

'THE CHAIN - SAW REVOLUTION'
ENVIRONMENTAL ACTIVISM IN THE B.C. FOREST INDUSTRY

by

Natalie Minunzie
B.A., Simon Fraser University

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APPROVAL

Name Natalie Minunzie
Degree Master of Arts
Title of Thesis "Chain-Saw Revolution'
Environmental Activism in
B.C. Forest Industry

Examining Committee:

Chair:

Patrick J. Smith
Senior Supervisor

Michael Howlett
Supervisor

Jeremy Wilson
Dept. of Political Science
University of Victoria
External Examiner

Date Approved June 24, 1993

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The Chainsaw Revolution: Environmental Activism in B.C's
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Author: _

(signature)

Natalie Beatrice Minunzie

(name)

June 15, 1993

(date)

Abstract.

This thesis investigates environmental activism in the forest industry of British Columbia. Demographic, ideological and structural explanations of environmentalism are examined and their conclusions tested against survey data detailing the social backgrounds, attitudes, beliefs and values of B.C. forest industry workers and members of environmental organizations active in the province. The study examines the differences and similarities among these activists and argues there is no single approach in the existing literature that adequately explains environmental activism in B.C.. The B.C. case points to the need for a reevaluation of this literature.

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Chapter One.

INTRODUCTION:

This thesis is about environmental activists in the forest industry of British Columbia. The study focuses on forest workers and members of environmental organizations, both prominent actors in an ongoing policy debate over the forests of the province. It is about their social backgrounds, their attitudes, beliefs and values, and their motivation to become involved in forest policy issues which have been part of the political landscape since the 1960s. Since that time, activists in the forest environmental movement have directed much of their energy toward the preservation of the province's old growth forests under threat of liquidation by the forest industry.

Much has been written about environmentalism in the past several decades. During the 1960s and 70s, research efforts in the U.S. were mainly directed toward identifying and explaining varying levels of public environmental concern on the basis of demographic categories. The success of linking environmentalism to socio-economic factors such as age, sex, and social class, however, has been limited.¹ By the 1980s, a

¹ Kent Van Liere and Riley E. Dunlap, "The Social Bases of Environmental Concern: Explanations and Empirical Evidence," *Public Opinion Quarterly*, 1980, Vol. 44, No. 2, pp. 181-97; Lester W. Milbrath, "Environmental Beliefs and Values," in Margaret G. Hermann, ed., *Political Psychology*. (London: Jossey-Bass Publishers, 1986), pp. 111-15.

number of additional explanations for the emergence of environmentalism and for its public support were put forward. These can be generally classified into two types. The first emphasizes micro level psychological factors, the most prominent of which are postmaterialist value priorities which, it is argued, motivate environmentalists and explain the growth in environmental activism. The second emphasizes the broad macro characteristics of advanced industrial democracies which, it is argued, have changed since World War II in such a fashion as to allow a "new" politics of "decommodified" interests to replace the "old" politics of market-based political economies.²

In Canada, while considerable research has been conducted into the behavior, structure, and policy-making role of pressure groups,³ much less attention has been devoted to the

² See, for example, Ronald Inglehart, *Culture Shift in Advanced Industrial Society*. (New Jersey: Princeton University Press, 1990), and Claus Offe, "New Social Movements: Challenging the Boundaries of Institutional Politics," *Social Research*, 1985, Vol. 52, No. 4, pp. 817-68.

³ Robert Presthus, *Elite Accommodation in Canadian Politics*. (Toronto: McMillan Publishing, 1973); *Elites in the Policy Process* (Great Britain: Cambridge University Press, 1974); A. Paul Pross, *Governing Under Pressure: Special Interest Groups* (The Institute of Public Administration of Canada, 1982); *Group Politics and Public Policy* (Toronto: Oxford University Press, 1986); Fred Thompson and W.T. Stanbury, *The Political Economy of Interest Groups in the Legislative Process in Canada* (Montreal: Institute for Research on Public Policy, 1979); William D. Coleman and Henry Jacek, "The Roles and Activities of Business Interest Associations in Canada," *Canadian Journal of Political Science*, 1983, Vol. 16, pp. 257-80; William D. Coleman, "Analyzing the Associative Action of Business: Policy Advocacy and Policy Participation," *Canadian Public Administration*, 1985, Vol. 28, pp. 413-33; Sandra Burt, "Women's Issues and the Women's Movement in Canada Since 1970," in Alan Cairn and Cynthia Williams, eds. *The Politics of Gender, Ethnicity and Language in Canada* (Toronto:

social and cognitive bases of individual members' involvement.⁴ The purpose of this study is threefold; (i) to identify differences and similarities in the social backgrounds, the attitudes, values and beliefs of environmental activists and in so doing; (ii) help bridge the gap between comparative studies and Canadian research on environmental activism; and (iii) contribute to theory building by testing three hypotheses derived from the study of explanations of environmentalism found in existing theoretical literature against evidence from the B.C. case. These hypotheses are:

1. That environmental activists will differ significantly in terms of demographic variables.
2. That environmental activists will differ significantly in terms of attitudinal variables.
3. That there is a positive relationship between demographic and attitudinal variables.

University of Toronto Press, 1986); Sandra Burt, "Organized Women's Groups and the State," in William D. Coleman and Grace Skogstad, eds. *Policy Communities and Public Policy. A Structural Approach*. (Mississauga, Ont.: Copp Clark Pitman Ltd., 1990) pp. 191-211.

⁴ A few examples where social and cognitive attributes are discussed are Jeremy Wilson "Wilderness Politics in BC: The Business Dominated State and the Containment of Environmentalism," in William D. Coleman and Grace Skogstad, eds. *Policy Communities and Public Policy*, (Mississauga, Ont.: Copp Clark Pitman Ltd., 1990) pp. 141-169. Also, in the public choice approach attention is paid to individual motivation in the formation, maintenance and impact of interest groups. One of the foremost proponents of this approach in the U.S. is Mancur Olson, see *The Logic of Collective Action, Public Goods and the Theory of Groups* (New York: Schocken Books, 1968); see also Robert H. Salisbury, ed. *Interest Group Politics in America* (New York: Harper and Row, 1970); Terry M. Moe, *The Organization of Interests* (Chicago: The University of Chicago Press, 1980).

All this is explored within the context of a case study of environmental activism in British Columbia. The reasons for this focus are two-fold. First, there is the prominence of environmental resource issues in the province; conflict has pushed the forest debate to the forefront of the policy agenda. Second, there is the limited capacity of earlier literature to explain environmentalism. By expanding the enquiry to include ideological and structural explanations as well as socio-economic factors, this study seeks to identify some of the underlying aspects of environmental activism as they relate to British Columbia. A limitation of such a case study is the question of whether findings from this research can be generalized elsewhere and to other environmental issues. Environmentalism embraces a wide diversity of concerns; the salience of forest issues in this province may, of itself, be a limiting factor. On the other hand, there is a need for comparative research to determine the applicability of environmental concern across regions and issues; the present study is intended to be a link in that process.

This thesis consists of five chapters. In chapter two, the main currents in the theoretical literature on environmentalism are reviewed and three main theoretical explanations examined; these are demographic, ideological and structural. The first approach - demographic - emphasizes social and psychological factors at the individual level; the

second - ideological - stresses the broad characteristics of advanced industrialized democracies and the individual's social location; and the third - structural - focuses on broad societal characteristics which give rise to environmentalism. All are relevant to the B.C. case in providing explanations and empirical evidence of environmentalism against which survey data from this study can be analyzed and compared.

Chapter three details the methodology of the study. It discusses the reasons for selecting forest environmental issues as the study area and for the choice of the research sample - members of Share Groups and of the Sierra Club of Western Canada. As well, the survey questionnaire design is outlined and information provided on data analysis.

Chapter four presents the data and analyses. In the first section, demographic categories such as age, education, occupation and place of residence are examined and comparisons made between the two groups. In the second section, attitudinal variables are investigated. Among these are attitudes toward such issues as jobs *versus* the environment, forest resource policy issues, public participation, environmental activism and other political behavior. In the third section, the demographic/attitudinal characteristics of B.C. environmental activists are compared with other research findings to identify where, along the spectrum of environmentalism, B.C. environmental activists are located.

Chapter five presents some conclusions about the findings and argues that because of its complexity, no single approach in the existing literature adequately explains environmental activism in the B.C. case. As well, some suggestions for further research are also discussed.

Chapter Two.

LITERATURE REVIEW:

Environmentalism has been the subject of considerable research over the past several decades. Much of the literature emanating from this research is focused on Europe where the environmental movement has been in existence longer and has had a stronger presence than elsewhere. This literature can be divided roughly into two camps: "structural" explanations based on macro approaches which focus on broad societal characteristics, and "ideological" explanations which stress micro-level individual psychological factors. A second body of literature, derived mainly from research in North America, emphasizes demographic correlates of public environmental concern. The structural model examines why individuals collectively engage in noninstitutional forms of political action such as environmentalism, the ideological model uses an actor-centered analysis of value change to explain individual motivation to support environmental causes, and the demographic model has provided a set of socio-demographic characteristics of environmentalists at the individual level which have been empirically linked with environmental activism.

These explanations - structural, ideological and demographic - provide the basis of analysis for the present study. They help to structure the analysis by identifying the

key variables which should be addressed in the effort to understand environmental activism in any particular locale - including that in the Province of British Columbia.

DEMOGRAPHIC EXPLANATIONS:

Numerous studies were undertaken during the 1960s and 70s - mainly in the U.S. - to determine public attitudes toward environmental issues. Environmentalism was measured in a variety of ways but, in general, attempts were made through sample survey techniques to measure respondents' concern for environmental quality or to measure their attitudes toward environmental protection. Analysis in most of these early studies focused on the socio-economic factors routinely included in such surveys; thus the largest body of data on the correlates of environmental concern consisted of social and demographic variables.⁵ There was, however, considerable dissensus with respect to both the data and its interpretation. One of the problems was related to the common practice among researchers to seek global measures of environmental concern by bringing together a wide range of issues - air and water pollution, wildlife protection, waste disposal, overpopulation, and others - under the matrix of environmental problems. Applying such diverse measures has

⁵ These were usually age, education, income, occupation, gender, residence and political party identification. Some researchers analyzed education, income and occupation as separate variables, while others used them as a measure of social class; see, for example, Lester W. Milbrath, *Environmentalists: Vanguard for a New Society* (Albany: State University of New York Press, 1984), pp. 75-77.

contributed little to our understanding of the dimensions of environmentalism, in part, because persons concerned about one environmental issue may not be equally concerned about the others.⁶ By the 1980s, however, researchers were focusing their studies more narrowly and increasingly using multiple item rather than single item indicators to improve the reliability of their analysis.⁷

In 1980, Van Liere and Dunlap reviewed American literature on bivariate associations of public environmental concern and identified five general hypotheses - the age, social class, residence, political, and gender hypotheses⁸ - four of which form the basis of the literature review on demographic variables in this study.

(i) Age:

Much of this research has shown that young people are more concerned about environmental quality than are older people. Some analysts contend that the age and generational structure of society provides an explanation for this finding. Theoretically, this involves two facets. The first is what Buttel has called the "sociopolitical generation."⁹ As used

⁶ W.K. Warriner has drawn a threefold topology into which three main groups of environmentalists fall; this is discussed by Timothy O'Riordan in his paper, "Toward a Strategy of Public Involvement" in W.R. Sewell and Ian Burton, eds. *Perception and Attitude Resource Management*, (Ottawa: Information Canada, 1971), pp. 105-06.

⁷ Kent D. Van Liere and Riley E. Dunlap, "Environmental Concern: Does It Make a Difference How It's Measured?" *Environment and Behavior*, 1981, Vol. 13, No. 6, pp. 651-76.

⁸ Van Liere and Dunlap, "The Social Bases of Environmental Concern: ...".

⁹ Frederick H. Buttel, "Age and Environmental Concern. A Multivariate Analysis," *Youth and Society*, 1979, Vol. 10, No.

by Mannheim in his theory of generations,¹⁰ this suggests that persons can be permanently affected by historical events (such as wars or depressions) which occur at crucial adolescent phases of their lives. The second is the phenomenon of aging and the aging/socialization process. Malkis and Grasmick argued that the first of these two facets - the phenomenon of the sociopolitical generation - which concurred with the mobilization of the youth movement during the 1960s and 70s over issues such as civil rights and Vietnam may help explain the pro environmental attitudes of young adults in the U.S. a decade later.¹¹ Relating to the second facet - the aging/socialization process - it has been argued that young people support environmental reforms more readily than do their elders because youth is less integrated into the economic system, or more generally, the dominant social order.¹² Hornback has suggested that because older people have a greater "investment" in society in political, economic and social terms, they are less willing to support environmental reforms which are often viewed as threatening to

3, pp. 237-56.

¹⁰ K. Mannheim, "The problem of generations," in *Essays on the Sociology of Knowledge* (New York: Oxford University Press, 1952), pp. 276-320.

¹¹ Allan Malkis and Harold G. Grasmick "Support for the Ideology of the Environmental Movement: Tests of Alternative Hypotheses," *Western Sociological Review*, 1977, Vol. 8, No. 1, pp. 25-47.

¹² *Ibid.*; K. E. Hornback, "Orbits of opinion: the role of age in the environmental movement's attentive public." Unpublished PhD dissertation, 1974, Department of Sociology, Michigan State University cited in Buttell, "Age and Environmental Concern ..."

the existing social order.¹³ Buttel has noted, however, if age is inversely related to environmental concern, "it is not ... clear whether [the] relationship is due to the phenomenon of the sociopolitical generation or the more general aging/socialization process."¹⁴

Other researchers have offered other possible explanations for young peoples' tendency to exhibit a greater concern for the environment. Van Liere and Dunlap, for example, have suggested that continued exposure to environmental deterioration through influences such as the media or educational courses has left an indelible imprint on young people which may not disappear as they live through the aging process.¹⁵ For Milbrath, "simple self interest" - that is, the longer life expectancy of younger people than the elderly - might account for youth's support for cleaning up the environment. As well, he has suggested, greater physical contact with the natural world through outdoor recreational activity, and the inclusion of environmental topics in school curricula, could help explain the relationship between age and environmentalism.¹⁶

As the foregoing indicates, the relationship between age and environmentalism is not entirely clear. Yet many researchers agree that the correlations, though usually fairly

¹³ *Ibid.*

¹⁴ Buttel, "Age and Environmental Concern ..."

¹⁵ Van Liere and Dunlap, "The Social Bases of Environmental Concern: ..."

¹⁶ Milbrath, "Environmental Beliefs and Values," p. 112.

low, are nevertheless statistically significant.¹⁷

(ii) Education:

As with the age variable, many studies have shown a modest, yet significant, relationship between education and environmental concern. Calvert found that in the resource-rich state of Montana, for example, legislation protecting the environment against the effects of resource development had its highest levels of support from "among college-educated white-collar professionals;"¹⁸ Wohlwill, analyzing voter preference for proposed legislation restricting development in ecologically sensitive coastal zones of California, also found support was correlated to education;¹⁹ a number of national opinion polls in the U.S. reported that the degree of concern about the quality of the natural environment was directly related to respondents' level of education and income;²⁰

¹⁷ For further discussion on the age hypothesis see Frederick H. Buttel and William L. Flinn, "Conceptions of Rural Life and Environmental Concern," *Rural Sociology*, 1977, Vol. 42, No. 4, pp. 544-55; Don A. Dillman and James A. Christenson, "The Public Value for Air Pollution Control: A Needed Change of Emphasis in Opinion Studies," *Cornell Journal of Social Relations*, 1975, Vol. 10, No. 1, pp. 73-95; Robert C. Mitchell, "The Public Speaks Again: A New Environmental Survey," *Resources*, 1978, Vol. 60, pp. 1-6.

¹⁸ Jerry W. Calvert "The Social and Ideological Bases of Support for Environmental Legislation: An Examination of Public Attitudes and Legislative Action," *The Western Political Quarterly*, 1979, Vol. 32, No. 3, pp. 327-37.

¹⁹ Joachim F. Wohlwill, "The Social and Political Matrix of Environmental Attitudes: An Analysis of the Vote on the California Coastal Zone Regulation Act," *Environment and Behavior*, 1979, Vol. 11, No. 1, pp. 71-85.

²⁰ National Wildlife Federation, "The U.S. Public Considers its Environment," Report on the national survey conducted by Gallup International, Inc., Washington, D.C., 1969; also "A Study of the Attitudes of the American Public Toward Improvement of the Natural Environment," Report on a national survey conducted by L. Harris and Associates, Washington,

Cotgrove, Larson et al, Milbrath and Mitchell have noted that in studies comparing environmental group members with the rest of the population, environmentalists were more highly educated;²¹ and research by Wiegel has indicated that better educated persons were more likely to participate in ecology projects than were those of lower educational levels.²²

While this seems to suggest that people with higher levels of formal education and higher economic status are supportive of environmental reform, the relationship does not necessarily hold. As Cotgrove has noted, industrialists too are well educated and in the upper middle income bracket, yet many are opposed to the goals of environmentalists.²³

Cauley and Groves have offered a clue to the enigma. In a study aimed at providing educators with information on how to incorporate conservation principles into high school curricula, they found considerable variation in knowledge of,

D.C., 1970; L.M. Lake, "The Environmental Mandate; Activists and the Electorate," *Political Science Quarterly*, 1983, Vol. 98, pp. 215-33; Hazel Erskine, "The Polls: Pollution and its Costs," *Public Opinion Quarterly*, 1971, Vol. 35, pp. 120-35.

²¹ Stephen Cotgrove, *Catastrophe or Cornucopia. The Environment, Politics and the Future*, (New York: Wiley and Sons, 1982), p. 18; M.A. Larson, D. Zimmerman and C. Sherer, "Communication Behavior by Environmental Activists Compared to Non-active Persons," *Journal of Environmental Education*, 1981, Vol. 12, pp. 21-24; Robert C. Mitchell, "How 'Soft,' 'Deep,' or 'Left?' Present Constituencies in the Environmental Movement for Certain World Views," *Natural Resources Journal*, 1980, Vol. 20, pp. 345-58.

²² Russell H. Weigel, "Ideological and Demographic Correlates of Proecology Behavior," *The Journal of Social Psychology*, 1977, Vol. 103, pp. 39-47.

