

THE ATTITUDE TOWARD NATURE IN CANADA

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Introduction

This report presents the major findings of a study of Canada's attitude toward nature and the comparison of attitudes toward nature in Canada, Germany, Finland and Japan.

When you cross the U. S. border, you might notice how different the scenery on the U. S. side is from that on the Canadian side. That is because attitudes toward nature in the U. S. and Canada are quite different, even though the climate and the geography around the border are almost the same. We believe that not only the temperature or the amount of rainfall influence nature, but also the inhabitants can affect aspects of nature.

Canada is well-known as a country full of the beauty of its natural environment. On the other hand, nature sustains Canada's economy by logging, mining, fishing, tourism and so forth. Many different kinds of issues about nature, deforestation, air pollution etc, have been discussed enthusiastically from different points of view.

How do Canadians feel about nature? To understand Canada's attitude toward nature is our main interest and the reason why we started this study.

Study method

In order to understand Canada's attitude toward nature, we used a questionnaire which consisted of 13 questions. Actually, we used the same questionnaire as the one used in Germany, Japan, France and Finland by the Forest Environment Research Group in Japan because we wanted to compare the attitudes toward nature in Canada and other countries.

As far as the places are concerned, Nelson and Vancouver were chosen because of their population sizes, different life styles and the ease of doing the survey. For international comparisons of attitudes toward nature, Freiburg in Germany, Helsinki in Finland and Asahikawa in Japan were also selected by similar natural environment.

The survey was done by distributing the questionnaire to co-operating individuals.

Table 1 The number of respondents

	Number
Vancouver	47
Nelson	117
Log-industry workers	37
Non-log people	80
High school students	95

Table 2 The distinction of sex (%)

	Female	Male	No answer
Vancouver	71.8	28.2	0
Nelson	40.8	55.7	3.5
Log-worker	24.3	75.7	0
Non-log	48.7	47.4	3.9
Students	48.4	50.5	1.1

Table 3 Age category (%)

	-18	19-29	30-60	60+	No answer
Vancouver	0	15.4	84.6	0	0
Nelson	0	14.8	76.5	7.8	0.9
Log-worker	0	21.6	78.4	0	0
Non-log	0	11.5	75.6	11.5	1.4
Students	88.4	11.6	0	0	0

Feature of the cities

Vancouver, population 1,450,000 (metropolitan Vancouver), is the third largest city in Canada. The Pacific Ocean lies to the west of the city and the Coast Mountains Range soars to the North. From its location, international business has been developed rapidly and also many different kinds of races live together in this city. As it is said that Vancouver is one of the most beautiful cities in the world, people enjoy both their urban life and natural environment.

Nelson, population 9,000, is a small city surrounded by forests and lakes. Kokanee Glacier can be seen from the town. Like many other communities in British Columbia, logging industries are the chief resource of income for quite a few people living in Nelson. Many inhabitants in Nelson are related with their forests by logging industries, forest-recreation and so on.

Freiburg, population 180,000, is a city of forest in Baden-Wuerttemberg, the south-

west part of Germany. The west end of this city faces the plane of Rhine and the east end opens in Black Forest, Schwarzwald. Freiburg is also known for a city of education.

Helsinki, population 480,000, is the capital of Finland. As the city faces the Baltic Sea to the South, Helsinki has been flourishing as a international trade port. Lakes, small islands and forests around Helsinki give the people lots of opportunities to enjoy in nature.

Asahikawa, population 360,000, is the second largest city in Hokkaido located in the centre of the Plane Kawakami. The climate is somewhat like continental and the difference the maximum and the minimum temperatures in a year is about 60 degrees Celsius.

The result of the survey

The survey was carried out September in 1991 to February in 1992.

Respondents to the questionnaire can be divided into three groups, inhabitants in Nelson, Vancouver and high school students in Nelson. Also inhabitants in Nelson can be two different groups, the people who engage in logging industry and the people who do not.

