 4 GOOD
  - 5 OUTSTANDING
  - 6 NOT SURE
- Any comments? \_\_\_\_\_

Q.32 Do you currently have computer access to the internet? (Circle **ALL** that apply)

- 1 IN YOUR HOME
- 2 AT YOUR JOB
- 3 OTHER (Specify) \_\_\_\_\_
- 4 NONE OF THE ABOVE

Q.33 Since a large part of this survey concerns your views about provincial parks in British Columbia, it is very important for us to know who lives in your household. Please list everybody, starting with yourself.

Who? (e.g. spouse, son daughter, parent, friend)	Age (in years)	Sex (M = male, F = female)
1 <u>YOURSELF</u> _____	<input type="text"/>	<input type="text"/>
2 _____	<input type="text"/>	<input type="text"/>
3 _____	<input type="text"/>	<input type="text"/>
4 _____	<input type="text"/>	<input type="text"/>
5 _____	<input type="text"/>	<input type="text"/>
6 _____	<input type="text"/>	<input type="text"/>

Q.34 What is the highest level of education you have completed? (Circle number of your answer)

- 1 SOME HIGH SCHOOL
- 2 HIGH SCHOOL DIPLOMA
- 3 COLLEGE/TRADE/TECH SCHOOL
- 4 SOME UNIVERSITY
- 5 UNIVERSITY DEGREE (bachelor's or higher degree)

Q.35 Which one of the following categories describes your total family income, before taxes, in 2000? (Please circle number of appropriate category)

- |                        |                         |
|------------------------|-------------------------|
| 1 LESS THAN \$20,000   | 5 \$65,000 TO \$79,999  |
| 2 \$20,000 TO \$34,999 | 6 \$80,000 TO \$94,999  |
| 3 \$35,000 TO \$49,999 | 7 \$95,000 TO \$109,999 |
| 4 \$50,000 TO \$64,999 | 8 \$110,000 OR MORE     |

Is there anything else you would like to tell us about BC provincial parks? Any comments you wish to make that you think may help us better understand what British Columbians would like to see in provincial parks in the future will be appreciated, either here or in a separate letter.

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Your contribution to this effort is greatly appreciated. If you would like a summary of the results, please print "copy of the results requested" along with your name and address on the back of the return envelope (not on this questionnaire). We will see that you get it.



## Appendix C

### Statistical Tables

<b>Table C1. Importance of Provincial Parks, 1995 and 2001</b>		
	<b>1995*</b>	<b>2001</b>
Very important	73	72
Fairly important	22	23
Not very important	4	5
Total percent	100	100
Number of respondents	2,926	2,856

\*1995 refers to the BC Parks 1995 household survey.

<b>Table C2. Some Benefits of Having Provincial Parks</b>			
<b>Benefits</b>	<b>Not very important</b>	<b>Fairly important</b>	<b>Very important</b>
Conservation-related:	Percent*		
Protection of special natural features (waterfalls, etc.)	2	13	84
Preservation of natural environments (forests, etc.)	3	14	82
Protection of rare plants, animals and birds	3	17	79
Protection of wildlife	2	18	78
Recreation-related:			
Places for relaxation	6	32	60
Places to go camping	8	32	58
Attraction of out-of-province visitors (bring in tourism revenue, etc.)	8	32	58
Places for outdoor activities other than camping	7	36	55
Education related:			
Places to learn about nature through interpretation (nature walks, slide shows, etc.)	12	41	45

\*Row percent (add across) based on 2,856 respondents; don't know is not shown in table.

<b>Table C3. Some Benefits of Having Provincial Parks in British Columbia, 1995 and 2001</b>		
<b>Comparable Benefits</b>	<b>1995</b>	<b>2001</b>
	Percent very important	
Conservation-related		
• Preservation of natural environments	85	82*
• Protection of wildlife	84	78*
Recreation related		
• Places for relaxation	61	60
• Places to go camping	59	58
• Attraction of out-of-province visitors	57	58
• Places for other outdoor activities	56	55
Education related		
• Places to learn about nature (interpretation)	51	45*
Number of respondents	2,926	2,856

\*Statistically different ( $p < .05$ ); 1995 refers to the BC Parks 1995 household survey conducted in spring of 1995.