²³ In an international survey involving environmentalists, industrialists and public officials, for example, industrialists held more university degrees than did environmentalists, see Cotgrove, *Catastrophe or Cornucopia*, pp. 19-20, 47.

and interest in, conservation among students of similar demographic backgrounds. As they noted, "the assumption is made that there is a direct relationship between knowledge and interest" and that there is "homogeneity among individuals in similar demographic groups."²⁴ The popular assumption, Cauley and Groves argued, is that there are rural-urban, male-female, and age differences in levels of conservation knowledge and interests. Their findings indicated, however, that knowledge and interest are separate entities, and that the development of each can largely be attributed to nondemographic variables. Much of the students' conservation interest and knowledge, for example, was obtained through active involvement and direct exposure in the form of family and organizational activities.²⁵

Although, as Cotgrove has noted, education is not necessarily correlated to environmental concern, high educational attainment features prominently among environmentalists. Furthermore, as will be discussed below, ideological and structural explanations stress education as an important aspect of environmentalism.

(iii) Income:

In analyzing the relationship between education and environmental concern, researchers often associate three variables - education, income and occupation; this largely

²⁴ Virgil B. Cauley and David L. Groves, "Some Important Variables Related to Conservation Knowledge and Interest," *Journal of Youth and Adolescence*, 1975, Vol. 4, No. 1, pp. 67-

72.

²⁵ *Ibid.*

because levels of formal education tend to correlate with levels of income and occupational status. While many studies have shown that high levels of education correlate positively with environmental awareness and concern, evidence suggests that the relationship between income and environmentalism is less conclusive. Milbrath has suggested that this may, in part, be due to the fact that

persons of very high income tend to be employed in business, and business people tend to hold economic values more highly than environmental values.²⁶

This contention has been supported by Costantini and Hanf in their study of elites involved in environmental decision-making. They found that two-thirds of the group which had a low-concern for environmental problems were high income businessmen.²⁷ Similarly, based on their analysis of competing interests between energy needs and environmental values, Rathbun and Lindner have suggested that the relationship between income and environmentalism appears to be determined by economic self-interest.²⁸

²⁶ Milbrath, *Environmentalists. Vanguard for a New Society*, p. 77.

²⁷ Edmond Costantini and Kenneth Hanf, "Environmental Concern and Lake Tahoe. A Study of Elite Perceptions, Backgrounds, and Attitudes," *Environment and Behavior*, 1972, Vol. 4, No. 2, pp. 209-42; see also Frederick H. Buttel and William L. Flinn, "The Structure of Support for the Environmental Movement, 1968-1970," *Rural Sociology*, 1974, Vol. 39, No. 1, pp. 56-69.

²⁸ P.F. Rathbun and G. Lindner, "Energy Needs vs. Environmental Values: Balancing of Competing Interests," Paper presented at Annual Meeting of the American Sociological Association, New York, 1980 cited in Milbrath, *Environmentalists. Vanguard for a New Society*, p. 77; see also Buttel and Flinn "The Structure of Support for the Environmental Movement."

The income variable has been included in many studies on environmentalism. Mitchell, reporting on a U.S. National Environmental Survey conducted as part of a Resources for the Future study, found that the most wealthy persons surveyed were somewhat less likely than those with middle incomes to support environmental protection "regardless of cost", while almost half of very low income respondents were supportive of the option.²⁹ In their study on support for economic growth and environmental protection, Marsh and Christenson have noted that income was not consistently related to support for either air or water pollution controls.³⁰ Tremblay and Dunlap found that neither income, education, nor age appeared to have an effect on the level of environmental concern among persons dependent on the utilization of natural resources. In such cases, they have argued, a 'utilitarian' as opposed to 'appreciative' attitude toward the natural environment appears to mediate.³¹ In modelling predictors of public environmental

²⁹ Mitchell "The public speaks again: A new environmental survey". The survey listed five groupings of income; of the lowest income group, 49 percent expressed support "regardless of cost"; of the three middle groupings, 56, 53, and 58 percent were supportive, and of the highest income group, 52 percent; see also Calvert, "The Social and Ideological Bases of Support for Environmental Legislation: ..."

³⁰ C. Paul Marsh and James A. Christenson, "Support for Economic Growth and Environmental Protection, 1973-1975," *Rural Sociology*, 1977, Vol. 42, No. 1, pp. 101-107.

³¹ Kenneth R. Tremblay, Jr. and Riley E. Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: A Replication and Extension," *Rural Sociology*, 1978, Vol. 43, No. 3, pp. 474-91; see also Buttell and Flinn, "Structure of Support for the Environmental Movement;" Frederick H. Buttell, "The Environmental Movement: Consensus, Conflict, and Change," *Journal of Environmental Education*, 1975, Vol. 7, No. 1, pp. 53-63.

concern by analyzing variables commonly examined by researchers, Honnold found that

people with higher income levels tend to have lower environmental concern, while those with higher educational levels tend to have higher environmental concern.³²

Honnold's evaluation on both direct and indirect effects of demographic variables on environmentalism has illustrated some of the problems of "relying solely on bivariate associations when complex relationships are involved."³³ From this then, it can be assumed that the income variable provides insights into the relative effects of socio-economic variables in multivariate analysis, but that as an independent variable it is of limited utility in explaining environmentalism.

(iv) Occupation:

The third variable of this grouping - occupation - has been used as a measure of environmental concern in many studies. Several explanations have been put forward, some of which tend to overlap in their explanatory value. The most significant of these explanations are related to measures of (a) occupational prestige, (b) occupational types, (c) utilitarian/appreciative and (d) market/non market.

The occupational prestige approach suggests that persons with high prestige occupations - those with advanced academic or technical training - are more likely to be concerned with

³² Julie A. Honnold, "Predictors of Public Environmental Concern in the 1970s," in Dean A. Mann, ed., *Environmental Policy Formation*, (Toronto: Lexington Books, 1981), pp. 63-75.

³³ *Ibid.*, pp. 71-3; see also Tremblay and Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: ..."

environmental problems than are those in low prestige - semi skilled or unskilled - occupations. Hendee *et al.*³⁴ and Devall³⁵, for example, found members of environmental and conservation groups were noteworthy for their high levels of educational attainment and occupational status. Faich and Gale have reported similar findings,³⁶ and Dillman and Christenson have noted that in their study of public values for pollution control, respondents in the highest skill categories (officials and professionals) ranked considerably higher on the public value index than did respondents in the middle categories (craftsmen, proprietors, managers, etc.) or lowest skill categories (e.g. labourers).³⁷

Sewell's analysis of two separate studies involving high status occupations, however, presents a different view. The

³⁴ John C. Hendee, William R. Catton, Larry D. Marlow, and C. Frank Brockman, "Wilderness users in the Pacific Northwest - their characteristics, values and management preferences," in Ronald G. Faich and Richard P. Gale, "The Environmental Movement," in Theodore B. Johannis Jr. and C. Neil Bull (eds), *Sociology of Leisure*, (London: Sage Publications, 1971) p. 39.

³⁵ W.B. Devall, "Conservation: an upper-middle class social movement: a replication," *Journal of Leisure Research*, 1970, Vol.2, pp. 123-36.

³⁶ In their study of the Sierra Club, the authors reported "professional positions [were] held by fully 73.8% of the respondents, an additional 9.8% were administrators and 9.2% students; only 2.8% were clerical workers and another 2.8% were unemployed ... 3% of the members [had] never attended college, while 25% [had] doctorates, 45.5% [had] master's degrees, and 17.4% the baccalaureate;" see Faich and Gale, "The Environmental Movement," p. 39. This same paper is also published in the *Pacific Sociological Review*, 1971, Vol. 14, No. 3, pp. 270-87.

³⁷ Don A. Dillman and James A. Christenson, "The Public Value for Pollution Control," in William R. Burch, Jr., Neil H. Cheek, Jr., and Lee Taylor, eds., *Social Behavior, Natural Resources, and the Environment*, (New York: Harper and Row, 1972) p. 251.

studies, undertaken in the 1960s in British Columbia, were related to the perceptions and attitudes of two groups of professionals - engineers and public health officials - involved in environmental quality management.³⁸ Both groups were employed in high prestige occupations, yet engineers ranked environmental deterioration far down the list of societal problems³⁹ while most "public health officials identified environmental quality problems as the major issue facing the province."⁴⁰

Other studies have indicated it is not high or low status occupations as such which influence attitudes toward the environment; rather, it is the **occupation type** that appears to be important. Commenting on three separate statewide surveys conducted in Wisconsin, Buttell and Flinn have noted that data relating occupation to pollution concern suggests "that occupational roles which are strongly linked with dominant economic (and nature-exploitive) interests lead to ambivalence regarding environmental reform."⁴¹ Of those surveyed and

³⁸ W.R. Derrick Sewell, "Environmental Perceptions and Attitudes of Engineers and Public Health Officials," *Environment and Behavior*, 1971, Vol. 3, No. 1, pp. 23-59.

³⁹ Sewell has cautioned that since the engineers' study was undertaken in 1967 before widespread public concern over environmental quality, a similar study at a later date may have yielded different results. However, he has also noted that other aspects of perception tested in the study indicated that engineers did view similar problems in a different light than did public health officials. Engineers sampled were drawn from government agencies, private consultant firms, and universities in the Vancouver and Victoria area of the province. *Ibid.*.

⁴⁰ *Ibid.*.

⁴¹ Buttell and Flinn, "Structures of Support for the Environmental Movement;" see also Buttell, "The Environmental Movement: Consensus, Conflict, and Change."

categorized as having high status occupations, business managers and proprietors were less likely to be concerned with environmental problems than were persons with professional or technical occupations.⁴² Of the low prestige workers, farmers and others who depended to a considerable degree upon economic exploitation of natural resources were the lowest in expressed environmental concern; clerical and sales personnel, on the other hand, tended to have high rates of concern.⁴³ Evidence from other studies has also suggested that people engaged in low prestige occupations in extractive industries such as farming, mining, fishing, and forestry, tend to have a more utilitarian view of nature.⁴⁴

The utilitarian/appreciative variable has been explored not only in terms of environmental concern, but as it relates to leisure and outdoor recreational activities as well. Hendee, in reviewing literature on rural-urban differences in outdoor recreation, also hypothesized differences in attitudes toward the natural environment may be related to differences in types of occupations.

⁴² *Ibid.*. Business managers and proprietors, according to the authors, tended to be more concerned with realizing a profit through their efforts and viewed environmental concern as an impediment to that goal. For a discussion in a similar vein, see also Sewell, "Environmental Perceptions and Attitudes of Engineers and Public Health Officials."

⁴³ *Ibid.*.

⁴⁴ Costantini and Hanf, "Environmental Concern and Lake Tahoe: A Study of Elite Perceptions, Backgrounds, and Attitudes;" Joseph Harry "Work and Leisure. Situational Attitudes," *Pacific Sociological Review*, 1971, Vol. 14, No. 3, pp. 301-09; Stan L. Albrecht, "Environmental Social Movements and Counter-Movements: An Overview and Illustration," *Journal of Voluntary Action Research*, 1972, Vol. 1, pp. 2-11.

Since rural occupations such as farming, mining, and logging are typically based on the exploitation and consumption of natural resources, they might encourage an exploitative attitude toward natural resources ... urban occupations, on the other hand, are typically in manufacturing or service industries far removed from the natural environment. Urban residence may thus allow the development of appreciative attitudes towards nature.⁴⁵

Further, he has argued

A utilitarian attitude toward nature may thus be associated with 'harvesting' recreational activities - fishing, hunting, and the like - whereas an appreciative orientation is more closely linked to the realization of aesthetic and social values in outdoor activities.⁴⁶

In testing this hypothesis, Harry found that there was some transfer between nature-exploitative occupations and outdoor recreation. Subjects whose occupations gave economic primacy to the use of natural resources viewed a "more extractive and manipulatory attitude toward natural resources in their leisure situations" as appropriate.⁴⁷

As an alternative to focusing on the utilitarian/appreciative dimension, others have suggested that it might be more useful to categorize people according to the sector of employment.⁴⁸ Cotgrove, one of the foremost proponents of this approach, has distinguished between the market and the

⁴⁵ John C. Hendee, "Rural-urban differences reflected in outdoor recreation participation," *Journal of Leisure Research*, 1969, Vol. 1, pp. 333-42.

⁴⁶ *Ibid.*

⁴⁷ Harry, "Work and Leisure. Situational Attitudes."

⁴⁸ Sector of employment research differs from type of occupation research by looking at the broader economic dimension, particularly in the light of Cotgrove's distinction between 'market' and 'non-market' categories.

non-market sectors. Those in the 'market' sector are primarily engaged in the production and sale of material goods, while those in the 'non-market' sector are persons primarily employed in personal service professions and creative arts.⁴⁹ Cotgrove's distinction is based on an analysis of comparative international studies which has indicated that persons whose livelihoods depend largely on the production and sale of material goods tend to be less environmentally oriented than those in occupations outside the market sector - i.e. teachers, social workers, doctors, etc..⁵⁰

Research has indicated that, in fact, environmentalists tend to be employed in occupations which give primacy to non-material values such as self expression and other intrinsic rewards, while non environmentalists (or industrialists, as Cotgrove refers to them) tend to choose occupations which provide extrinsic rewards such as "status, security and money."⁵¹

The foregoing suggests there is a relationship between occupation and environmentalism: however, whether it is

⁴⁹ Cotgrove, *Catastrophe or Cornucopia*, pp. 95-6; see also Stephen Cotgrove and Andrew Duff, "Environmentalism, Middle-Class Radicalism and Politics," *The Sociological Review*, 1980, pp. 333-51; Buttel, "The Environmental Movement: Consensus, Conflict, and Change."

⁵⁰ Cotgrove, *Catastrophe or Cornucopia*, especially chapter one; Milbrath, *Environmentalists. Vanguard for a New Society*, p. 74.

⁵¹ *Ibid.*, especially chapter three; see also Faich and Gale, "The Environmental Movement;" Hendee et al., "Wilderness users in the Pacific Northwest ..."; Milbrath, *Environmentalists. Vanguard for a New Society*, p. 39. M. Rosenberg et al., *Occupations and Values*. (Glencoe, Illinois: Free Press, 1958.)

initial differences in values that lead people to choose careers either in the 'market' or the 'non market' sector, or that these values are taught and reinforced when persons become employed in either sector is not clear. Milbrath has contended that "it is probable both kinds of influences are at work ..."⁵² Duff and Cotgrove, on the other hand, found in surveying university students to test the hypothesis that values are important in determining the choice of an occupation or career, that social science students were "more anti-industrial in their social values than students of management, engineering and economics"; they also found that the former tended to prefer non-industrial jobs. The choice of career, they have suggested, could be explained as "part of the process of political socialization and hence rooted in experiences of early adolescence."⁵³ It is important to recall, however, that persons with access to higher education do not necessarily represent the public at large, and as Cotgrove has noted, relative to the general public, environmentalists tend to have above-average education. This, he has argued, enables many to choose occupations which are "congruent with their values and ideals", a situation which is

⁵² Milbrath, *Environmentalists. Vanguard for a new Society*, p. 77.

⁵³ Andrew Duff and Stephen Cotgrove, "Social values and the choice of careers in industry," *Journal of Occupational Psychology*, 1982, Vol. 55, pp. 97-107. The authors were extending upon earlier research on social values and choices in careers, concentrating mainly on Rosenberg's *Occupation and Values* and on H.K. Schwarzweller, "Value orientations in educational and occupational choices," *Rural Sociology*, 1959, Vol. 24, pp. 246-56.

not available to the majority for whom work is primarily a source of income rather than self-fulfilment.⁵⁴

Generalizations which might be drawn from this research suggest that persons with occupations - either skilled or unskilled - focused on dominant economic or nature-exploitive interests are less likely to be environmentally oriented than are those related to 'human services'.

(v) Residence:

The residence variable has been identified by a number of researchers as an important indicator of environmental concern. Dunlap and Catton ranked residence as one of the best predictors of concern with environmental quality,⁵⁵ while Honnold reported that place-of-residence, ranking third after age and political ideology, performed well in her predictor models.⁵⁶ Tremblay and Dunlap have also supported the view that residence is an important variable to consider when examining public concern with environmental problems.⁵⁷ In these analyses, three sub categories have been identified as being particularly relevant to understanding the influence of place-of-residence on environmentalism. These are (a) a global rural-urban variable,⁵⁸ (b) a variable differentiating

⁵⁴ Cotgrove, *Catastrophe or Cornucopia*, p.44.

⁵⁵ Along with residence were identified education, age and political ideology; see Riley E. Dunlap and William R. Catton Jr., "Environmental Sociology" in Alex Inkeles et al. eds., *Annual Review of Sociology*, Vol. 5, (U.S.A.: Annual Reviews Inc., 1979), pp. 243-73.

⁵⁶ Honnold, "Predictors of Public Environmental Concern."

⁵⁷ Tremblay and Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: ..."

⁵⁸ Although many studies have been limited to single communities or specific samples such as students, etc., a

rural farm (utilitarian) - non farm (appreciative) categories,⁵⁹ and (c) a local-distant level of reference distinction,⁶⁰ all of which will be discussed more fully below.

The global rural-urban variable relates to differences between rural and urban residents. Evidence from a large number of studies in which the relationship between place-of-residence and environmental attitudes has been examined suggests that urban residents are more likely to be environmentally-oriented than are their rural counterparts.⁶¹ That urban residents are more concerned with environmental issues can be explained, according to some researchers, by the fact that they are typically exposed to more serious

number of researchers have compared the attitudes of rural and urban residents toward environmental issues such as air, noise and water pollution; for a list of a number of U.S. studies see *Ibid.*.

⁵⁹ Buttel and Flinn have differentiated rural farm and rural nonfarm residents' attitudes toward nature and environmental problems, see "The Structure of Support for the Environmental Movement;" others have categorized these differences utilitarian/appreciative, see Harry et al., "Conservation: an upper-middle class social movement;" Hendee et al., "Conservation, politics and democracy."

⁶⁰ The local vs distant reference was identified in studies focusing on environmental problems at the state or national level as opposed to problems at the local or community level.