Q1 Where would you most like to go for a trip? (%)

- | | |
|--------------------------------------|------------------------------|
| (1) A forest | (2) To visit old churches |
| (3) A large beach | (4) Meadows in hilly country |
| (5) A mountain with a panoramic view | (6) High mountains |
| (7) A lake | (8) Other |

	1	2	3	4	5	6	7	8
Vancouver	0	2.1	31.9	10.9	23.4	14.9	8.5	6.4
Nelson	6.8	3.4	16.2	10.3	22.2	6.0	23.1	6.0
Log-worker	8.1	0	21.6	10.8	16.2	8.1	27.0	5.4
Non-log	6.3	5.0	13.8	10.0	25.0	5.0	21.3	6.3
Students	5.3	1.1	29.8	4.3	13.8	7.4	13.8	22.1

Q2 Do you like to walk in the woods? (%)

	Yes	Sometimes	No	No answer
Vancouver	80.9	17.0	0	2.1
Nelson	83.8	15.4	0	0.8
Log-worker	89.2	10.8	0	0
Non-log	81.3	17.5	0	1.2
Students	54.7	40.0	4.2	1.1

Q 3 Can you name five types of trees which you find beautiful?

(plural answers %)

Best 10

	Vancouver	Nelson	Log-worker	Non-log	Students
Pine	31.9	53.8	54.1	55.0	61.7
Fir	57.4	48.7	51.4	46.3	44.6
Cedar	46.8	45.3	67.6	47.5	45.7
Larch		38.7	45.9	38.8	15.0
Spruce	17.0	29.9	29.7	30.0	51.1
Maple	68.1	50.4	51.4	53.8	45.7
Birch	34.0	53.8	24.3	57.5	30.9
Oak	31.9	36.8	24.3	35.0	27.7
Willow	21.3	10.3	21.6	15.0	29.8
Hemlock			13.5		17.0
Poplar		8.5		11.3	
Arbutus	21.3				
Cherry	17.0				

Q 4 Of these, which one do you prefer? (%)

Best 7

	Vancouver	Nelson	Log-worker	Non-log	Students
Maple	21.8	17.1	8.1	17.5	9.6
Birch	4.3	13.7	5.4	11.3	
Oak	6.4	13.7	5.4	13.8	12.8
Fir	6.4	11.1	5.4	8.8	7.4
Ceder	21.8	7.7	21.6	8.8	8.5
Spruce		6.8		7.5	
Larch		4.3	18.9	5.0	
Arbutus	8.5				
Cherry	4.3				
Pine			10.8		10.6
Willow			5.4		11.7
Palm					7.4

Q 5 Does the sight of an ancient tree move you deeply? (%)

	Yes	No	No answer
Vancouver	97.9	2.1	0
Nelson	75.2	22.2	2.6
Log-worker	56.8	40.5	2.7
Non-log	83.8	13.8	2.4
Students	43.2	52.6	4.4

Q 6 Are you moved by feelings of respect and timelessness when you enter a great, deep forest ? (%)

	Yes	No	No answer
Vancouver	97.9	2.1	0
Nelson	84.6	12.0	3.4
Log-worker	78.4	18.9	2.7
Non-log	87.5	8.8	3.7
Students	62.1	36.8	1.1

Q 7 Which of the following corresponds more closely to your opinion? (%)

- (1) Silvicultural management is necessary to keep forests clean and beautiful
- (2) Forests should be left as they are

	1	2	No answer
Vancouver	44.7	44.7	10.6
Nelson	59.0	34.2	6.8
Log-worker	81.1	13.5	5.4
Non-log	48.8	43.8	7.4
Students	46.3	52.6	1.1

Q 8 Which sport do you prefer ? (%)

- (1) Swimming (2) Jogging (3) Hiking (4) Camping
- (5) Skiing (6) Hunting (7) Golf (8) Boating and canoeing
- (9) Fishing (10) Mountaineering