<b>Table C4. Percent of BC Residents using Provincial Parks, 1994 and 2001</b>		
<b>Use of provincial parks</b>	<b>1994</b>	<b>2001</b>
• Ever used	89	86*
• Used	65	53*
Types of provincial parks used		
• Day use areas	47	37*
• Campgrounds	37	30*
• Wilderness areas	20	15*
• Visitor centres	18	13*
• Marine parks	15	12*
Number of respondents	2,926	2,856

\* Statistically different ( $p < .05$ ); 1994 refers to the 1995 BC Parks household survey. It was conducted in the spring of 1995 so the question on use of provincial parks referred to the previous year (i.e. 1994).

<b>Table C5. Preferences for Services in Provincial Park Campgrounds</b>					
<b>Services</b>	<b>Definitely No</b>	<b>Probably No</b>	<b>Not Sure</b>	<b>Probably Yes</b>	<b>Definitely Yes</b>
Currently provided:	Percent*				
Trails for walking and jogging	1	1	2	28	58
Firewood	2	3	5	28	52
Hot showers	7	3	8	27	44
Trails for bicycles	5	10	11	33	29
Playgrounds	8	13	10	33	23
Nature education programs	4	13	19	34	18
New:					
Rental of recreation equipment (canoe, etc.)	7	15	15	34	17
Lessons on outdoor skills (how to kayak, etc.)	6	18	22	30	12
Vending machines (ice, pop, etc.)	23	22	12	22	10
Concession stands (hot dogs, etc.) in beach areas	28	20	11	21	9
Mobile food service (van providing milk, bread, etc.)	23	24	14	20	8

\*Row percent (add across) based on 2,387 respondents; not indicated is not shown in table.



<b>Table C6. Preferences for Alternative Types of Overnight Accommodation in Provincial Parks</b>					
<b>Types of Accommodations</b>	<b>Definitely No</b>	<b>Probably No</b>	<b>Not Sure</b>	<b>Probably Yes</b>	<b>Definitely Yes</b>
Frontcountry:	Percent*				
Campsites with water and electrical hookups (accessible by car; showers)	7	7	7	36	39
Yurts on campsites (accessible by car; canvas tents on platforms; beds; showers)	12	17	22	30	15
Backcountry:					
Hut to hut (accessible by foot, water or air; bring own food and bedding; about 6-8 people)	8	11	18	37	22
Hostels ( accessible by foot, water or air; showers; common cooking area; bring own food and bedding; about 20 people)	17	18	20	28	13

\*Row percent (add across) based on 2,387 respondents; not indicated is not shown in table.

<b>Table C7. Preferred Choice for Using and Paying For Alternative Types of Overnight Accommodation in Provincial Parks</b>			
<b>Types of Accommodations</b>	<b>First Choice*</b>	<b>Second Choice*</b>	<b>Combined**</b>
Frontcountry:	Percent		
Campsites with water and electrical hookups (\$25 - \$30 per night)	50	10	61
Yurts on campsites (at \$45- \$60 per night)	6	17	23
Backcountry:			
Hut to hut (\$15 - \$20 per person/per night)	15	22	37
Hostels (\$20 - \$30 per person/per night)	4	12	16
Number of respondents	2,387	2,387	2,387

\*First choice and second choice are column percent (add down); \*\*combined is row percent (add across) of first choice and second choice.

<b>Table C8. Preferred Information Source For Planning Overnight Trip</b>			
<b>Information Sources</b>	<b>Most Prefer*</b>	<b>Second Most Prefer*</b>	<b>Combined**</b>
	Percent		
Advice from friends and relatives	38	14	52
BC road map	19	20	39
Brochures on specific parks	12	23	35
BC Parks web site	14	17	31
Advice from travel information centres	8	12	20
Number of respondents	2,387	2,387	2,387

\*Most prefer and second most prefer are column percent (add down); \*\*combined is row percent (add across) of most prefer and second most prefer.

**Table C9. Acceptability of Activities in Backcountry Areas**

<b>Activities</b>	<b>Never Acceptable</b>	<b>Sometimes Acceptable</b>	<b>Always Acceptable</b>
Non-motorized:	Percent*		
Fishing	2	26	67
Canoeing	2	24	66
Overnight backpacking	3	28	60
Cross country skiing	3	36	53
Rockclimbing	7	46	38
Horseback riding	6	55	31
Mountain biking	14	47	32
Hang-gliding	17	47	20
Using llamas as pack animals	21	40	15
Motorized:			
Using aircraft access (drop off/pick-up visitors)	18	57	14
Snowmobiling	32	43	16
Motorized boating access (over 10 hp, jet boats, etc.)	43	38	10
Using all-terrain vehicles (4-wheel drives, etc.)	48	34	10
Using personal watercraft (jet skiis, etc.)	50	33	8
Other:			
Producing entertainment movies or commercials	28	47	12

\*Row percent (add across) based on 2,387 respondents; not sure and not indicated are not shown in table.