⁶¹ See Van Liere and Dunlap "The Social Bases of Environmental Concern: ..." for a summary of extensive U.S. research undertaken in the 1970s; see also Tremblay and Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: ...;" Hendee et al., *Wilderness users in the Pacific Northwest - their characteristics, values, and management preferences*; Tognacci et al., "Environmental Quality. How Universal is Public Concern?" Harry et al. "Conservation: an upper-middle class social movement;" McEvoy, "The American Concern with Environment;" Richard L. Means, "Public Opinion and Planned Changes in Social Behavior: The Ecological Crisis," in Burch et al., *Social Behavior, Natural Resources, and the Environment*, pp. 203-13.

environmental problems such as air, water and noise pollution. The U.S. National Center for Air Pollution Control, for example, in plotting pollution ratings against population size reported air pollution to be strongly correlated with the size of the population.⁶² Van Tassel also found that air quality tended to deteriorate as the city size increased,⁶³ and Elgin et al. have provided evidence which indicates that urban areas are subject to higher levels of water and noise pollution as well.⁶⁴ The relationship between degree of concern about environmental problems and the actual level of pollution has also been subject to research. Studies by de Groot and Samuels, Schusky, Smith et al. and others confirm that as pollution increases with urban centre size, public opposition to it also increases.⁶⁵

⁶² See Tremblay and Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: A Replication and Extension" for National Center for Air Pollution Control, *Managing the Environment*, (Washington, D.C.: U.S. Government Printing Office, 1968.)

⁶³ Alfred Van Tassel, ed., *Our Environment. The Outlook for 1980*. (Lexington, Massachusetts: Lexington Press, 1973.)

⁶⁴ See Tremblay and Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: ..." for Duane Elgin, Tom Thomas, Tom Logothetti and Sue Cox, *City Size and the Quality of Life*, (Washington, D.C.: U.S. Government Printing Office, 1974.)

⁶⁵ Ido de Groot, "Trends in public attitudes toward air pollution," *Journal of the Air Pollution Control Association*, 1967, No. 17, pp. 679-81; David E. Kromm, Ferenc Probal and Geoffrey Wall, "An international comparison of response to air pollution," *Journal of Environmental Management*, 1973, No. 1, pp. 363-75; Dillman and Christenson, "The Public Value for Pollution Control;" see McEvoy, "The American Concern with Environment" for I. de Groot and S. Samuels, *People and Air Pollution: A Study of Attitudes in Buffalo, N.Y.*, (Buffalo: New York State Department of Health, Air Pollution Control Board, 1962,) and W.S. Smith, J.J. Scheuneman and L.D. Zeidberg, "Public reaction to air pollution in Nashville, Tennessee," *Journal of the Air Pollution Control Association*, 1964, Vol. 14, pp. 445-48; N.Z. Medalia and A.L. Finker,

The relationship between rural-urban residence and environmental concern, however, is more complex than such correlations imply. Buttell and Flinn found in their Wisconsin surveys that, contrary to many other studies, rural residents were more concerned with environmental problems than were urban residents. However, when rural residence was separated into farm and non farm components, significant differences became apparent, the rural farm grouping being much less environmentally concerned than were both the non-farm and urban groupings.⁶⁶ These findings were supported by Kronus and van Es who found that farmers - dependent on fertilizers which run off into water supplies - were much less concerned about water pollution than were nearby urban male respondents.⁶⁷ And in their study of attitudes toward the pesticide industry, Salcedo et al. also reported that farmers dependent on pesticides harmful to the environment viewed the industry more favourably than did nearby urban residents.⁶⁸

Community Perception of Air Quality: An Opinion Study in Clarkson, Washington, (Cincinnati, Ohio: U.S. Public Health Service Publication, 1965 No. 99.)

⁶⁶ Buttell and Flinn, "The Structure of Support for the Environmental Movement." In a later study, these researchers distinguished agrarianism and ruralism based much on the same utilitarian/appreciative dimension with a similar relationship to environmental concern; that is, agrarianism had a lower correlation with environmentalism than did ruralism. They found, however, that ruralism was stronger in the upper-middle class segment rather than in population studied as a whole, see Buttell and Flinn, "Conceptions of Rural Life and Environmental Concern."

⁶⁷ Carol L. Kronus and J.C. van Es, "The Practice of Environmental Quality Behavior," *Journal of Environmental Education*, 1976, Vol. 8, pp.19-25.

⁶⁸ Rodolfo N. Salcedo, Hadley Read, James F. Evans, and Anna C. Kong, "Rural-urban Perspectives of the Pesticide Industry," *Rural Sociology*, 1971, Vol. 36, pp. 554,62.

These varying attitudes, as noted above, are thought to be related - at least to some degree - to occupational differences, some analysts associating 'farm' with 'utilitarian' and 'non farm' with 'appreciative' orientations.⁶⁹ Hines et al. have suggested that since rural occupations such as farming often involve the use of natural resources they are extractive or exploitive in nature.⁷⁰ And as such, Hendee, Harry and others have argued, people dependent on farming and other occupations such as mining, logging and trapping are assumed to believe "that nature is to be used, not just appreciated."⁷¹

The local vs distant reference, associated with public perceptions about environmental problems at the local, national or global level, is yet another dimension of environmentalism. The phenomenon is no less complex than others encountered by researchers. In analyzing survey data related to awareness and concern for environmental damage at several different levels - community, state, national - Murch found that while most respondents agreed pollution was a serious problem at the state or national level, they were far less inclined to acknowledge that it was a serious threat to

⁶⁹ The utilitarian/appreciative dimension was discussed earlier in this chapter.

⁷⁰ See Tremblay and Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: ..." for Fred K. Hines, David L. Brown and John M. Zimmer, *Social and Economic Characteristics of the Population in Metro and Non-metro Counties*, (Washington D.C.: USDA Economic Research Service, Agricultural Economics Report 272, 1970.)

⁷¹ Hendee, "Rural-urban differences reflected in outdoor recreation participation;" see also Harry, "Work and Leisure. Situational Attitudes."

their own community despite the fact that pollution was as serious there as it was elsewhere in the country.⁷² These findings, Murch has argued, might be explained in two ways. One reason might be that environmental concern has been heavily influenced by mass media reporting which is more likely to focus on environmental problems at the state, national or global level; as such, many would tend to view pollution as a general problem external to one's own community. Another reason might be what de Groot suggests is a "denial system" at work,⁷³ or as Murch has described it, "a basic reluctance to acknowledge serious defects in one's own immediate surroundings."⁷⁴

Dillman and Christenson also found the local-distant referent at work in their State of Washington study on the public value for air pollution action, albeit in a slightly different way. Although a high percentage of respondents strongly supported air quality improvement,⁷⁵ there was a

⁷² Arvin W. Murch, "Public Concern for Environmental Pollution," *Public Opinion Quarterly*, 1971, Vol. 35, No. 1, pp. 100-06.

⁷³ de Groot hypothesized that while respondents might be willing to admit that air pollution was bad for the population as a whole, to admit that one's neighbourhood or city experienced higher levels demanded decisions about its potential impact on family health and welfare, and about whether or not to remain in the area, see "Trends in Public Attitudes Toward Air Pollution."

⁷⁴ Murch has suggested that this attitude may related to the degree of attachment or commitment individuals feel for their communities, and to the fact that they either do not perceive the problem as serious, or prefer not to acknowledge it; see "Public Concern for Environmental Pollution."

⁷⁵ Dillman and Christenson noted that data suggested exposure to air pollution made no difference in the extent to which people wanted control actions taken; see "The Public Value for Air Pollution Control: A Needed Change in Emphasis in Opinion

tendency among those from communities with higher levels of pollution to exhibit a lower value for action. This, according to the researchers,

may suggest that the higher the pollution level in a given community, the more ... concern tends to reflect on acceptance of the existence of pollution rather than a desire for action.⁷⁶

Tremblay and Dunlap's analysis of data from statewide surveys of Oregonians, while substantiating Murch and de Groot's findings, also illustrated that other factors such as actual pollution levels come into play. Overall, the data indicated that while more than half the respondents viewed pollution as a serious problem at the state level, a considerably smaller proportion considered it a serious problem in their own community. However, when broken down into sub-categories comparing rural and urban attitudes, while urban residents expressed higher levels of pollution concern than did rural residents, their concern was focussed much more strongly at the community level than at the state level of reference.⁷⁷

From the foregoing it can be argued that while place of residence plays a role in environmentalism, other mitigating factors may be equally important in shaping environmental attitudes. For example, in small communities where economic growth is necessary in order to survive, such growth may be

Studies,"

⁷⁶ Ibid..

⁷⁷ Tremblay and Dunlap, "Rural-Urban Residence and Concern with Environmental Quality: ..."

valued over environmental protection.

(vi) Gender:

Although the gender variable has been included in some studies investigating the correlates of environmental concern, it has not been as widely researched as have been other demographic variables; relatively little attention has been specifically devoted to a detailed examination of the possible relationship between gender and environmentalism. Of those studies which have explored the relationship, there is evidence to support the hypothesis that women are more environmentally concerned than are men.

That women tend to be more environmentally-oriented than men, some writers have suggested, is related to sex-role socialization.⁷⁸ Since the industrial revolution, it is argued, western culture has come to view nature primarily as a resource base to be exploited and conquered through scientific and technological development. This has led to differing roles for men and women. Men, according to these writers, were regarded as the appropriate carriers of scientific-technological change and were socialized to emphasize qualities such as rationality, competitiveness and mastery over the environment, whereas women, because of their identification with the more ecologically benign roles of

⁷⁸ See Ian G. Barbour, *Technology, Environment, and Human Values*. (New York: Praeger, 1980); Elizabeth D. Gray, *Why the Green Nigger?* (Wellesley, Mass.: Roundtable Press, 1979); Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution*. (San Francisco: Harper and Row, 1979.)

mother and nurturer, were considered less suited to the task of controlling nature.⁷⁹ Further, it is argued, basic sex-role differences are reinforced by men's dominance in positions which value economic growth and see nature as a means of achieving such growth. Women, by contrast, have tended to lack power within economic, political and scientific-technological institutions, and as such, are not only less committed to these goals than are men, but may also be less confident that economic growth is possible without damaging the physical environment.⁸⁰ Female-male differences toward the environment, therefore, have both practical and theoretical implications.⁸¹

As with other variables discussed earlier, research on the gender-environmental concern relationship has provided conflicting evidence. Analysts such as Tognacci et al.,

⁷⁹ See also Susan Griffin, *Women and Nature*. (New York: Harper and Row, 1978); R.S. Cowan, "From Virginia Dare To Virginia Slims: Women and Technology in American Life," *Technology and Culture*, 1979, Vol. 20, pp. 51-63.

⁸⁰ *Ibid.*; See also Ian R. McStay and Riley E. Dunlap, "Male-Female Differences in Concern for Environmental Quality," *International Journal of Women's Studies*, 1983, Vol. 6, No. 4, pp. 291-301 for E.M. Passino and J.W. Lounsbury, "Sex Differences in Opposition to and Support for Construction of a Proposed Nuclear Power Plant," in L.M. Ward et al., eds., *The Behavioral Basis of Design, Book 1*. (Stroudsburg, Penn: Hutchinson and Ross, 1976), and for J.H. Reed and J.M. Wilkes, *Sex and Attitudes Toward Nuclear Power*, Paper presented at the Annual Meeting of the American Sociological Association, Boston, August, 1980.

⁸¹ Since efforts to enhance environmental quality apply equally to men and women, there is a practical aspect to identifying, and understanding, male-female differences in environmental concern. For example, many waste control and conservation programs are aimed at modifying household consumption; since women are more likely than men to perform household tasks, it is useful to know if they are likely to be concerned with environmental quality.

Grossman and Potter, and the National Wildlife Federation reported negligible results.⁸² Van Liere and Dunlap⁸³ reported modest positive gender associations while Arbuthnot and Lingg⁸⁴ reported modest negative associations. McEvoy, analyzing data from a national opinion poll, found men to be more concerned about the environment than women,⁸⁵ and in a statewide survey designed to measure public environmental knowledge, Arcury et al. found men to be both more knowledgeable and concerned about a range of environmental issues than were women.⁸⁶ Lowe et al., on the other hand, analyzing data from several representative samples of the U.S. population over a six year period from 1973 to 1978, reported females scored higher on environmental concern,⁸⁷ and Passino

⁸² Tognacci et al. "Environmental Quality: How Universal is Public Concern?"; See McStay and Dunlap, "Male-Female Differences in Concern for Environmental Quality" for G.M. Grossman and H.R. Potter, "A Trend Analysis of Competing Models of Environmental Attitudes." Working Paper No. 127, Institute for the Study of Social Change, Purdue University, 1977; see also Van Liere and Dunlap, "The Social Bases of Environmental Concern: ..."

⁸³ *Ibid.*.

⁸⁴ J. Arbuthnot and S. Lingg, "A Comparison of French and American Environmental Behaviors, Knowledge, and Attitudes." *International Journal of Psychology*, 1975, Vol. 10, pp. 275-81.

⁸⁵ McEvoy, "The American Concern with Environment."

⁸⁶ See T.A. Arcury and T.P. Johnson, "Public Environmental Knowledge: A Statewide Survey," *The Journal of Environmental Education*, 1987, Vol. 18, No. 3, pp. 31-37 for T.A. Arcury, T.P. Johnson and S.J. Scollay, *Ecological Worldview and Environmental Knowledge: An Examination of the "New Environmental Paradigm."* Center for Developmental Change, University of Kentucky, Manuscript, 1985. The survey dealt with the general environment of the U.S., that of Kentucky, and the causes of water pollution including acid rain.

⁸⁷ George D. Lowe, Thomas K. Pinhey and Michael D. Grimes, "Public Support for Environmental Protection," *Pacific Sociological Review*, 1980, Vol. 23, No. 4, pp. 423-45.

and Lounsbury, Reed and Wilkes, Ray, and Brody, focusing more narrowly on the environmental hazards of nuclear energy, found women to be less supportive of nuclear power than men.⁸⁸

Looking at other sources of energy, Jackson, in one of the relatively few studies undertaken in Canada, found that women perceived the need to conserve energy such as natural gas and oil more seriously than did men.⁸⁹ Overall, then, while research has not found gender to be an important predictor of environmental concern neither has it ruled out that male-female differences exist.

McStay and Dunlap have offered some possible reasons for this ambiguity. One of the problems, in their view, was related to the data itself in that many of the earlier studies relied on public opinion polls in which environmental concern was measured only by a single item. Insofar as "single item indicators have poor reliability and validity," they argued, "it is important to test the sex-environmental concern relationship using multi-item scales."⁹⁰ They also

⁸⁸ Passino and Lounsbury, "Sex Differences in Opposition to and Support for Construction of a Proposed Nuclear Power Plant;" Reed and Wilkes, *Sex Attitudes Toward Nuclear Power*; John J. Ray, "Measuring Environmental Attitudes," *The Australian and New Zealand Journal of Sociology*, 1975, Vol. 11, No. 2, pp.70-1; Charles J. Brody, "Differences by Sex in Support for Nuclear Power" *Social Forces*, 1974, Vol. 63, No. 1, pp. 209-28. Milbrath also notes "that most of the indigenous leaders among home owners mobilized by the toxic waste crisis at Love Canal in Niagara Falls, New York, were women," Milbrath "Environmental Beliefs and Values;" see also A.G. Levine, *Love Canal: Science, Politics, and People*. (Lexington, Mass.: Heath, 1982.)

⁸⁹ Edgar L. Jackson, "Perceptions of Energy Problems and the Adoption of Conservation Practices in Edmonton and Calgary," *Canadian Geographer*, 1980, Vol. 24, No. 2, pp. 114-30.

⁹⁰ In discussing single-item indicators, the authors refer to

maintained, as noted earlier in this thesis, that "[since] people are often more concerned about some aspects of environmental quality than about others," it might be more useful to focus on specific issues such as "pollution control, resource conservation, and population control rather than upon the global issue of 'environmental problems'."⁹¹ And finally, they contended, analysis of the sex-environmental relationship should encompass not only evidence based on surveys of the general public, but of the relationship among environmental activists as well. In their view,

[if] male-female differences in environmental attitudes and behaviors are found among environmentalists as well as among the public we will have more faith in the existence of such differences.⁹²

In one of the few studies designed specifically to examine the gender-environmental concern relationship, McStay and Dunlap surveyed environmental attitudes and behaviors of residents from Washington State and members of a statewide environmental organization. Their analysis of the data provided support⁹³ for their hypothesis that women are more environmentally concerned than are men, noting also, however,

the work of J.C. Nunnally, *Psychometric Theory*. (New York: McGraw-Hill, 1967), see McStay and Dunlap, "Male-Female Differences in Concern for Environmental Quality."

⁹¹ *Ibid.*.

⁹² *Ibid.*.

⁹³ The researchers noted that while the overall pattern of correlations provided "modest support" for their hypothesis that environmental concern was higher among women than among men, it was important to recall that research, in general, has not demonstrated strong relationships between demographic variables and environmental concern.

that in terms of behavior,

while females engage[d] in *personal* behaviors on behalf of environmental quality significantly more often than [did] males, they [were] slightly less likely than males to engage in *public* behaviors.⁹⁴

Thus, while women were found to be more strongly committed to a 'pro-environmental' lifestyle than were men, they were less likely than men to engage in political action on behalf of the environment

In concluding, the relationship between demographic factors and environmentalism is complex and often not clear. This has prompted researchers such as Milbrath to comment that demographic categories do little to explain why some people, for example, become environmentalists and others not.⁹⁵ As indicated in this review, however, some factors are more relevant than others. The implications of demographic variables, therefore, will be referred to again later with reference to the hypotheses set out in chapter three.

⁹⁴ *Ibid.*. The type of personal activity referred to included such things as recycling, cutting down on driving, and avoiding environmentally damaging products of all types, while public activities included contacting government officials, business or industry, and writing letters to newspapers and magazines. McStay and Dunlap noted that these same pattern differences, while not as pronounced as in the general public sample, were still discernible among female and male environmentalists.

⁹⁵ Milbrath, *Environmentalists. Vanguard for a New Society*, pp. 74-5.