	1	2	3	4	5	6	7	8	9	10
Vancouver	19.1	4.3	40.4	17.0	8.5	0	4.3	2.1	4.3	0
Nelson	9.4	0.9	20.5	12.0	18.8	3.4	6.0	11.1	10.3	4.3
Log-worker	2.7	2.7	16.2	13.5	24.3	5.4	5.4	10.8	13.5	2.7
Non-log	12.5	0	22.5	11.6	16.3	2.5	6.3	11.3	8.8	5.0
Students	4.3	2.1	9.6	10.6	39.4	4.3	7.4	10.5	2.1	3.2

Q 9 Do you think that hunting is a good sport? (%)

	Yes	No	No answer
Vancouver	2.6	94.9	2.5
Nelson	33.0	63.2	3.8
Log-worker	51.4	48.6	0
Non-log	24.4	71.8	3.8
Students	30.5	68.4	1.1

Q 10 Do you prefer — (%)

- (1) Nature transformed by human activities, featuring mixed landscapes of fields, prairies and forests, or
 (2) Virgin landscapes untouched by human activity where natural plant and forest succession is active.

	1	2	No answer
Vancouver	10.3	87.2	2.5
Nelson	31.3	64.3	4.4
Log-worker	48.6	43.2	8.2
Non-log	23.1	74.4	2.5
Students	26.3	68.4	3.3

Q 11 Have you ever been deeply moved by a sunrise or sunset, or by a silent mountain landscape? (%)

	Yes	No	No answer
Vancouver	100	0	0
Nelson	98.3	1.7	0
Log-worker	97.3	2.7	0
Non-log	98.7	1.3	0
Students	82.1	16.8	1.1

Q 12 Have you ever had the inkling that in many aspects of nature, such as mountains and valleys, rivers and streams, trees and plants, there may be something similar to a soul? (%)

	Yes	No	No answer
Vancouver	74.4	25.6	0
Nelson	61.7	37.4	0.9
Log-worker	45.9	54.1	0
Non-log	69.2	29.5	1.3
Students	54.7	43.2	1.1

Major findings of the survey

a. A lake and a mountain with panoramic view were chosen as the most preferable destinations for a trip by people in Nelson. People in Vancouver prefer a large beach and a mountain with a panoramic view for a trip. For favorite sports, hiking came first in both Nelson and Vancouver. However, Canadians also enjoy other activities like skiing, camping and swimming.

b. Most Canadians like to walk in the woods like Germans. Taking a walk in the woods seems to be a part of their regular activities. However, the attitude of the young

generation is a little different. Only half of high school students answered that they liked to walk in the woods.

c. A large amount of Canadians have special feelings toward nature. Most have been moved by sunrise, sunset or a silent mountain landscape and many are touched with feelings of respect and timelessness when they enter a great deep forest. In spite of the fact that Christianity is the main religion in Canada, more than half of respondents found something similar to a soul in nature. Inhabitants in Vancouver tended more to have special feelings toward nature, more so than those in Nelson.

d. On hunting, there is a difference between people in Nelson and Vancouver. Hunting is not regarded as a good sport by Vancouver residents, but one third of Nelson residents accept hunting as a good sport.

e. Almost all Canadians, even high school students, can name five types of trees, and most trees named by Canadians are constituent species of the forests in Canada. Some people referred to the full name or in some cases the scientific name of the tree. (i. e. western red cedar, not just cedar). It shows that Canadians are quite familiar with their forest. However, the trees which can be named such as maple, fir, cedar and pine are limited because of the small variety of constituent species in Canada.

f. There are different points of view about the necessity of silvicultural management to keep forests healthy and beautiful. Most people who engage in the logging industry believe that silvicultural management is necessary. Half of the people who do not engage in the logging industry, however, want forests to be left as they are. This attitude is very much connected with the following question: which do you prefer, nature transformed by human activities, featuring mixed landscapes of fields, prairies and forests, or virgin landscapes untouched by human activity where natural plant and forest succession is active? The majority of people in Vancouver and non-logging industry workers in Nelson like virgin landscapes untouched by human activity. On the other hand, more than half of the logging industry workers prefer nature transformed by human activities. As far as forestry technicians are concerned, nature transformed by human activities was chosen by most of them.