<b>Table C10. Acceptability of Guiding Services in Backcountry Areas</b>			
<b>Activities</b>	<b>Never Acceptable</b>	<b>Sometimes Acceptable</b>	<b>Always Acceptable</b>
Non-motorized:	Percent*		
Day hikes led by a guide	4	37	53
Canoeing trips led by a guide	4	37	53
Whitewater rafting trips	5	49	39
Motorized:			
Aircraft landings (heli-hiking, heli-skiing, etc.)	23	53	14
Aircraft sightseeing tours (low helicopter over-flights)	29	46	16

\*Row percent (add across) based on 2,387 respondents; not sure and not indicated are not shown in table.

<b>Table C11. Attitude Toward Fire Management Policy</b>			
<b>Attitude</b>	<b>All</b>	<b>Aware</b>	<b>Not Aware</b>
	Percent		
Favour	49	66	36*
Oppose	8	7	9
Not enough information/not sure	43	27	55*
Total percent	100	100	100
Number of respondents	2,387	1,120	1,025

\*Statistically different ( $p < .001$ ); the sample size of aware and not aware does not add up to 2,387 respondents because not sure and not indicated are not shown in table.

**Table C12. Priority of Park Programs**

Park Programs	First Priority*	Second Priority*	Combined**
	Percent		
Undertaking specific conservation projects to protect animals and plants (control forest infestations, identify rare plants and animals, restore damaged environments)	42	12	54
Providing backcountry patrols (prevent illegal activities like poaching; provide emergency services, trail upkeep, maintenance)	14	25	39
Providing security services, cleaning and maintenance in high use areas (campgrounds, day use areas)	16	20	36
Undertaking major repairs of existing facilities (campgrounds, wharves, sewage systems)	10	16	26
Constructing new recreation facilities (showers, wharves, trails)	6	10	16
Educating park visitors and citizens about park values (talk or slide shows about plants, animals and history of park)	2	6	8
Providing public information for park visitors (facilities, things to see and do)	2	4	6
Number of respondents	2,387	2,387	2,387

\*Most prefer and second most prefer are column percent (add down); \*\*combined is row percent (add across) of first priority and second priority.

<b>Table C13. Views About Ways to Raise Revenues and Reduce Costs</b>					
<b>Ways to...</b>	<b>Strongly Disagree</b>	<b>Mildly Disagree</b>	<b>Not Sure</b>	<b>Mildly Agree</b>	<b>Strongly Agree</b>
Raise Revenue:	Percent*				
Increase current camping fees in provincial parks campgrounds by \$1-\$4 per night (current fees: \$8.00 to \$18.50)	17	12	7	36	24
Establish a fee for firewood (\$5 per 1 1/2 cubic bundle of firewood; that is, about 1 1/2 wide by 1 1/2 long by 1 1/2 ft high)	17	13	10	31	25
Establish an annual parking pass for day use areas and backcountry trailheads (\$30)	19	11	15	26	24
Establish pay parking in heavily used day use or beach/picnic areas (\$2 - \$4 per day)	26	14	7	30	20
Reduce Costs:					
Reduce the number of nature education programs that are provided	18	22	20	25	10
Long-term lease (about 15 years) of provincial park campgrounds to private business operators	39	12	23	15	8
Reduce frequency of maintenance (garbage pick-up, cleaning, etc.)	55	23	8	8	2

\*Row percent (add across) based on 2,387 respondents; not indicated is not shown in table.

<b>Table C14. Views About Ways To Raise Revenues and Reduce Costs By Provincial Park Users and Non-Users</b>			
<b>Ways to...</b>	<b>All</b>	<b>Used in 2001</b>	<b>Did Not Use in 2001</b>
Raise Revenue:	Percent agree		
Increase current camping fee \$1-\$4	60	59	62
Establish a fee for firewood \$5 per bundle	56	56	57
Establish an annual parking pass \$30	50	48	55*
Establish pay parking in day use areas (\$2- \$4 per day)	50	48	51
Reduce Costs:			
Reduce number of nature education programs	35	37	34
Long-term lease (15 years) of campgrounds	23	23	23
Reduce frequency of maintenance	10	11	8*
Number of respondents	2,387	1,400	848

\*Statistically different ( $p < .05$ ); the sample sizes of users and non-users does not add up to 2,387 respondents because not sure and no response is not shown in table.