IDEOLOGICAL AND STRUCTURAL EXPLANATIONS:

During the 1960s and 70s, researchers (in the U.S., in particular) attempted to explain environmentalism empirically on the basis of the analysis of demographic factors; by the 1980s, theorists (mainly from Western Europe) were providing other explanations. Two types of theories central to current discussion on environmentalism are ideological and structural. The first - the ideological model - emphasizes individual psychological factors, while the second - the structural model - emphasizes macro characteristics of advanced industrial democracies and the social location of individuals.⁹⁶ Neither explanation is mutually exclusive, however, since there is considerable overlap between them. Macro models focusing on the social position of individuals also contain a psychological component in explaining why certain segments of society are more supportive of environmental causes than others. Ideological models, on the other hand, stress the psychological characteristics of individuals independent of their social location. Both generally agree, however, that this ideological/psychological dimension of environmentalism

⁹⁶ These distinctions - ideology and structure - are provided by Herman Bakvis and Neil Nevitte, "The Greening of the Canadian Electorate," in Robert Boardman, ed., *Canadian Environmental Policy: Ecosystems, Politics, and Process*. (Toronto: Oxford University Press, 1992) and Robert Rohrschneider, "The Roots of Public Opinion toward New Social Movements: An Empirical Test of Competing Explanations," *American Journal of Political Science*, 1990, Vol. 34, No. 1, pp. 1-30.

is located in the 'new middle class' of advanced industrial societies.⁹⁷

Ideology:

Ideological theories attempting to explain environmentalism stress individual-level psychological factors, primarily those related to political values. The most prominent micro theory is that of Ronald Inglehart. Inglehart's postmaterialist value thesis posits that an intergenerational shift from materialist to postmaterialist value priorities has taken place in advanced industrial states. The shift from a materialist emphasis on economic and physical security to a postmaterialist emphasis on self-expression and quality of life, according to Inglehart, can be traced to sustained material prosperity and the development of the welfare state in the post World War II era.⁹⁸

The materialist-postmaterialist thesis is based on two key hypotheses - the *scarcity hypothesis* and the *socialization hypothesis*. The first argues that an individual's priorities reflect the socio-economic environment, and that "one places the greatest subjective value on those things that are in relatively short supply." The second argues that there is a time lag in the relationship between socio-economic environment and value priorities, and that "one's basic values reflect the conditions that prevailed during one's

⁹⁷ See Robyn Eckersley, "Green Politics and the New Class: Selfishness or Virtue?" *Political Studies*, 1989, Vol. 37, pp. 205-223.

⁹⁸ Ronald Inglehart, *Silent Revolution*. (New Jersey: Princeton University Press, 1977).

preadult years."⁹⁹ Taken together, these hypotheses imply that prosperity is conducive to postmaterialist values; as such, it can be expected that substantial differences in value priorities exist between older and younger groups since each would have been shaped by different experiences during their formative years.¹⁰⁰

Inglehart uses these two hypotheses to explain cultural and political changes occurring in postwar industrial democracies. The scarcity hypothesis is similar to the principle of diminishing marginal utility:¹⁰¹ it suggests that with physical sustenance and safety needs met, individuals will put greater emphasis on esteem, self-expression and aesthetic satisfaction and less on economic and physical security. Thus the generally high levels of economic and physical security that prevailed during the postwar era help explain the shift to postmaterialist priorities. The socialization hypothesis qualifies the first. Since younger

⁹⁹ Inglehart, *Culture Shift in Advanced Industrial Society*, p. 56.

¹⁰⁰ Inglehart points out, however, the prevalence of postmaterialist values reflect an individual's *subjective* sense of security, not the economic level per se. In other words, while these values may be influenced by a sense of affluence and security, they are also affected by the cultural setting and social institutions in which an individual is raised, *Ibid.*, p. 68.

¹⁰¹ Following criticism of his initial explanation built on Maslow's theory of need hierarchy (Abraham Maslow, *Motivation and Personality*. [New York: Harper & Row, 1954], Inglehart revised his thesis focusing on the principle of diminishing marginal utility and deemphasizing the Maslowian underpinnings; see Herman Bakvis and Neil Nevitte, "In Pursuit of Postbourgeois Man. Postmaterialism and Intergenerational Change in Canada," *Comparative Political Studies*, 1987, Vol. 20, No. 3, pp. 357-89.

generations experienced conditions of relative affluence and material abundance during their preadult years, it is among members of these generations that postmaterialist values tend to be highest. Once acquired, these value priorities guide an individual's perception of problems and influence their political behavior.

The cultural shift from materialist to postmaterialist values over the past several decades, Inglehart argues, has a number of important political implications.¹⁰² First, with material needs fulfilled postmaterialists have more time and energy to invest in political and moral/survival issues such as nuclear power and environmental pollution. Second, since institutional systems which focus on the physical and material needs of society are not capable of meeting self-actualization goals of individuals, postmaterialists are attracted to nonconventional forms of political action engaged in by such direct action interest groups as pacifists and environmentalists.¹⁰³ And third, because of higher educational levels postmaterialists have both the capacity to

¹⁰² Inglehart's theory has been the subject of considerable controversy both in terms of its underpinnings and of its operationalization. His materialism-postmaterialism (MPM) forced-choice scale has, however, produced consistent results for more than two decades; see *Ibid.*; Eckersley, "Green Politics and the New Class: ..."; Jacquetta Newman, "Uncertainty and Social Movement Mobilization. An Examination of the British Peace and Environmental Movements," Paper presented at the Annual Meeting of the Canadian Political Science Association, 1992, Charlottetown, P.E.I..

¹⁰³ Inglehart argues that because of their adoption of postmaterialist values, postmaterialists have become the main participants of these movements, see Robert Inglehart, "Post-Materialism in an Environment of Insecurity," *American Political Science Review*, 1981, Vol. 75, No. 4, pp. 880-900.

understand national and international politics and the political and communicative skills to participate more actively on the political scene. As a consequence, they are better able to engage in what Inglehart calls 'elite-challenging' - a style of politics that gives the public an increasingly important role in decision-making - as opposed to 'elite-directed' activities' - a style in which political participation is largely elite-mobilized support through political parties and other established organizations such as labour unions and religious institutions.¹⁰⁴

Two decades of survey research across several countries¹⁰⁵ has produced a socio-demographic profile of postmaterialists and a framework of their value priorities. Postmaterialists, for example, are concentrated among a relatively prosperous strata of any given age group; they have more education, tend to be employed in high status occupations, and earn above-average incomes. Inglehart argues, however, that their postmaterialist values tend to make this group economic under-achievers. Unlike materialists who tend to attach more importance to safe jobs and higher incomes, postmaterialists deemphasize economic achievement

¹⁰⁴ Inglehart, *Culture Shift in Advanced Industrial Society*, pp. 5, and chapter 10.

¹⁰⁵ Survey research has been conducted in Western Europe, North America, Australia and Japan; see *Ibid.*, *passim*. Initially, the MPM index consisted of four items, these were later increased to a twelve-item battery. Questions related to law and order, freedom of speech, economic growth, national defense, greater public participation in government decision-making, etc.; see Inglehart, *Culture Shift in Advanced Industrial Society*, pp. 74-75, 131-34.

stressing status and quality of life, i.e. a sense of community, interesting and meaningful work, or the protection of the environment.¹⁰⁶ Postmaterialists are against big business, big science, and big government - "bureaucratic organizations that are evaluated negatively because they are inherently impersonal and hierarchical, minimizing individual self-expression and human contact."¹⁰⁷ In business, postmaterialists favour industry/employee co-decision making, or even a dominant role given to employees; in government, they favour greater regional autonomy as a means of achieving greater equality.¹⁰⁸ In politics, postmaterialists are more likely to vote for the Left.¹⁰⁹ This trend, however, has become increasingly selective in that the postmaterialist vote tends to go to parties such as ecology parties that have distinctive programs tailored to postmaterialist concerns.¹¹⁰

¹⁰⁶ *Ibid.*, pp. 162-69.

¹⁰⁷ *Ibid.*, p. 269.

¹⁰⁸ *Ibid.*, p. 304.

¹⁰⁹ Inglehart emphasizes the changing nature of the political spectrum of the "left" arguing that there has been a shift from 'class-based to value-based polarization.' Whereas formerly, the working class has been linked to the Left and the middle class to the Right, the social bases of new support for parties of the Left tends to come from middle class postmaterialists. He argues, however, that this can be problematic for these parties since the goals of postmaterialists - environment over jobs, for example - may stimulate a reaction among their working class constituencies which may side with the Right to reaffirm the traditional emphasis of economic growth and law and order, see *Ibid.*, pp. 258-64;

¹¹⁰ For an analysis of ecology parties in Western Europe see Wilhelm P. Burklin, "The German Greens. The Post-Industrial Non-Established and the Party System," *International Political Science Review*, 1985, Vol. 6, No. 4, pp. 463-81 and Ferdinand Muller-Rommel, "The Greens in Western Europe. Similar But Different." *International Political Science Review*, 1985, Vol. 6, No. 4, pp. 483-99; see also Robert C. Paehlke,

Structure:

While ideological theorists stress individual level characteristics such as values, social location theorists emphasize the inability of political institutions to cope with the complex policy issues in advanced industrial democracies.¹¹¹ For Claus Offe, a prominent theorist of "postindustrial" society¹¹², "the central problem of democratic politics in modern society is to maintain the diversity within civil society while creating some measure of unity, or bindingness, of political authority."¹¹³ The problem is more easily solved, he argues, when the underlying diversity over issues remains one of *interests*; it becomes more difficult when values must also be mediated.¹¹⁴ During the post World War II period, for example, there was broad

Environmentalism and the Future of Progressive Politics.
(London: Yale University Press, 1989).

¹¹¹ There are other explanations; some social location theorists, for example, focus on the cyclical recurrence of protest movements in modern nations; see Philip Lowe and Jane Goyder, *Environmental Groups in Politics.* (London: George Allen and Unwin, 1983); see also Rohrschneider, "The Roots of Public Opinion toward New Social Movements: ..." for Sidney Tarrow, *Struggling to Reform.* Occasional Papers No. 15, Ithaca: Cornell University, 1983.

¹¹² For a succinct summary of the main arguments of other prominent theorists of postindustrial society see Herbert Kitschelt, "Left-Libertarian Parties: Explaining Innovation in Competitive Party Systems," *World Politics*, 1988, Vol. 40, pp. 194-234.

¹¹³ Claus Offe, "Challenging the Boundaries of Institutional Politics: Social Movements since the 1960s," in Charles S. Maier, ed., *Changing boundaries of the political.* (Cambridge: Cambridge University Press, 1987), p. 65.

¹¹⁴ *Ibid.*; see also Claus Offe, "New Social Movements: Challenging the Boundaries of Institutional Politics," *Social Research*, 1985, Vol. 52, No. 4, pp. 817-68.

agreement in western industrialized nations on the value of economic growth and the distribution of rewards through welfare state policies. These policies were directed toward stimulating private investment, reducing unemployment, maintaining national security, and administering various social needs.¹¹⁵ The period was not devoid of social and political conflict, but throughout the 1940s and 50s there was, Offe argues, an undisputed agreement regarding "'interests', issues, actors, and institutional modes of resolving conflict." Conflict resolution mechanisms were almost exclusively collective bargaining, party competition, and representative government. Within this framework, alternative modes of resolving conflict, or collective actors which could not easily be accommodated, were marginalized.

There are however, Offe suggests, inherent 'contradictions' in the development of the welfare state. On the one hand, there is the state's increasing intrusion of the private sphere through control, support, and regulation into what were formerly more independent areas of social life - culture, family, and the labour market, for example - thereby limiting the personal autonomy of citizens. On the other hand, there is the state's decreasing capacity to deal effectively with the perverse effects of industrial policy making and political modernization; environmental pollution and inequality of women and minority groups, for example,

¹¹⁵ See Claus Offe, *Contradictions of the Welfare State*. (London: Hutchinson, 1984).

continue to exist. In Offe's words:

The conflicts and contradictions of advanced industrial society can no longer be meaningfully resolved through etatism, political regulation, and the inclusion of ever more issues on the agendas of bureaucratic authorities.¹¹⁶

Thus as public policies impact more directly on citizens, they in turn, collectively challenge the adequacy of existing institutional channels of communication, many of them turning to "noninstitutional or nonconventional forms of political participation, such as protest, demonstrations, and unofficial strikes."¹¹⁷

Offe's analysis focuses on four principal components - *issues, values, modes of action, and actors*.¹¹⁸ The dominant *issues*, Offe argues, are a concern with "physical territory, space of action, or 'life world'". These encompass health and identity, the physical environment and conditions of life, and the survival of mankind in general. Most prominent among *values* are autonomy and identity, i.e. decentralization, self-government and self-help as opposed to "manipulation, control, dependence, bureaucratization, and regulation." *Modes of action* typically consist of two aspects - an 'internal mode' which relates to individuals becoming highly informal, context-sensitive, egalitarian collective actors - and an

¹¹⁶ *Ibid.*, p. 64-5; see also Offe, "New Social Movements: Challenging the Boundaries of Institutional Politics."

¹¹⁷ Offe, "Challenging the Boundaries of Institutional Politics: ..." p. 63; see also *Contradictions of the Welfare State*, especially chapter 8.

¹¹⁸ Offe, "New Social Movements: Challenging the Boundaries of Institutional Politics."

'external mode' which consists largely of protest tactics intended to mobilize public attention through 'unconventional' means. This mode of action, Offe suggests, emphasizes the 'principled and nonnegotiable nature of concerns' which is, in part, contingent upon the actors' belief that their concern is of "such high and universal priority that no part of it can be meaningfully sacrificed (e.g. in issues linked to the values of 'survival' or 'identity') without negating the concern itself."¹¹⁹ Perhaps the most striking aspect of the actors is that they do not rely on left/right, poor/wealthy, rural/urban identity. This is not to say, however, that in terms of their *social base* they are in fact heterogeneous in class and ideological terms. One of Offe's main arguments is that the primary actors of protest movements are members of the new middle class. It is the well-educated professionals lacking direct vested interest in government or industrial enterprises - those employed in human service professions - that have the cognitive skills to understand the 'contradictions' of modern industrial societies and the communicative skills to challenge political leaders. These 'policy takers' as he calls them form a loose political alliance with two other identifiable strata, namely 'decommodified' groups and elements of the old middle class. Decommodified groups are those from outside the formal labour market - the marginally employed, housewives, students and the retired - that have flexible time schedules enabling them to engage in political activities; the old

¹¹⁹ *Ibid.*, p. 831.

middle class consists of independent and self employed shop keepers, farmers and artisans whose economic interests at times converge with environmentalists.¹²⁰

Given its importance to both the ideological and structural explanations, the 'new class' dimension of environmentalism deserves further attention. Research findings have consistently shown that environmental activists tend to be drawn from a particular social strata - the new middle class. Inglehart argues, for example, that postmaterialists, by definition members of the new class, "furnish the ideologues and core support for the environmental, zero-growth and antinuclear movements".¹²¹ Offe identifies core activists and supporters of the environmental movement as having membership in the new class and summarizes their characteristics as "high educational status, relative economic security ... and employment in personal-service occupations."¹²² Morrison and Dunlap, in a recent review of American literature, report that 'core environmentalists' (leaders and active members of formal environmental organizations) typically are college graduates holding professional-level jobs with incomes that are 'moderately skewed upscale',¹²³ and Cotgrove's survey of

¹²⁰ *Ibid.*, p. 834.

¹²¹ Inglehart, "Post-Materialism in an Environment of Insecurity."

¹²² Offe, "New Social Movements: ..."

¹²³ Denton E. Morrison and Riley E. Dunlap, "Environmentalism and Elitism: a Conceptual and Empirical Analysis," *Environmental Management*, 1986, Vol. 10, No. 5, pp. 581-89.

environmental activists in Britain also accords with this general profile.¹²⁴

In addition to being identified as a socio-economic stratum, the new class has also been identified as having a certain kind of mentality or 'adversary culture' that is critical of the status quo. The 'culture of critical discourse', or CCD, is Alvin Gouldner's term for adversary culture. The CCD he posits, "is the deep structure of the common ideology shared by the new class."¹²⁵ It is an ideology about discourse - i.e. the grammar or the ground rules of speech which have evolved historically. An essential feature of the CCD is that claims and assertions be 'justified without reference to the speaker's societal position or authority.' In fact, Gouldner argues, 'the culture of critical speech forbids (emphasis added) reliance upon the speakers' person, authority, or status in society to justify his claims.'¹²⁶ Aided by the communications revolution, the CCD is a discourse which is cosmopolitan and increasingly international, and one which, because of societal changes, is increasingly insulated from family and local elites. According to Gouldner, adherents of the CCD 'define themselves as responsible for and 'representative' of society as a whole,

¹²⁴ Cotgrove, *Catastrophe or Cornucopia*, p. 19. For a counter argument to the above, however, see Rohrschneider, "The Roots of Public Opinion toward New Social Movements: ..." in which the author argues that social class is only weakly associated with support for environmental causes.

¹²⁵ Alvin W. Gouldner, *The Future of Intellectuals and the Rise of the New Class*. (New York: Seabury Press, 1979), p. 48.

¹²⁶ *Ibid.*, p. 29.

an attitude which he maintains is particularly prominent among teachers and academics.¹²⁷

The CCD, Gouldner argues, underlies the language spoken by the two main elites of the new class; the "*intelligentsia* whose intellectual interests are fundamentally 'technical'" and the "*intellectuals* whose interests are primarily critical, emancipatory, hermeneutic and hence often political". The intelligentsia - essentially technical or problem solvers - Gouldner argues, are accommodative of the status quo while the humanistic intellectuals are more likely to provide revolutionary leadership in social movements such as environmentalism.¹²⁸

Both ideological and structural models provide explanations for the emergence of environmentalism in the past several decades and summarize characteristics of its main participants. Excluded from both Inglehart and Offe's analyses, however, are the industrial working class.¹²⁹ Also excluded are those who provide the technical and administrative services (Gouldner's 'technical intelligentsia), and who are said to have an ambivalent

¹²⁷ *Ibid.*, pp. 28-9, 64-5.

¹²⁸ The idea of a new class embodying an adversary culture is not restricted to humanistic intellectuals and technical intelligentsia. Anyone may participate in the culture of critical discourse; certain groups, however, because of their social backgrounds and education are more likely to participate than others.

¹²⁹ Although for the purpose of this thesis, reference is made to the industrial working class, it should be noted that the other traditional class of capitalist society - the 'business class' - is also excluded from Inglehart and Offe's analysis.

relationship with environmentalism.¹³⁰ Such an approach tends to gloss over the considerable overlap in concerns between the middle class and working class; environmentalists and many workers, for example, are equally concerned about safe and non polluting industries. Furthermore, environmentalists' more universalistic concerns such as global nuclear threat and global environmental degradation affect everyone.¹³¹ The exclusion of these two groups is particularly relevant to this study since, as will be discussed further, both groups represent a significant percentage of the research sample, that is, forest workers and technical experts within the forest industry.

Of the three approaches examined in this literature review, theoretical analysts have emphasized structural and ideological explanations which focus on broad societal factors in explaining environmentalism. Empirical analyses featuring demographic explanations have been considered of less explanatory value largely because of the often-ambiguous relationship found to exist between socio-economic factors and

¹³⁰ See Eckersly, "Green Politics and the New Class: Selfish or Virtue?"