International comparisons of attitudes toward nature

a. The most favorite place for inhabitants in Freiburg is the forest (response of more than 50% of respondents). In Germany, walking in the woods is a part of their routine life. More than half of inhabitants in Helsinki chose lakes as the best place for a trip. People in Asahikawa prefer to go to either a lake or a mountain with a panoramic view. This response pattern is quite similar to that in Nelson. Asahikawa is located on the Northern island in Japan, which has the same kind of natural environment as Canada.

b. The most favorite sport among these countries is hiking. However, the rates are

Table 4 The most favorite place for a trip (%)

(1) A forest (2) A lake
(3) A mountain with a panoramic view

	(1)	(2)	(3)
Vancouver	0	8.5	23.4
Nelson	6.8	23.1	22.2
Freiburg	55.0	8.6	16.6
Helsinki	11.7	53.1	6.3
Asahikawa	5.2	27.4	24.0

quite different in each city. The rate of hiking in Freiburg, Helsinki is nearly 60%, but in Nelson is just over 20%. Vancouver and Asahikawa is around 40%. People in Nelson, however, enjoy skiing and camping which are usually done in Nature. Most Canadians like to walk in the woods like Germans. In Canada, taking a walk in the forest is also regarded as a part of their life style.

Table 5 The most favorite sport (%)

(1) Hiking (2) Camping (3) Skiing

	(1)	(2)	(3)
Vancouver	40.4	17.0	8.5
Nelson	20.5	12.0	18.8
Freiburg	58.7	4.3	7.5
Helsinki	58.1	4.3	7.3
Asahikawa	37.4	14.0	10.9

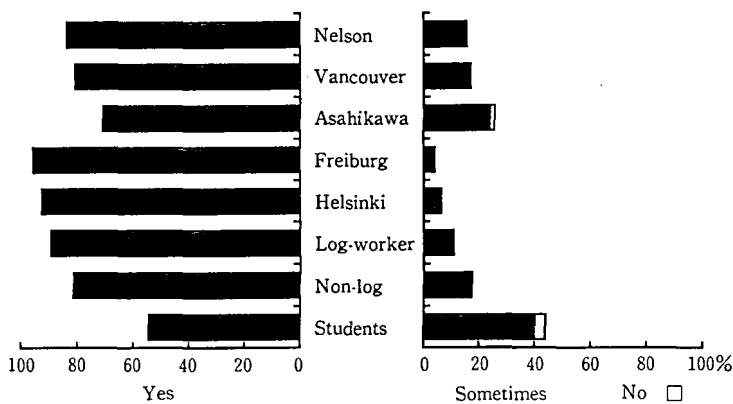


Fig. 1 Do you like to walk in the woods?

c. More than 80% of Freiburg residents had the opinion "people should manage forests to keep them beautiful and healthy". This idea is based on the advances in forest

science, and well-managed forests are accepted as familiar scenery by Germans. Almost half of Canadian residents, however, had the opinion "forests should be left like they are". This tendency is more pronounced in Vancouver than in Nelson. This attitude toward nature reflects that many Canadians prefer virgin landscapes untouched by human activity over nature transformed by human activities. In Canada, natural forests are still familiar, and forests tend to be thought of as recreation areas rather than as multipurpose areas (such as logging, leisure, wildlife) by quite a few Canadians.