¹³¹ Buttel and Flinn, for example, have argued that the middle class pro-environmentalism generalization tends to overlook compelling reasons why industrial workers should be environmentally concerned given the disproportionately large amounts of workplace pollution, see Frederick H. Buttel and William L. Flinn, "Social Class and Mass Environmental Beliefs: A Reconsideration," *Environment and Behavior*, 1978, Vol. 10, No. 3, pp. 433-50; see also Patricia Sexton and Bernard Sexton, *Blue Collars and Hard Hats*. (New York: Random House, 1971).

environmentalism.¹³² It is not inconceivable to suggest, however, that not only is there considerable overlap between structural and ideological explanations, but that demographic explanations interact with both models as well.

At the broader level, structure and ideology provide explanations for the emergence of environmentalism and its influence on political behavior. Demographic analyses provide a more detailed - albeit less inclusive - view of individual-level social/psychological factors and their relationship to environmental attitudes which provide evidence both for and against more-macro-level ideological and structural arguments.

This suggests that socio-economic variables should not be discounted, particularly in areas of study in which occupational roles or sector of employment, for example, may have some bearing on environmental attitudes. On the other hand, demographic analyses focus primarily on micro-level factors with little reference to ideological and structural factors, both of which provide explanations of environmentalism at the broader plane.

The approach in this study therefore is to look to all three models in attempting to explain environmental activism in British Columbia. On the basis of this literature review, it is hypothesized that demographic and attitudinal

¹³² This ambiguousness has prompted some analysts to comment that demographic variables do little to explain environmentalism, see, for example, Milbrath, *Environmentalists. Vanguard for a New Society*, and Van Liere and Dunlap, "The Social Bases of Environmental Concern: ...".

differences exist among environmental activists in the B.C. case, and that there is a positive relationship between demographic and attitudinal variables. The issues and questions which arise from these hypotheses, as well as an analysis of the data derived from the survey, will be addressed in the chapters that follow.

Chapter Three:

THE STUDY:

The Survey Group:

The present study is based on data from a survey of two organizations in British Columbia - the Sierra Club of Western Canada and Share Groups¹³³ - conducted over a four month period commencing in late September, 1991 and completed by mid January, 1992. Since it was not possible to directly access organization membership lists, the 989 copies of a self-administered mail questionnaire were distributed to members by each organizations' central office. The Sierra Club of Western Canada mailed 489 copies to a randomly selected sample of club members residing in British Columbia, while Share B.C.¹³⁴ forwarded 500 copies to sixteen local Share Groups throughout the province, each local office undertaking to mail the questionnaire to randomly selected local Share Group members.¹³⁵ Four hundred and seventy-eight completed

¹³³ Share Groups are distinguished from the organization representing most forest industry workers, the International Woodworkers of America (IWA). Although many Share Group workers are also members of the IWA, they and their supporters have formed their own organizations representing specific local issues. For the IWA position on forest environmental issues see IWA-Canada, *Forest Policy*. Third Annual Convention and National Executive Board, 1989.

¹³⁴ Share B.C., whose office is located at Ucluelet, B.C., is the umbrella organization for local Share Groups throughout the province.

¹³⁵ Share Groups of British Columbia participating in the survey were: *Share Our Resources Society*, Port Alberni; *Share Our Forests Society*, Cobble Hill; *Share The Stein Committee*, Boston Bar; *Share The Stein (Lytton)*, Lytton; *Share The Clayoquot Society*, Ucluelet; *Share The Cariboo*, Williams Lake; *Share Smithers*, Smithers; *Lillooet-Bridgeriver Share Society*,

questionnaires were returned (48.3 percent of those distributed). These included two hundred and eight-four from Sierra Club members (58 percent) and one hundred ninety-four (38.8 percent) from Share Group members.

The choice of forest resource issues and of Share Groups and the Sierra Club of Western Canada was based on several considerations. A first consideration was the high salience of forest environmental problems in British Columbia. In a survey of the *Vancouver Sun* from January 1 to June 30, 1990 forest related issues dominated media coverage on the 'environment'.¹³⁶ In economic terms, forestry is the largest revenue-earning industry in the province with product sales of \$11.5 billion.¹³⁷ It is estimated that the timber product sector generates 17.5 percent of total provincial employment and 25.5 percent of the provincial gross product.¹³⁸

Bralorne; *North Cariboo Share Our Resources Society*, Quesnel; *Share The Rock Society*, Sandspit; *Kootenay West Share Society*, Kaslo, Kaslo; *Kootenay West Share Society*, Nakusp, Nakusp; *Share The Central Okanagan Society*, Kelowna; *Share Vernon*, Vernon; *North Island Citizens for Shared Resources*, Port McNeil; *McBride Valley Timber Association*, McBride.

¹³⁶ The survey reviewed media coverage of environmental issues (e.g. water quality, waste management and various types of pollution) within the province for the period January 1 to June 30, 1990. During that time, forestry and forest-related environmental issues accounted for approximately 40 percent of the issues reported.

¹³⁷ Natural Resource Management Program (NRMP), Simon Fraser University, *Wilderness and Forestry: Assessing the Cost of Comprehensive Wilderness Protection in British Columbia*. (Burnaby: Simon Fraser University, 1990), p. 3.

¹³⁸ Romain Jacques, *The Impact of the Forestry Sector on the Economy of Canada and Its Provinces: An Input-Output Approach*. (Ottawa: Canadian Forestry Service, 1988) cited in Elaine Bernard, "Labour and the Environment: A Look at BC's 'War in the Woods,'" in Daniel Drache, ed., *Getting on Track*. Canadian Centre for Policy Alternatives, Ottawa. (Montreal: McGill University Press, 1992), p. 204.

Furthermore, many of the province's communities are especially dependent on forestry, seventy of them having been identified as dependent almost exclusively on this single industry.¹³⁹ Forest industry workers therefore are interested in a steady supply of wood for the mills and processing plants that provide jobs and economic stability. Since the early 1970s, however, there has been growing public concern over the sustainability of forest resources.¹⁴⁰ Awareness of the problem has coincided with the growth of the forest environmental movement since the late 1960s. The movement has done much to publicize industry waste, controversial logging practices, and poor reforestation performance.¹⁴¹ Although environmentalists have also called for more environmentally sound logging practices, their main thrust has been to preserve old growth forests which, because of their profitable timber, are particularly attractive to forest companies. Environmentalists put forward a number of arguments to make their case; old growth wilderness areas should be preserved for their own intrinsic worth; we have a moral obligation to preserve these areas for future generations; they should be preserved to maintain species and genetic diversity; in

¹³⁹ NRMP, *Wilderness and Forestry*, p. 12.

¹⁴⁰ For an account of forest issues in the province see Jeremy Wilson, "Forest Conservation in British Columbia, 1935-85: Reflections on a Barren Political Debate," *B.C. Studies*, 1987/88, No. 76, pp. 3-32; also by the same author, "Wilderness Politics in BC," and H. Peter Pearse, *Timber Rights and Forest Policy in British Columbia*. Report of the Royal Commission on Forest Resources (2 vols). (Victoria: Queen's Printer, 1976).

¹⁴¹ Wilson, "Forest Conservation in British Columbia, 1935-85: Reflections on a Barren Political Debate," p. 25.

preserving them we provide recreational opportunities for British Columbians; as well, wilderness preservation pays economic dividends through tourism.¹⁴² Of forest environmental issues, saving old growth forests has received the most widespread support from the public. In the words of Ben Parfitt, the Vancouver Sun's forestry reporter:

Old growth forests, and the likelihood of their disappearance in all but the current system of parks, wilderness areas and ecological reserves, lie at the heart of most of today's land use disputes in B.C..¹⁴³

A second consideration was that both the Sierra Club and Share Groups feature prominently among the various interest groups actively involved in forest issues.¹⁴⁴ Much as Sierra Club members argue their case for the preservation of old growth forests, Share Groups advance a 'shared- or multiple-use' approach to forest management rather than having areas dedicated to single-use as in parks or wilderness areas.¹⁴⁵

¹⁴² Wilson, "Wilderness Politics in BC," p. 142; see also Joan E. Vance, *Tree Planning. A Guide to Public Involvement in Forest Stewardship* (Vancouver: B.C. Public Interest Advocacy Centre, 1990), pp. 7-8.

¹⁴³ Ben Parfitt, "Old growth forests report sparks attack on Ministry," *Vancouver Sun*, December 7, 1989, p. F4.

¹⁴⁴ The media survey noted above was indicative not only of the salience of forest environmental issues in the province, but of the extent to which the Sierra Club and Share Groups were involved in forest environmental issues as well; for more recent comments, see Mark Hume, "The Players: A guide to the Groups," *Vancouver Sun*, April 17, 1993, p. A8.

¹⁴⁵ Multiple use of forest lands was officially adopted by the provincial government in new forest legislation enacted in 1978 [Ministry of Forests Act, sec. 4(c)].

Multiple-use of the resource, they argue, allows for the preservation of jobs and recreational opportunities. As advocates of this strategy they suggest that special preserves - the giant sitka spruces of the Carmanah Valley, for example - can be saved while logging continues on the slopes. Groups such as the Sierra Club argue, however, that 'the survival of such preserves depends on the continued existence of whole ecosystems and watersheds.'¹⁴⁶ Thus members of both organizations are activists involved in environmental issues, but each represent different views in the province's ongoing forest debate.

The Hypotheses:

These contrasting beliefs and values about the environment have been identified in a number of research studies.¹⁴⁷ Milbrath has labelled them the 'dominant social paradigm' (DSP) and the 'new environmental paradigm' (NEP).¹⁴⁸ Although each is distinct, there is some correspondence between his characterizations and those of Inglehart's

¹⁴⁶ Bernard, "Labour and Environment."

¹⁴⁷ Constantini and Hanf, "Environmental Concern and Lake Tahoe: ...;" Cotgrove, *Catastrophe or Cornucopia*; Cotgrove and Duff, "Environmentalism, Middle Class Radicalism and Politics;" Van Liere and Dunlap, "Environmental Concern. Does It Make a Difference How It's Measured?" see also Milbrath, "Environmental Beliefs and Values," for a discussion on these two paradigms in which he identifies contrasting beliefs and values of each.

¹⁴⁸ Milbrath, *Environmentalists. Vanguard for a New Society*; see also Offe, "New Social Movements: Challenging the Boundaries of Institutional Politics;" Cotgrove, *Catastrophe or Cornucopia*; Riley E. Dunlap and Kent Van Liere, "The New Environmental Paradigm," *The Journal of Environmental Education*, 1978, Vol. 9. No. 4, pp. 10-19.

materialist-postmaterialist thesis.¹⁴⁹ Persons who adhere to the dominant social paradigm place a high value on material wealth and uphold the economic, social and political arrangements of modern industrial society. Those of the 'new paradigm' question many of the beliefs and values currently in vogue in modern industrial society and seek fundamental changes in economic and political affairs. Situated along a continuum between these two 'ideal' types, are those who partake of both paradigms. Many people are concerned with environmental problems and are sympathetic to environmental causes but they also hold aspirations for material wealth.¹⁵⁰ These Milbrath has labelled 'environmental sympathizers' or 'conservationists'.

This thesis investigates the spectrum of environmentalism in the B.C. case by linking the three approaches examined in the literature review. The goal of integrating these explanations is to address some of their limitations in examining environmental activism at what is essentially a meso level of analysis.¹⁵¹ Demographic explanations, for example,

¹⁴⁹ See also in this same vein, Bakvis and Nevitte, "The Greening of the Canadian Electorate."

¹⁵⁰ Milbrath, "Environmental Beliefs and Values;" see also Mitchell, "The Public Speaks Again: A New Environmental Survey."

¹⁵¹ Wassenberg distinguishes three levels of analysis in examining policy communities. The *macro* level, the *micro* level, and the *sectoral* or *meso* level. See Arthur F. Wassenberg, "Neo-Corporatism and the Quest for Control: the Cuckoo Clock Game," in P. Schmitter and G. Lehmbruch, eds. *Patterns of Corporatist Policy-Making*. (London: Sage, 1982). This approach seems appropriate in examining environmentalism in the BC forest industry given the difficulties noted earlier in the literature review with respect to analyzing environmentalism under a broad matrix of environmental

do not delve into the broad societal/structural dimensions of environmentalism which are examined in both the ideological and the structural approaches. Rather, they investigate demographic and social-psychological correlates of environmental concern at the micro level. Ideological explanations provide some empirical evidence to support a theory that posits a cultural shift has occurred in advanced industrial societies, but since the research upon which the thesis is based is national in scope, regional nuances are lost. The theory-grounded structural approach, on the other hand, provides explanations for the rise of environmentalism and for political behavior of environmentalists, but offers little by way of empirical evidence. By drawing on all three approaches this study seeks to identify not only how B.C. forest environmental activists differ but to evaluate why these differences might exist and to aid in the process of theory development.

Demographic studies are useful in that they identify how socio-economic variables might influence attitudes toward the environment. This is relevant in the B.C. case. Some environmental activists such as forest industry workers, by virtue of their occupations, are more likely to live in rural communities and to be dependent on nature-exploitive occupations for their livelihoods. Evidence suggests there is

concerns, see chapter two; see also William D. Coleman and Grace Skogstad, eds., *Policy Communities and Public Policy in Canada: A Structural Approach*. (Mississauga: Copp Clark Pitman Ltd., 1990).

likely to be a correlation between this type of employment and utilitarian attitudes toward the natural environment.

Environmentalists, on the other hand, tend to reside in urban settings and to have professional occupations in the 'human service' sector far removed from resource extractive industries. They are more likely to emphasize preserving nature for its own sake rather than using it to produce goods for human consumption.¹⁵²

Ideological explanations overlap with demographic explanations. For example, education features prominently in research on environmentalism. However, there appears to be consonance between environmentalism and certain fields of higher education that is lacking in other fields; Gouldner's 'technical' and 'humanistic' distinctions, for example, have been found in various studies. This distinction is relevant to the B.C. case where technical expertise plays a major role in the resource-extractive forest industry. Nevertheless, higher educational attainment often goes hand in hand with postmaterialist values which encompass a more inclusive

¹⁵² Hay and Haward discuss the implications of wilderness preservation in North America (and in Australasia). They argue that the desire to preserve wilderness is a form of advanced radicalism; the notion that wilderness has its own justification for 'being in and of itself' - without reference to its use value to humans - calls into question "the most fundamental tenet of western civilization, the belief that rights are strictly human categories, and that no countervailing principle exists to bar humanity from behaving in any it deems fit toward the non-human world;" see P.R. Hay and M.G. Haward, "Comparative Green Politics: Beyond the European Context?" *Political Studies*, Vol. 36, pp. 433-48; see also Milbrath, *Environmentalists. Vanguard for a New Society*, especially chapter three.

attitude toward the natural world, limits to economic growth, empathy to other people, and a more open, participatory society.¹⁵³

Structural explanations also overlap with the ideological ones. The debate over the preservation of old growth forests in British Columbia, for example, revolves around diverse and often conflicting attitudes and values found in this issue. Offe has argued that conflict over values becomes more acute when the fundamental question of whether rewards allocated count as valuable. Traditionally, the provincial government has pursued the 'politics of exploitation'; preserving old growth calls these policies into question.¹⁵⁴ As more people attach greater value to wilderness and 'the wilderness experience',¹⁵⁵ it is likely that challenges to the goals and policies of decision makers will increase and will be organized through institutional and noninstitutional channels.¹⁵⁶

¹⁵³ *Ibid.*.

¹⁵⁴ Edwin R. Black, "British Columbia. The Politics of Exploitation" in Patricia E. Roy, ed., *History of British Columbia*. (Toronto: Copp Clark Pitman Ltd., 1989); see also Wilson, "Forest Conservation in British Columbia, 1935-85: Reflections on a Barren Political Debate," and by the same author, "Wilderness Politics in B.C."

¹⁵⁵ See, for example, Mark Hume and Nick Didlick, "Pressures on Paradise," *Saturday Review in the Vancouver Sun*, May 29, 1993, pp. C 7-14.

¹⁵⁶ Environmental groups have declared they will engage in protests, blockades, etc., in response to the provincial government's recent decision to allow the forest industry to log sixty percent of Clayoquot Sound, the largest remaining tract of old growth forest on Vancouver Island. Greenpeace has organized workshops to instruct protesters in non-violent confrontation techniques, see Glenn Bohn, "Activists get schooled in civil disobedience," *Vancouver Sun*, May 31, 1993, p. B2; see also Gordon Hamilton, "Environmentalists call for

These issues which are the pith and substance of environmental activism in the B.C. case suggest a layering effect between socio-economic characteristics underlying demographic analyses and attitudinal variables underlying ideological and structural ones. It can be argued that demographic categories provide the link between individual actors and the attitudes, beliefs and values associated with environmentalism and identified in ideological and structural explanations.

On this basis, the following hypotheses have been developed:

1. That environmental activists in B.C. will differ significantly in terms of demographic variables.
2. That environmental activists in B.C. will differ significantly in terms of attitudinal variables.
3. That there is a positive relationship between demographic variables and attitudinal variables.

The Survey Questionnaire:

The questionnaire for the study was designed to provide a socio-economic profile of environmental activists, to evaluate their attitudes and their political and behavioral participation in environmental issues, and to compare these with categorizations provided elsewhere in the literature on

boycott," *Vancouver Sun*, May 11, 1993, p. D3 in which European environmentalists are said to have joined the ranks of protesters; as well, The First Nation Tribes of Clayoquot Sound have vowed to protect their interest in a land claim dispute over the area, see Karen Gram, "Indians vow all-out action to block logging plan," *Vancouver Sun*, May 1, 1993, p. B7.

environmentalism. In constructing the instrument, a number of items were adapted from a questionnaire used in a three-nation comparative study (England, Germany and the United States) of environmental beliefs and values conducted in 1980 and repeated in 1982.¹⁵⁷ These items tapped attitudes toward the natural environment, technology, decision-making, obligation toward others, etc., all matters about which environmentalists tend to hold strong views. This previous research indicated that environmentalists, for example, believe that solving environmental problems require changing our lifestyles, not developing better technology;¹⁵⁸ that they attach high priority to decentralized decision-making and greater public participation;¹⁵⁹ and that they put a strong emphasis on saving natural resources for future generations.¹⁶⁰ These and other relevant questions were included in the present survey, and in this respect, it sought to replicate findings from earlier empirical studies in a setting (British Columbia) where no such empirical studies have been undertaken. Questions specific to the province were also included. These focused mainly on forest environmental issues which are part of the current debate - ways and means of resolving the

¹⁵⁷ See Milbrath, *Environmentalists. Vanguard for a New Society*, pp. 15-17. Although the questionnaire addresses a number of environmental issues, it also incorporates aspects which are reflective of Inglehart's MPM thesis; see, for example, Inglehart's twelve-item MPM index in *Culture Shift in Advanced Industrial Society*, p. 74.

¹⁵⁸ *Ibid.*, p. 38.

¹⁵⁹ Cotgrove, *Catastrophe or Cornucopia*, p. 61.

¹⁶⁰ Milbrath, *Environmentalists. Vanguard for a New Society*, p. 29.

conflict, opinions on government effectiveness in dealing with related environmental problems, attitudes toward civil disobedience such as logging road blockades and other forms of demonstrations protesting current logging practices, and others.

Fifty items were included in the questionnaire (see Appendix A). The majority were forced-choice questions supplemented by a number of open-ended questions. One question, for example, asked respondents to rank, in order of importance, seven suggested uses of old growth forests within the province; another, that from a list of five choices they select a resource management proposal which, in their view, represented the best option to manage the forest resource on a sustainable basis while maintaining environmental quality. In some cases, forced-choice questions presented alternatives such as jobs *versus* environment, or controlling government spending *versus* providing social services, while others consisted of 'agree-disagree' choices over issues such as depletion of natural resources, the use of technology, the rights of other species, etc.. In these items, participants were asked to respond within a six category scale. Open-ended questions related to various aspects of forest resource and environmental issues. One solicited information on what motivated the individuals to become involved in the debate; another asked what, in the respondents' view, were the most appropriate uses of natural resources; still another requested that the three most important forest policy issues

be identified. Respondents were also asked to list what measures or mechanisms they believed would help work out an acceptable compromise to the majority of people involved. In addition to the above variables, environmental attitudes were measured against "indicators of environmentalism" based on Inglehart's materialist-postmaterialist (MPM) index.¹⁶¹

Analysis of the data was conducted using the SPSS programme and consisted of frequency distributions, bivariate cross-tabulations, a comparison of subsample mean-scores, and other tests designed to aid in the elaboration of an environmental spectrum and the evaluation of the three hypotheses cited above.

¹⁶¹ See Inglehart, *Culture Shift in Advanced Industrial Society*, pp. 74-75; 131-34.

Chapter Four.

DATA AND ANALYSIS.

In this chapter, the data analysis is presented in three sections focusing on each of the hypotheses set out in the introduction. The first of these states that the two groups of environmental activists - Share Groups and the Sierra Club of Western Canada - will differ significantly in terms of demographic variables.

Demographic Variables:

As a first step in comparing similarities and differences among environmental activists, demographic variables are analyzed. In so doing, however, this study departs from the four general hypotheses identified by Van Liere and Dunlap (and examined in the literature review in chapter two) in order to more accurately reflect the B.C. case. Cotgrove, for example, has hypothesized that sector of employment - the market sector vs the non market sector - is indicative of differing attitudes toward environmental issues.¹⁶² Given the diversity among environmental activists in British Columbia, seven commonly used socio-economic variables are examined; these are education, occupation, and sector of the economy, income, age, gender and place of residence.

¹⁶² Cotgrove, *Catastrophe or Cornucopia*, pp. 95-6.

Education, Occupation and Income:¹⁶³Education:

In reviewing data on education, occupation and income, several important differences between Share Group members and the Sierra Club become apparent. Of the entire population, 30 percent reported terminating formal education at the secondary level while 70 percent continued at the post secondary level, the mean educational attainment being 17 years. Separated into groups, nearly one half (47 percent) of Share Group

Table 4.1 Demographic Characteristics.
Education.

	Share (n194)	Sierra (n284)	Gap
Education *			
Secondary	52.1%	14.3%	37.8%
>Secondary	46.9	84.5	-37.6
Degrees			
Diploma	12.4	4.9	7.5
BA, BSc, etc.	17.5	34.2	-16.7
MA	2.1	17.6	-15.5
PhD	1.0	9.2	- 8.2
Missing Values	67.0	34.2	

* Because of the large number of missing values in the degree category, valid percentages are not used in the education variable as they are elsewhere in the tables.

respondents reported continuing their formal education beyond secondary school, the majority graduating at the regional-college-diploma level or at the university-graduate-degree level, with a small percentage (3 percent) completing post

¹⁶³ Some researchers analyze education, income and occupation as separate variables as they are in this study, while others use them as a measure of social class; see, for example, Milbrath, *Environmentalists: Vanguard for a New Society*, pp. 75-77.

graduate degrees. By comparison, 14 percent of Sierra Club respondents reported terminating their education at the secondary level while 85 percent continued studies at the post secondary level; of these, over one quarter (27 percent) acquired degrees at the post graduate level. Thus while more Share Group respondents completed their formal education to the technical diploma level than Sierra Club members, the reverse is true at the university degree level.

The fields of study also differ. Share Group respondents almost exclusively pursued forestry and technical studies; other programs represented - but to a much lesser degree - are accounting and business administration. Among Sierra Club respondents, although the emphasis of education is in the 'human services' - i.e. social work, education, health, and such - there is considerably more diversity in that the sciences, administration, etc. are also reasonably well represented.

Occupation and Sector of Employment:

Looking at occupation among Share Groups, there was a predominance of managerial/administrative and professional/technical responses to the survey (52 percent), and a relatively low representation of forest workers (23 percent). The three major categories for Share Groups therefore are (i) technical experts consisting of managerial/administrative (28 percent) and professional/technical (23 percent), (ii) forest worker and other forestry-related occupations such as heavy duty mechanics (23 percent), and (iii) those located in

various sales, clerical and small business areas. Not surprisingly, resource extraction - providing 65 percent of

Table 4.2 Demographic Characteristics.
Occupation and Sector of Employment.

	Share (n194)	Sierra (n284)	Gap
Occupation			
Mgr/Admin	28.4%	9.5%	18.9%
Prof/Tech	23.2	37.3	-14.1
Res/Wkr	23.2	3.5	19.7
Sal/Cler/Svs	13.4	8.5	4.9
Other (including retired, govt/empl., students).	11.9	41.2	-29.3
Sector of Employment			
Nat. resources	65.4	7.5	57.9
Manuf/transp. etc.	7.9	8.9	- 1.0
Services	16.8	27.8	-11.0
Other (including retired, govt/empl).	9.9	55.9	-46.8

employment, is by far the most important sector of the economy for Share Groups; other areas providing smaller numbers of jobs are manufacturing, transportation and other resource-related services.

Data on the occupation and sector of employment variables for Sierra Club respondents present quite a different picture. Two occupational categories dominate; (i) the 'professional/technical' category (37 percent) engaged primarily in health and social services and in education; (ii) the 'other' category (41 percent) which corresponds to Offe's 'decommodified' group consists of persons who are retired, those occupied in a variety of "human services" and a small group of independent, self-employed individuals. The categories labelled 'Service' and 'Other' in the sector of

economy variable require some clarification. Under 'Services', for example, 43 percent of respondents identified themselves as 'retired' while another 41 percent indicated they were employed in various education-, health- and social- related services. The breakdown in the 'Other' category is similar with 'retired' topping the list (43 percent), followed by education (24 percent), health and social services (17 percent), and the remainder consisting of government employees, artists, and students.

Income:

Turning to income, of the entire population, 12 percent earned less than \$25,000. while 88 percent reported incomes of over \$25,000., one half of which exceeded \$46,000. At the bottom end of the scale with yearly incomes less than \$15,000. are 7 percent of Sierra Club respondents compared to 1 percent

Table 4.3 Demographic Characteristics.
Income.

	Share (n194)	Sierra (n284)	Gap
< \$15,000	1.1 %	7.0 %	- 5.9%
15,000 - 24,999	3.8	9.3	- 5.5
25,000 - 45,999	40.9	47.4	- 6.5
> 46,000	54.3	36.3	18.0

of Share Group respondents in that same category. Most of the Sierra Club members falling within this income category identified 'services (including homemaker)' as their area of occupation. The base line of incomes is \$25,000 (see Table 4.3). Although there are slightly more (6.5 percent) Sierra

Club than Share Group respondents in the \$25,000. to \$45,999. income group, the reverse is true of higher incomes; here, 54 percent of Share Group members reported incomes over \$46,000. compared to 36 percent among Sierra Club. The distribution of incomes results in a mean income of \$32,500. for Sierra Club participants compared to \$38,333. for Share Groups'. Overall, these findings confirm previous research which indicates that environmental activists tend to be drawn from the middle class income brackets but that they cannot be considered upper middle class as their educational levels and professional status' might suggest.

Age:

In terms of age, it has been argued, as noted above, that young people tend to be more environmentally oriented than old, yet younger people - those under 21 years of age - are conspicuously absent from both groups; even the number of 21 to 30 year olds is small. By comparison, older people (61 years and over) account for 35 percent of all respondents in the survey; of these, 30 percent are Sierra Club members.

Table 4.4 Demographic Characteristics
Age

	Share (n194)	Sierra (n284)	Gap
61 years and over	5.2%	30.0%	-24.8%
51 - 60	10.4	11.3	- 0.9
41 - 50	39.1	25.0	14.1
31 - 40	34.9	23.6	11.3
21 - 30	9.4	8.1	1.3
<21	1.0	2.1	- 1.1

The largest age category by far is the 31 to 50 year old grouping accounting for 59 percent of the entire population; of these, 74 percent belong to Share Groups and 49 percent to the Sierra Club. On average, Share Group members were born a decade later (1955) than were Sierra Club members. All in this age category, however, were born between the 1940s and 60s falling within the time span during which, as hypothesized by Inglehart, an inter generational shift in values occurred.

Gender:

The overall frequency of male and female responses to the survey questionnaire is 58 percent male respondents compared to 42 percent female. Separated into organizations, however, the response rate of Share Group females is less than half

Table 4.5 Demographic Characteristics.
Gender.

	Share (n194)	Sierra (n284)	Gap
Female	24.5%	54.6%	-30.1%
Male	75.5	45.4	30.1

that of the Sierra Club. The low representation of women in Share Group respondents is interesting for two reasons. First, it is in marked contrast with the much more evenly distributed - albeit slightly female-dominated - representation among Sierra Club respondents. Second, it suggests that women may not be well represented in the forest industry, or possibly that in the more conservative rural settings in which the majority of Share Group respondents

reside (see the residence variable below) membership in such an organization may be viewed as being traditionally a male domain. This is, of course, conjecture. In any event, the gender variable will be discussed again below with reference to attitudinal and behavioral variables and in light of findings from previous research.

Place of Residence:

And finally, some comparisons in communities and place of residence. Overall, respondents are fairly evenly distributed into three community sizes in terms of population; that is, communities less than 5,000, those between 5,000 and 50,000, and those over 50,000 (see Table 4.6). The most obvious intergroup distinction is found in these same categories.

Table 4.6 Demographic Characteristics.
Community Size.

	Share (n194)	Sierra (284)	Gap
< 5,000	50.0%	18.1%	31.9%
5,000 - 50,000	42.0	22.4	19.6
>50,000	8.0	59.6	-51.6

For example, 92 percent of Share Group respondents compared to 40 percent of Sierra Club members live in communities of under 50,000, while 8 percent of Share Group members compared to 60 percent of Sierra Club respondents come from cities of over 50,000 population. Looking at community size in greater detail, fully one half of Share Group respondents live in rural communities of less than 5,000 while slightly more than a third (35 percent) live in 10-50,000 population sized

communities. These include resource centres such as Campbell River, Powell River and Williams Lake. By comparison, only 8 percent live in urban centres over 50,000. The pattern for Sierra Club members is quite different: less than half (40 percent) live in communities smaller than 50,000, while over half (60 percent) live in urban areas, the majority of them (52 percent) living in cities of over 100,000.

In summary, two general profiles emerge from the data on demographic variables. Share Group members are, on average, 40 year old males residing in rural communities, occupied in the resource extractive industry and earning above average incomes. Their educational attainment is at secondary and post secondary levels with accreditation at the regional college/university graduate level primarily in technical studies. Sierra Club members, on average, are 50 year old males and females, the majority of them residing in urban areas. They tend to have professional occupations in the 'service' sector earning more moderate incomes. The level of educational attainment for Sierra Club members is, for the most part, at the post graduate level in social sciences or in fields such as education and health care. One distinguishing feature among Sierra Club members is the fairly high percentage of 'retirees' many of whom were formerly employed in similar 'services' occupations.

This data analysis confirms the first hypothesis that environmental activists in British Columbia differ

significantly in terms of demographic variables. Furthermore, many of the demographic characteristics of Share Group respondents and Sierra Club members are consistent with the findings of empirical studies undertaken in Europe and North America. With this in mind, the study turns to an analysis of various attitudinal variables identified in the literature as being key factors in explaining environmentalism.

Attitudinal Variables:

This section sets out and analyzes the data with reference to the second hypothesis which posits that environmental activists will differ significantly in terms of attitudinal variables. The four areas examined are (i) 'indicators of environmentalism' (ii) resource policy issues (iii) conflict resolution and (iv) political behavior.

Indicators of Environmentalism:

Following Bakvis and Nevitte, eleven 'indicators of environmentalism' are employed to evaluate attitudes and to help establish the content and underlying structure of environmentalism.¹⁶⁴ Reference is made to a number of themes commonly encountered in the literature on environmentalism. These include attitudes toward limits to economic growth, greater public participation in decision-making, public goods versus the market, other people, other species, and future generations.¹⁶⁵ These 'indicators' correspond to Inglehart's

¹⁶⁴ See Bakvis and Nevitte, "The Greening of the Canadian Electorate."

¹⁶⁵ See, for example, Milbrath, *Environmentalists. Vanguard*

materialist-postmaterialist (MPM) index which has been used in many studies to evaluate environmental attitudes.

The findings on the 'indicators of environmentalism' listed in Table 4.7 are interesting for a number of reasons.¹⁶⁶ One point of interest is the greater variance among Share Group respondents than among Sierra Club members. With the exception of the 'government priority' indicator in which Sierra Club members are fairly evenly divided, there is far greater homogeneity among Sierra Club members than among Share Group respondents. A second point of interest is the significant percentage gap between groups, the most notable being in the 'jobs versus environment' variable. This is not surprising, however, since many Share Group members view the exclusion of forest lands for 'single purpose' use (i.e. parks) as advocated by a number of environmental organizations as a serious threat to their livelihoods.¹⁶⁷ Regarding natural resources, Share Group respondents are less likely than are Sierra Club members to view the depletion of resources as an urgent matter; nevertheless, slightly more than half (53 percent) did express *some* concern. With respect to government priorities such as keeping spending under control *versus* providing such services as health, education and social assistance, Sierra Club respondents place greater

for a *New Society*, chapter two.

¹⁶⁶ The variables used as 'indicators of environmentalism' as listed in Table 4.7 were recoded so that environmentalism would score high on the scale ranging from 1 to 6; see Questionnaire, Appendix A for the original wording.

¹⁶⁷ A number of Share Group respondents commented on 'single use' forest withdrawals from the 'working forest' land base.

emphasis on the provision of these services than do those of Share Groups. Even so, Sierra Club members scored

Table 4.7 Indicators of Environmentalism.
(% who mainly agree).

	Share (n194)	Sierra (n284)	Gap
Environment is more important than jobs.	26.2%	96.0%	-69.8%
Depletion of natural resources is an urgent matter.	52.7	98.6	-45.9
Environmental solutions depend on changing lifestyles, not better technology.	36.7	82.3	-45.6
Support pollution cleanup even if taxes increase.	56.9	96.4	-39.5
Govt. priority should be providing social services, not controlling spending.	22.0	58.9	-36.9
Environmental problems are extremely serious.	63.3	97.9	-34.6
Other species have as much right to natural environment as humans.	59.3	93.6	-34.3
Pollution levels are dangerously high.	66.0	87.9	-21.9
There are limits to economic growth.	74.0	91.8	-17.8
Obligation to future generations.	80.4	97.2	-16.8
Decision making should involve more people	78.8	86.4	- 7.5

considerably lower on this particular indicator than on all others. One possible explanation for these findings is that environmentalists believe, at least to some degree, people should fend for themselves. Share Group members place greater

faith in technology to deal with environmental problems than do Sierra Club members; respondents from both groups however share the belief that unlimited growth is not possible even in industrialized societies. Both also see pollution as a serious environmental problem and are prepared to bear some of the cost of cleanup.

On some variables, women scored higher than men (see Table 4.8). This was most noticeable among Share Group respondents¹⁶⁸ where women tended to agree more than men on the seriousness of environmental problems, the likelihood of

Table 4.8 Indicators of Environmentalism.
Gender Differences.
(% who mainly agree).

	Share Group (n194)			Sierra Club (n284)		
	<u>Male</u>	<u>Female</u>	<u>Gap</u>	<u>Male</u>	<u>Female</u>	<u>Gap</u>
Environmental problems are serious.	59.0	74.5	(-15.5)	96.8	98.7	(- 1.9)
Depletion of natural resource is urgent.	48.6	63.0	(-14.4)	97.6	99.3	(- 1.7)
Govt. priority should be social services.	17.8	33.3	(-15.5)	50.4	65.9	(-15.5)
Other species have rights to natural environment.	54.6	73.9	(-19.3)	92.1	94.7	(- 2.6)
Support pollution cleanup even if taxes higher.	59.6	46.7	(12.9)	95.2	97.4	(- 2.2)
Obligation to future generations.	81.6	76.1	(/ 5.5)	96.9	97.4	(-0.5)

¹⁶⁸ See Table 4.5 for the gender representation among respondents from both organizations.

natural resource depletion, that social services should be a government priority, and, in particular, that other species have as much right to the natural environment as do humans. On others - sharing in the cost of pollution cleanup and obligation to future generations - Share Group male respondents were more likely to agree than females. Among Sierra Club respondents, with one exception - government priority - male and female scores were much closer and more consistent throughout than among Share Groups. The government priority variable is interesting for several reasons. Not only did Sierra Club members score considerably lower on this indicator as discussed above, but the gap between male and female respondents stands out in sharp contrast to others. Coincidentally, this gap corresponds identically to that between Share Group male and female respondents.

The attitudinal variable on which the groups are most similar concerns the importance of public participation in decision making; 79 percent of Share Group respondents favour greater public input compared to 86 percent of Sierra Club members, a spread of only 7.5 percent. Since the survey broached the question of public involvement in decision-making in a variety of ways, the issue will be discussed again below.