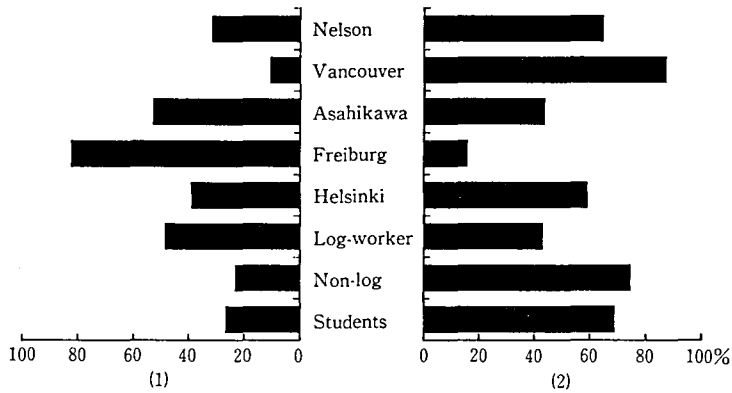


Fig. 2 Which is more closely to your opinion?

- (1) Silvicultural management is necessary to keep forests clean and beautiful
- (2) Forests should be left as they are

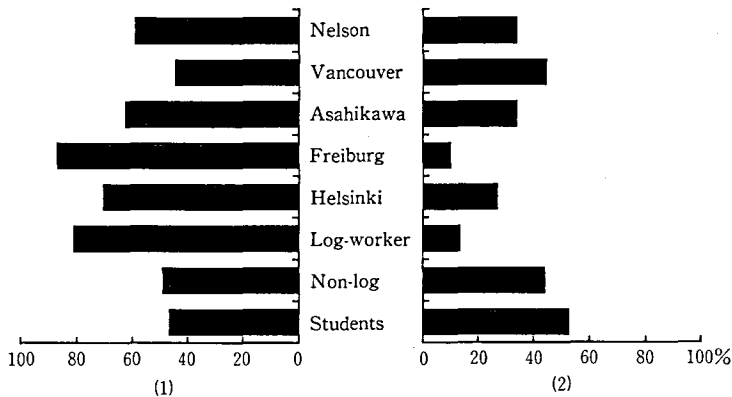


Fig. 3 Do you prefer —

- (1) Nature transformed by human activities, featuring mixed landscapes of fields, prairies and forests, or
- (2) Virgin landscapes untouched by human activity where natural plant and forest succession is active.

Conclusion

We found that many Canadians are related with nature in some ways and the relationship between people and nature is day to day events. However, not only are the attitudes toward nature of Canadians, Germans, Finnish, Japanese are different, but even in Canada alone, there are different points of view among common inhabitants, logging industry workers and high school students. Canadians love their natural environment, but the ways that they show their love, their attitudes toward nature, can be very different. It will be interesting to see how Canadians solve their problems with nature in the future.

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カナダにおける森林環境意識

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カナダは自然環境に恵まれており、経済の面でも自然に依存するところが大きい国である。そのようなカナダの人の森林意識を調査し、国際比較することを本研究の目的とした。

カナダにおける調査地はヴァンクーバーとロッキー山中のネルソンとであった。カナダでの調査結果をドイツ（フライブルク）・フィンランド（ヘルシンキ）・日本（旭川）での結果と比較して、次のようなことが言えた。

- ・カナダでもハイキングが好ましいスポーツとして選ばれたが、スキーやキャンプといった間接的に森林と関わるスポーツがカナダでは多く選ばれた。
- ・森林内の散策を好む人は、ヨーロッパと同じように、カナダでも高かった。
- ・ドイツでは林業の歴史を反映して「人手の加わった自然」が好まれたのに対して、カナダではフィンランドと同じように、「人手の加わらない自然」を好む人が多かった。

なお、本研究によって、カナダではほとんどの人が何らかの形で森林環境と深く関わっており、それも日常的に関わっていること、そして、その関わり方はそれぞれに異なっており、一様な関わり方でないことが明らかになった。そして、自分たちの森林環境をうまく生活の一部に取り入れながら、生活を豊かにし、楽しもうという、いわゆる「自然との共存」の思想が、各人の森林意識の根底に流れていることを知ることができた。森林環境と深い関わりをもっているカナダの人たちの森林意識は、世界的な森林環境問題を解決していくにあたって、大きな力になり得るものと思われた。