Overall, insofar as 'indicators of environmentalism' are concerned, the gap between Share Group and Sierra Club respondents is greatest with respect to the economy, the

depletion of natural resources and the use of technology. Attitudes toward these issues feature prominently in the literature on environmentalism. Comparative international studies have found that adherents of the DSP believe that nature is a resource base to be exploited and that technical adjustments will deal with environmental problems. Adherents of the NEP, on the other hand, believe that natural resources are limited, that science and technology are not always good, and that there are limits to growth to which humans must adapt.¹⁶⁹ On the other 'indicators', however, while the strength of the relationship may vary considerably, the direction, in general, does not; it is largely a question of degree.

Resource Policy Issues:

One of the aims of the survey was to examine attitudes toward resource policy issues. This was done in two ways; (i) through two open-ended questions dealing with natural resources in general and with forest policy in particular, and (ii) with forced-choice questions relating to old growth forests and options on how best to deal with resource management, sustainable development and environmental quality.

When responses to the first open-ended question - what are the most appropriate uses of natural resources - were collapsed into seven general categories, the most often

¹⁶⁹ See Milbrath, "Environmental Beliefs and Values," and by the same author, *Environmentalists: Vanguard for a New Society*, chapters two and three.

mentioned were (i) economic (ii) conservation, and (iii) preservation.

Table 4.9 Attitudes toward use of natural resources.
(% that mentioned these options).

	Share (n194)	Sierra (n284)
Job creation	62.4%	20.4%
Conservation	32.5	46.1
Preservation	11.3	27.1

These categories, of course, encompass a range of attitudes within both groups, some of which can best be expressed by the respondents themselves. On the one hand, "Using them [resources] in good ways such as having jobs;" or "Use what is necessary (sic) to keep the economy at the present level"¹⁷⁰ reflected the opinion of a sizeable number of Share Group respondents and a minority of Sierra Club members. Either explicitly or implicitly expressed among a number of Share Group respondents was the idea that, unless utilized, natural resources were 'wasted'. As one respondent put it, natural resources were:

To create jobs for future generations and to attain (sic) the most value from this resource not to let timber rot in parks and minerals to lay dormant while our fresh water is wasted into the ocean. ¹⁷¹

On the other hand, comments such as "Natural resources should be left alone for the earth to maintain its balance," or

¹⁷⁰ Quoted from Share Group responses numbered 1001 and 1192 respectively.

¹⁷¹ Quoted from Share Group respondent number 1177.

"Natural resources are not necessarily here for our 'uses', and should be preserved for their intrinsic value"¹⁷² were restricted almost exclusively to Sierra Club members. There were, however, those in both groups whose attitudes lay somewhere in between. For those advocating conservation, the message from both camps had a similar ring.

We must continue to employ people but at the same time use methods that will sustain the forests, and protect our waters. For non-renewable resources, prudence should be used and if it is feasible, again high standards of extraction with protecting the environment always being kept at the forefront. People must come first however.¹⁷³

In attempting to evaluate comments from both groups, some generalizations can be made. Among Share Group respondents, a utilitarian approach toward natural resources pervades regardless of the category in which they fall. While many advocate greater environmental protection and sustainability, the emphasis is on utilizing natural resources to maintain a "good standard of living".¹⁷⁴ In the words of one Share Group member,

In my view, if you take a natural resource such as trees (renewable) that in this area are 100 years old, and manufacture a product (creating jobs) that can be of use for the next 100-200 years (houses), you have found an appropriate use of our more important resource.¹⁷⁵

¹⁷² Quoted from Sierra Club responses numbered 2183 and 2142.

¹⁷³ Share Group respondent number 1160. Similar attitudes were reflected by many 'conservationists' from both groups.

¹⁷⁴ Share Group respondent number 1152.

¹⁷⁵ Share Group respondent number 1115.

Among Sierra Club respondents, the emphasis is toward greater restraint by reducing our needs and using resources "to the smallest extent possible"¹⁷⁶ with an eye to the future by maintaining ecosystems and "preserv[ing] the 'genetic blueprints' of a variety of animals and plant species."¹⁷⁷

Focusing more narrowly on forestry, a second open-ended question asked respondents to identify what they considered to be the three most important forest policy issues in British Columbia at the present time. Of the fifteen categories into which all responses were coded, six emerged as the most important, a number of which, of course, overlap. These are: (i) sustainability of forest resources, (ii) forest practices, (iii) the role of government, (iv) the role of private corporations, (v) land use policies, and (vi) protecting old growth forests. These categories are set out in Table 4.10 in descending order of importance for each group.

Table 4.10 Important Forest Policy Issues:

	Share (n194)	Sierra (n284)	
Sustainability	43.8%	44.7%	Forest practices
Government	28.4	37.7	Sustainability
Land use	26.3	37.3	Old growth forest
Corporations	18.0	21.1	Government
Forest practices	11.3	20.1	Corporations
Old growth forest	4.6	16.9	Land use

For Share Group respondents, clearly sustainability of the resource is the major policy issue; for Sierra Club

¹⁷⁶ Sierra Club respondent number 2266.

¹⁷⁷ Sierra Club respondent number 2206.

members, forestry practices is the most important followed by sustainability and protecting old growth forests, all of which they view as closely interrelated. One of the problems of categorizing respondents' attitudes to this question was that, particularly in the case of Share Group respondents, comments often were not explicit. For example, the Annual Allowable Cut (AAC), stumpage rates, Tree Farm Licences (TFLs), and corporate control of the industry were cited as important issues in a number of cases without indicating in what way they might be problematic. It was also the case that among the relatively few who did elaborate there appeared not to be a general consensus. For example, fifty-seven Share Group respondents (42 percent of those who completed this question) expressed their views on TFLs, stumpage rates, and AACs. Of these, ten individuals commented that government should exercise more control over TFLs - six noted there should be less since corporations require greater control in order to maintain a viable industry; nine indicated stumpage rates were too high to be globally competitive - five specified they were too low to provide an adequate return to society for a publicly owned resource; six identified AACs as being too high to be sustainable - twenty-one others were non committal stating simply that AACs should come under review.

While there is correspondence in the relative importance of some of the issues between the two groups - sustainability and views about government and corporations, for example - the reasoning behind the responses is generally quite different.

Few Share Group members mentioned harvesting of the resource as part of the problem; rather, for the majority, it is mainly a question of inadequate reforestation. For Sierra Club respondents the issue is more complex. In their view, the problem of sustainability is a combined lack of adequate reforestation and overharvesting by the forest industry; furthermore they disagree with the mono culture approach to reforestation, hence one of the main arguments for the preservation of old growth forests as a source of species or genetic diversity. Of government, both groups (28 percent of Share Group and 21 percent of Sierra Club respondents) were critical of its failure to adequately monitor and control the industry; government was also criticized for not providing a long range strategy based on a comprehensive inventory of forest resources. Of the business community, while some Share Group respondents voiced their disapproval of large corporations' control of forest resources and of their forestry practices, as a group, they were much less critical of 'big business' than were Sierra Club respondents. Ten percent of Share Group respondents were critical of business, for example, compared to 41 percent of Sierra Club members.¹⁷⁸ Sierra Club members were much more likely to criticize corporations for unacceptable forest practices which include water pollution, habitat destruction, and clear-cutting. They

¹⁷⁸ These percentages are derived from comments either directed specifically at corporations or more obliquely; included are comments on logging practices, water pollution, habitat destruction, local input, as well as corporations.

were also more critical of profits leaving the country; for the loss of forest workers' jobs through mechanization; for smaller logging companies being deprived of a fair share of forest resources; and for shutting out local communities in decision making. The onus of this, they argue, falls on government which has the responsibility to monitor corporations' forest practices and to ensure the equitable distribution of the public resource.

Because old growth forests are such a contentious issue in the forest debate in British Columbia, respondents were asked to rank in order of importance seven options for their use. These included:

- (1) to preserve for future generations
- (2) to create/maintain forestry jobs
- (3) to preserve for biological diversity
- (4) to provide recreational opportunities
- (5) to provide critical habitat for threatened or endangered wildlife species
- (6) to log so as to contribute to the overall provincial economy
- (7) to preserve for esthetic values.

The options are set out in Table 4.11 according to the percentage of difference between groups.

In these choices, the groups were diametrically opposed. What were for Share Groups first and second priorities, i.e. 'forestry jobs' and the 'overall provincial economy' (collectively accounting for 83 percent of respondents), were at the bottom of the list for Sierra Club members, only 4 percent of whom ranked either of these 'uses' a number one priority. It should be noted, however, that this is one of the relatively few instances where variance among Sierra Club

respondents is greater than among Share Groups'.

Table 4.11 Ranking of uses of Old Growth Forest Areas.
(% ranking each option number 1).

	Share (n194)	Sierra (n284)	Gap
For forestry jobs	56.1 %	1.6%	54.5%
For overall economy	26.9	2.0	24.9
For recreation	0.0	0.4	- 0.4
For esthetics	1.3	2.7	- 1.4
For endangered wildlife	5.3	29.3	-24.0
For future generations	6.0	19.9	-13.9
For biological diversity	4.6	43.6	-39.0

Respondents were also asked to identify which of five resource management proposals put forward at the provincial, national and global levels (for example, the Bruntland Commission) most closely represented the *degree of change* they felt was necessary to deal with forestry issues

Table 4.12 Degree of Change Necessary to address
Forestry Issues.
(% that mainly agree).

	Share (n194)	Sierra (n284)	Gap
Promote multiple use.	54.1%	2.8%	51.3%
Strengthen integrated resource management planning.	27.3	10.2	17.1
Independent audit to govern forestry practices.	9.3	13.4	- 4.1
Preserve individual old growth forest stands as a means of achieving sustainable development.	1.0	6.7	- 5.7
Ensure biodiversity in forest systems before forestry practices implemented.	1.5	58.1	-56.6

such as resource management, sustainable development and environmental quality. Here, too, there is little common ground with the majority among both groups having very different views. Fifty-four percent of Share Group members were of the opinion that the goals of resource management, sustainable development and environmental quality could be achieved through a multiple use approach to forestry, while 58 percent of Sierra Club respondents maintained that the viability of forests - and of the forest industry itself - was dependent on maintaining diversity in ecosystems.

Conflict Resolution:

Because of the ongoing conflict over the use of forests, respondents were asked, in an open-ended question, what measures or mechanisms they believe would help work out an acceptable compromise to the majority of people involved. When the responses were collapsed into categories, the most often mentioned were (i) conflict resolution mechanisms; (ii) forest policy changes, (iii) education, and (iv) government.

Table 4.13 Mechanisms and Measures
of Conflict Resolution.

	Share (n194)	Sierra (n284)	Gap
Conflict resolution mechanisms	33.5%	35.2%	- 1.7%
Policy changes	19.6	37.7	-18.1
Education	36.7	13.7	9.5
Government	11.3	17.6	- 6.3

These responses suggest several things. First, the two options on which there is the greatest congruence between groups was conflict resolution and government. Collectively, 69 percent of volunteered responses called for various forms of public conflict resolution mechanisms bypassing the provincial government. By comparison, 29 percent raised the issue of government - again, almost invariably in negative terms. Respondents from both groups were critical of politicians (and bureaucrats) for what government has failed to do; that is, to provide the public with an accurate inventory of forest resources and to develop a comprehensive land use policy, to enforce government regulations and to hold forest companies accountable for a publicly-owned resource. By and large, the theme of conflict resolution was for the various interested parties to negotiate/mediate a workable solution among themselves. In the words of one Sierra Club member, "Loggers and environmentalists should work together instead of fighting; the real enemy is the giant forest company that uses technology to destroy jobs."¹⁷⁹

Decentralized decision-making was a key factor in this respect, and although many Share Group respondents expressed the view that communities should have greater control over the resources upon which their well-being depends, Sierra Club respondents were much more likely than Share Groups' to advocate decision making at the local community level. For many Sierra Club members, control of forests through

¹⁷⁹ Sierra Club respondent number 2177.

mechanisms such as TFLs should be shifted away from large corporations to become more community based, with greater opportunity for smaller logging companies to share in the resource. Even at the community level, however, there was strong emphasis on "Mak[ing] those in control responsible for the long-term maintenance of the health of forests ..."¹⁸⁰

Second, policy changes (i.e. land use, forest practices, planning, TFLs, etc.) are of greater importance to Sierra Club members. Among their priorities are more rigorous enforcement of government regulations, and greater responsibility and accountability on the part of large corporations for forestry practices which lead to waste and environmental degradation - i.e. road building, water contamination, loss of wildlife habitat, etc..

As for education, Share Group respondents tend to view educating the public to the 'facts' of the forest industry as a means of countering what many regard as an anti forestry propaganda campaign mounted by the media and environmentalists to discredit the forest industry. According to one Share Group member:

I think the number one problem for opposing groups is the overwhelming amount of disinformation and emotionalism of radical environmental groups. These people, mostly from cities, have no understanding of the primary industry in Canada, nor do they have much understanding of the complex socioeconomic realities facing most Canadians in rural, resource based communities. They accept verbatim information provided by media and media personality types like Suzuki. We must protect our

¹⁸⁰ Sierra Club respondent number 2121.

lands to work and play and this will not come about until both sides have a real understanding of both sides.¹⁸¹

Education, for Sierra Club members, is primarily a tool to inform people not only of the negative long-term implications of present forestry practices which, unless modified, many argue, will eliminate forest workers' jobs in the long run, but also to develop an awareness of environmental problems globally as well.

Of central importance to 'interested parties' mediating or negotiating solutions to forestry problems is, of course,

Table 4.14 Attitude toward Involvement
in Decision-Making.
(% who mainly agree).

	Share (n194)	Sierra (n284)	Gap
It is important that individuals be involved in the resource and environmental policy process.	95.8%	97.5%	- 1.7%
Decision making should involve more people even if decisions take longer to make.	78.8	86.4	- 7.5
The general public should have a say in clearcuts.	36.8	95.4	-58.4
The following should have a lot to say in solving forest environmental problems.			
trade unions	53.2	43.7	- 9.5
environmental groups	31.7	91.6	-59.9
government	85.6	77.0	8.6
the general public	64.9	86.9	-22.0
native people	38.7	84.1	-45.4
scientists and technicians	81.4	88.0	- 6.6
industry	73.8	40.4	33.4

¹⁸¹ Share Group respondent number 1028.

who is to be included in the decision-making process. The question of decision-making was broached in several ways in the survey. Although results show that in general respondents from both groups believe the process should be more open, there are a number of inconsistencies.

Looking first at Share Group respondents; 96 percent expressed the view that it is very important for individuals to be involved in the resource and environmental policy process, 79 percent mainly agree that in big decisions which affect the lives of many people, citizens should be able to express their views, and 65 percent believe that the general public should be involved in seeking solutions for forest environmental problems. However, there is much less support for the participation of native people (39 percent) and environmentalists (32 percent) despite the fact that both are very much 'interested' parties to the forest debate. Similarly, on the question of clear-cuts - one of the most controversial forestry issues - only 37 percent of Share Group respondents deemed that citizens should have some say on how public forest lands are harvested. Among Sierra Club respondents, although they are more consistent in their attitudes toward greater public participation in decision-making, only 44 percent and 40 percent respectively indicate that two key actors - trade unions and industry - should have much say in how forest environmental problems can be solved.

Respondents' attitudes toward government are equally inconsistent. In the open-ended question relating to

mechanisms and measures (see Table 4.13), neither Share Group nor Sierra Club respondents display confidence in government's ability to resolve forestry disputes. In two forced-choice questions designed to tap attitudes toward the provincial government's effectiveness in dealing with pollution and environmental problems, Share Group respondents gave qualified approval (52 and 42 percent respectively) while Sierra Club members ranked its performance as a dismal failure (4 and 6 percent). Despite these low ratings, however, 85 percent of Share Group respondents and 77 percent of Sierra Club members indicated government should have 'a lot to say in solving environmental problems'.

Political/Behavioral Variables:

And finally, included in the questionnaire were a number of attitudinal questions related to environmental activism, motivation, efficacy, and political parties.

Activism was measured by organizational membership and political behavior such as letter writing, contacting government officials, or participating in protest demonstrations. Patterns of membership vary considerably between the two groups. Share Group respondents, for example, typically belong to one resource/environmental organization (65 percent) from between one to three years. Approximately one half (47 percent) indicated they have been politically active in attempting to influence government decisions through writing letters, etc., and 17 percent reported participating in demonstrations or protests over forest environmental

issues. By contrast, the majority of Sierra Club respondents (49 percent) belong to three or more organizations, many of them for longer than five years; 72 percent have been politically active by contacting politicians and government, while 35 percent reported being involved in demonstrations or protests over environmental issues. Thus in terms of membership, petitioning government and participating in protest activity, Sierra Club members tend to be more activist than Share Groups'.

Motivation to become involved was also broached by asking respondents, in an open-ended question, why they had become members of their respective organizations. Share Group respondents were motivated primarily to protest against environmental activists (47 percent), and secondly, for economic reasons (37 percent), i.e., the loss of a job - or the threat of loss - not only for themselves individually but on behalf of their communities as a whole. For many, the 'radical' nature of environmental groups,¹⁸² the 'untruths' or 'misinformation' they present to the public via the media,¹⁸³ and the 'urban' rather than 'local' influence in government decision making¹⁸⁴ were instrumental in their becoming involved. In the words of one Share Group member:

Concern over lost jobs due to the push to turn vast amounts of lands into wilderness areas. This would affect logging - ranching - hunting -

¹⁸² The 'radicalness' of environmentalists was mentioned by a number of Share Group members.

¹⁸³ See, for example, Share Group respondent number 1169.

¹⁸⁴ Share Group respondent number 1021 and others.

recreation which would affect all people except the "Distant" few who are pushing for these exclusive areas.¹⁸⁵

Among Sierra Club respondents, while some were motivated to become involved because of specific environmental issues such as forest practices, clear-cut logging or water pollution, the majority (64 percent) indicated it was primarily their "concern for environment be it locally or globally".¹⁸⁶ Although variously expressed, the essence of many comments is reflected by one of the respondents who wrote:

A sense of responsibility. A concern for lack of understanding of "interdependence". An understanding that the health of the planet will be a measure of the level of "our" welfare!¹⁸⁷

Given the high degree of confrontation over forest issues through demonstrations, protests, and blockades, participants were queried on their attitudes toward civil disobedience. Respondents were asked, for example, whether they opposed or supported people who break the law in an effort to influence resource policy. The 'law and order' orientation of Share Group respondents (93 percent who oppose civil disobedience) is not generally shared by Sierra Club members. In fact, 68 percent of them mainly support what Offe refers to as 'noninstitutional or nonconventional forms of political participation'.¹⁸⁸ However, when Share Group members were asked if there was any situation in which they might take to

¹⁸⁵ Share Group respondent 1167.

¹⁸⁶ Sierra Club respondent number 2154.

¹⁸⁷ Sierra Club respondent number 2254.

¹⁸⁸ Offe, "Challenging the boundaries of institutional politics: social movements since the 1960s."

civil disobedience, 41 percent indicated they would, while the majority (59 percent) rejected such behavior. For 73 percent of Sierra Club respondents, civil disobedience was an option when all else failed. Relatively few in either group specified under what circumstances they would resort to these tactics; of those that did, however, the majority of Share Group respondents cited job related threats as the primary reason, while Sierra Club members mentioned a variety of environmental reasons ranging from hunting to wide-scale water diversions for export.¹⁸⁹

Respondents were also queried about how important they thought it was to participate politically, and how effective

Table 4.15 Sense of Efficacy.
(% that agree)

	Share (n194)	Sierra (n284)	Gap
It is important for individuals to become involved in policy process.	95.8%	97.5%	- 1.7%
There is a good deal of opportunity for citizen involvement.	68.9	54.1	14.8
Environmental activists can influence policy a good deal.	83.7	72.1	11.6
Ordinary citizens can influence policy a good deal.	70.5	80.6	-10.1

¹⁸⁹ Only 27 percent of Share Group members completed this question, 21 percent of whom mentioned job related circumstances; Sierra Club members who answered the question (34 percent) cited circumstances such as anti hunting demonstrations, wide scale water diversions for export, for the preservation of old growth forests, damming of certain rivers, or as a last resort because government was not listening, etc..

was that participation. The response from both groups to the question of how important it was for individuals to become involved in the policy process was overwhelmingly positive. Ninety-six and 98 percent of Share Group respondents and Sierra Club members respectively, indicated it was important to become involved. The response on how much opportunity there was for citizens to become involved, however, was much more muted; 69 percent of Share Group members believe there is a good deal of opportunity while only 54 percent of Sierra Club respondents hold that same view. When asked how influential environmental activists have been in influencing resource policy issues, 84 percent of Share Group respondents compared to 72 percent of Sierra Club members indicated they influenced the process a good deal.

The question of political parties and voting preferences was addressed by asking respondents which of the two main political parties in B.C. they were most likely to vote for in the forthcoming provincial election.¹⁹⁰ Thirty-nine percent of Share Group respondents (the largest percentage) supported the Social Credit Party and following a distant third - with 12.9 percent of their support - was the New Democratic Party.¹⁹¹ The reverse was the case among Sierra Club

¹⁹⁰ The B.C. General Election was held in October, 1991. As reported in chapter three, this research was in progress prior to, during, and after the election. Going into the election the two political parties dominating the province were the governing Social Credit Party and the Official Opposition, the New Democratic Party. The election resulted in an NDP government with a revitalized Liberal Party in opposition, and the Social Credit Party in third place.

¹⁹¹ The Provincial Liberal Party, supported by 12.9 percent of

respondents, seventy percent of whom supported the NDP while support for the Social Credit was virtually non-existent. Responses to the second question - which party had the best approach to handling environmental issues -

Table 4.16 Provincial Political Parties
Voting Preference - Fall, 1991.

	Share (n194)	Sierra (n284)
Social Credit Party	39.3%	1.9%
New Democratic Party	12.9	70.3
Liberal Party	19.7	16.2
Undecided	24.7	7.1
Not likely to vote	3.4	4.5
	(100.0)	(100.0)

demonstrate that for environmentalists voting preference is not necessarily matched by confidence to deal with environmental problems. While a large percentage of Sierra Club respondents indicated, as noted above, that they would cast their vote for the NDP, barely half (54 percent) felt that it was the party best able to handle environmental problems; 21 percent in the 'other' category, however, specified the Green Party as having the best approach to dealing with environmental issues.

In summarizing the attitudinal characteristics among these two groups of environmental activists, while on some issues there are major difference between them, on others, there are some similarities. Share Group respondents'

Share Group respondents, ranked second.

utilitarian attitudes toward the natural environment in general, and to the forest resource in particular, for example, is in sharp contrast to that of Sierra Club members. For Share Groups, natural resources are there to be used to benefit society. And although they acknowledge adjustments are required in how these resources are harvested, and in how sustainability can be attained, they do not perceive the solution to environmental problems in terms of fundamental change. In their view, greater efficiency in current practices and better technology can go a long way in addressing current problems. Few challenge existing arrangements; it is more a question of having them work better. Sierra Club members, on the other hand, argue fundamental changes are required, not only in the arrangements through which forest resource benefits are distributed within society, but in the *value* attached to the resource itself. A number of Sierra Club respondents spoke of the non-human world 'right' to exist of itself. This, as Hay and Haward have noted, represents a radical departure from the belief in western societies that rights are strictly human categories.¹⁹² The similarities between groups is based primarily on the notion that people should be able to participate in decision-making in public policy areas and that local communities should have some control over their well-being. As well, both groups suggest that the conflict over

¹⁹² Hay and Haward, "Comparative Green Politics: Beyond the European Context?"

forest environmental issues can best be resolved by the people themselves with less - not more - government intervention.¹⁹³

The Relationship Between Demographic and Attitudinal Variables:

This section analyzes data with respect to the third hypothesis which argues that there is a positive relationship between demographic and attitudinal variables. The analysis measures the variation both *within* and *between* the two groups on the basis of demographic variables and 'indicators of environmentalism' discussed earlier in this chapter. The 'indicators' selected are those in which there is the greatest percentage of difference between Share Group respondents and Sierra Club members.

Looking first at the relationship between demographic variables and 'indicators of environmentalism' *within* the two groups as set out in Appendix B,¹⁹⁴ it should be noted that of the demographic variables examined, occupation and sector of employment appear to have the greatest overall effect on attitudes; for Sierra Club members, the sector of employment is most revealing while for Share Group respondents,

¹⁹³ A successful example of this type of conflict resolution is the compromise worked out between various interests - logging, mining, tourism, conservation/preservation - in the Chilcotin area of the province. Glenn Bohn, "Peace finds a home on the range," *Vancouver Sun*, July 3, 1993, p. B4.

¹⁹⁴ See Appendix B, "Relationship between Demographic and Attitudinal Variables within Share Groups and Sierra Club Respondents." In this table are set out the levels of significance between demographic and attitudinal variables based on the chi-square test of statistical significance.

occupation is more pronounced. Among Share Groups, the occupation effect on 'environmental problems' (.003)¹⁹⁵ indicates that those in higher status occupations - technical, managerial and administrative positions - are less likely to agree that these are extremely serious. The sector of employment effect on this 'indicator', however, suggests a more generalized level of concern across all sectors involved in the forest industry (.06). Although the occupation effect on 'environmental solutions' (.01) among Share Group respondents points to better technology as a means of solving environmental problems across all occupations, it is much more pronounced among forest resource workers. Those favouring a change in lifestyles, on the other hand, are restricted almost solely to professional/technical occupations; this same group, however, advocates government control over spending (.03) rather than in the provision of services. Among Sierra Club respondents, the sector of employment affects several 'indicators'; for example, 'depletion of resources' (.01), the willingness to pay for 'pollution cleanup' (.04), and other 'species' rights' (.05).

The education and income effects on attitudinal variables are complex. Among Share Group respondents, for example, the education effect on 'government priority' (.04) suggests a trend; those with lower levels of education favor the provision of social services while those with post secondary education are more likely to support government spending

¹⁹⁵ See Appendix B.

controls. The income and 'resource depletion' relationship is worth noting since among both Share Group and Sierra Club respondents, those with higher incomes are less likely to view the depletion of resources as a serious problem (Share Group .05; Sierra Club .01).

The age variable is important only among Sierra Club respondents and is interesting in that it suggests that the aging process discussed earlier in the literature review (see chapter two) may account for this relationship. Sierra Club members over 50 years of age, for example, are less likely to support government control over spending at the expense of social services (.005), and although the relationship is not as strong (.07), this same age group is also less likely to advocate changes in lifestyle as a solution to environmental problems.

The gender variable has its greatest effect among Share Group respondents; here, males are less likely than females to view environmental problems as serious (.01), and in the government priority variable, they are also less likely to opt for social services over government spending controls (.01).

While these findings in general support the hypothesis that among environmental activists a positive relationship exists between demographic and attitudinal variables, the relationship is not always clear. Within Share Group respondents, for example, there is a distinction with respect to some attitudinal variables between professional/technical occupations and other occupational categories. This suggests

that the somewhat ambivalent relationship between this technical group and environmentalism as noted by Eckersley exists in the B.C. case.¹⁹⁶ The income variable is interesting in that its effect is similar within both Share Group respondents and Sierra Club members; that is, a general reluctance among higher income earners to pay for some of the social costs of modern industrial societies. And, as noted earlier, the age variable suggests that the aging effect in an older population such as Sierra Club members may account for some of their attitudes.

With respect to the strength of the relationship between demographic and attitudinal variables, while they are, at best, modest,¹⁹⁷ there are discernible trends within each of the two groups as set out in Table 4.17.¹⁹⁸ Among Share Group respondents, for example, occupation has the greatest overall effect on the 'indicators of environmentalism' followed by the gender variable. Among Sierra Club members the relationship is more complex in that although the sector of economy and income variables appear to have the greatest overall effect, other variables such as age, education, and gender appear to have some bearing as well. Although these trends provide insights into the demographic/attitudinal relationship within

¹⁹⁶ Eckersley, "Green Politics and the New Class: Selfishness or Virtue?"

¹⁹⁷ For the strength of these relationships see Appendix C, "Strength of the Relationship Between Attitudes/Demographics Within Share Group and Sierra Club Members" which is based on (i) the levels of significance set out in Appendix B, and (ii) the strength of the relationship based on Cramer's V value.

¹⁹⁸ This table is a modified version of Appendix C; the numbers of this table identify trends within each group.

Table 4.17 Strength of the Relationship Between Attitudes and Demographics Within Share Group and Sierra Club Members.

<u>Demographics</u>	<u>Indicators of Environmentalism</u>					
	<u>Deple-</u> <u>tion</u>	<u>Solu-</u> <u>tion</u>	<u>Pollu-</u> <u>tax</u>	<u>Prior-</u> <u>ity</u>	<u>Env-</u> <u>probs</u>	<u>Species</u>
<u>Age:</u>						
SHARE						
SIERRA				.005(.20)		
<u>Education:</u>						
SHARE						
SIERRA			.01(.17)			
<u>Occupation:</u>						
SHARE		.01(.27)		.03(.21)	.003(.24)	.06(.19)
SIERRA						
<u>Sector of Economy:</u>						
SHARE						
SIERRA	.01(.17)		.04(.15)			.05(.12)
<u>Income:</u>						
SHARE	.05(.15)					
SIERRA	.01(.15)			.10(.20)	.04(.13)	
<u>Gender:</u>						
SHARE				.01(.21)	.01(.21)	.06(.17)
SIERRA						

The numbers in this table are: (i) the levels of significance set out in Appendix B, and (ii) the strength of the relationship based on Cramer's V value: e.g.

Priority variable - Sierra - .005 level of significance between the two variables based on the chi-square test of statistical significance.
- .20 Cramer's V value.

the two groups, they also suggest that other intervening variables mediate.

The findings discussed above relate to the significance of demographic and attitudinal differences *within* the two groups; Tables 4.18 and 4.19 set out this same data in a different way to make comparisons *between* them.¹⁹⁹ Among demographic variables (see Table 4.18) sector of employment is

Table 4.18 Demographic Variables.
Comparisons between Groups.

		Share (n194)	Sierra (n284)	X ²	df	Sig
Age:	< 50	84.4%	48.8%	35.1(1)		.00
	> 50	15.6	41.2			
Education:	secondary	52.6	14.3	79.8(1)		.00
	> secondary	47.4	85.7			
Occupation:	mgr/admin	28.4	9.5	106.5(4)		.00
	prof/tech	23.2	37.3			
	res/wkr	23.2	3.5			
	sales/svs	13.4	8.5			
	other	11.9	41.2			
Sector of economy:	nat/res	65.4	7.5	193.9(3)		.00
	manuf/transp	7.9	8.9			
	svs	16.8	27.8			
	other	9.9	55.9			
Income:	< 24,999	4.8	16.3	21.6(2)		.00
	25-45,999	40.9	47.4			
	> 46,000	54.3	36.3			
Population:	< 50,000	92.0	40.4	125.6(1)		.00
	> 50,000	8.0	59.6			

¹⁹⁹ In Table 4.7 set out earlier in the chapter, 'indicators' were analyzed by dividing the 6 point scale into two equal groups, that is, 1,2,3 "mainly disagree" and 4,5,6 "mainly agree". In order to identify the more subtle differences within groups, the scale used in Table 4.18 and 4.19 is divided into three; 1,2 are labelled 'disagree' 3,4 are 'ambivalent' and 5,6 are 'agree'.

Table 4.19 Indicators of Environmentalism -
Share Group / Sierra Club Members.
Attitudinal Spectrum.

	Disagree	Ambiva- lent	Agree	No.	X ²	df	Sig
Environment is more important than jobs.							
SHARE	41.0	48.6	10.4	183	256.3(2)		.00
SIERRA	1.8	13.5	84.7	275			
Depletion of resources is an urgent matter.							
SHARE	27.7	35.6	36.7	188	192.9(2)		.00
SIERRA	.7	3.6	95.7	276			
Environmental solutions depend on changing lifestyles, not better technology.							
SHARE	43.2	35.5	21.3	169	87.8(2)		.00
SIERRA	10.3	24.6	65.1	232			
Support pollution cleanup even if taxes increase.							
SHARE	22.3	47.3	30.3	188	154.5(2)		.00
SIERRA	1.4	12.9	85.7	280			
Govt. priority should be providing social services, not controlling spending.							
SHARE	56.0	36.3	7.7	182	71.7(2)		.00
SIERRA	20.3	45.5	34.1	246			
Environmental problems are extremely serious.							
SHARE	19.1	37.2	43.6	188	138.2(2)		.00
SIERRA	1.1	6.4	92.5	281			
Other species have as much right to natural environment as humans.							
SHARE	21.7	32.3	46.0	189	106.9(2)		.00
SIERRA	2.5	8.2	89.3	281			

clearly the most important demographic variable, followed by place of residence and occupation, all of which are inter-linked in forest environmental activism. Among the attitudinal variables (see Table 4.19), 'jobs vs environment' explains more than all other variables about the differences between Share Group respondents and Sierra Club members; 'environmental problems' and 'support for pollution tax', while both significant, are superseded by 'depletion of resources'. And as for the much lower level of significance for 'environmental solutions' and 'government priority' among Sierra Club members, this can, perhaps, be explained by the aging effect noted above.

Based on the foregoing analysis, several observations can be made. First, among demographic variables, occupation and sector of economy have the greatest overall effect both within and between groups, while among attitudinal variables, 'jobs vs environment' is the most powerful indicator of all. Second, in general, there is far greater homogeneity among Sierra Club members than among Share Group respondents with respect to attitudinal variables whereas Share Group members stand out for their homogeneity with regard to demographic variables. And third, given the trends identified in Table 4.17 which suggest there is a relationship between demographic and attitudinal variables, more research is clearly called for since these and other intervening variables are relatively important when examining environmental activism.

Environmental activists in British Columbia are not an homogeneous group; as this analysis has demonstrated, there are significant differences among them along various parameters. In general, however, Sierra Club members are proactive. They are motivated by their concern for the environment and react through 'nonconventional' forms of political activity such as demonstrations, blockades, etc., if they deem it necessary. Share Group respondents are reactive. They became activists because of the activism of forest environmentalists - either to counter their 'propaganda' or to protect jobs. Many of the attitudes examined here have been identified in empirical studies elsewhere. They form the basis of categorizations along the DSP-NEP continuum identified by Milbrath, Cotgrove and others. The attitudes, values and beliefs expressed by Sierra Club members in this survey cluster around those which have been labelled the 'new environmental paradigm'. Those expressed by Share Group respondents, on the other hand, while they do not conform to the DSP ideal, fall somewhere along the continuum between the 'dominant social paradigm' and what Milbrath has labelled 'environmental sympathizers'.

Chapter Five.

CONCLUSION:

This thesis has investigated environmental activism in the forest industry of British Columbia. It has examined demographic and attitudinal characteristics of two organized groups of environmental activists - Share Groups and the Sierra Club of Western Canada. In so doing, the study has sought to identify differences and similarities in their social backgrounds, their attitudes, beliefs and values, and in their motivations to become involved in forest policy issues which have been at the top of the public policy agenda since the late 1960s.

The approach in this study has been to analyze the spectrum of environmentalism in British Columbia by linking ideological and structural theories to demographic explanations. A review of existing literature on environmentalism undertaken in chapter two has indicated that the relationship between demographic variables and environmentalism is complex and often not clear. The education variable is a case in point. Although featured prominently in ideological and structural explanations of environmentalism, in demographic studies, education is not necessarily correlated with environmental concern. As some

researchers have noted, industrialists are also well educated, yet many are opposed to the goals of environmentalists. Occupation and sector of economy variables, on the other hand, have been found to have some bearing on environmentalism. Persons engaged in resource extractive industries tend to have a utilitarian - or perhaps an ambivalent - approach toward nature while those with occupations in the 'human services' tend to have a more appreciative attitude toward the natural environment. Place of residence has also been found to be related with environmentalism with those living in rural communities and dependent on resource extractive industries such as farming, logging, and mining being less environmentally concerned than are urban dwellers. With the gender variable, females have been found to be more environmentally oriented than males in terms of personal behavior, yet they are less likely to engage in political activity such as contacting officials or taking part in confrontations such as protests and blockades.

Ideological and structural explanations of environmentalism were also reviewed by examining Inglehart's postmaterialist thesis and Offe's structural model. In these explanations, it has been argued that values have changed since World War II and that a 'new politics' of 'decommodified' interests has replaced the 'old politics' of

market-based political economies. Furthermore, these changes are said to have given rise to a more elite-challenging type of politics than has been experienced in the past. It has been argued as well that such challenges are more likely to come from postmaterialists who, because of their higher levels of education, have developed the cognitive skills to understand the 'contradictions' of modern industrial states.

The goal of integrating these approaches in this study has been to address some of the limitations found in the existing literature. While ideological and structural models explain environmentalism in broad societal terms, macro-level theoretical underpinnings and empirical evidence have tended to obscure micro-level questions related to local demographic factors which help shape environmental attitudes.

In chapter three, the conditions which gave rise to environmental activism in British Columbia, and the responses of environmental activists, were discussed. Here it was argued that examining environmentalism at the meso level was best facilitated by a three-layered approach. At the broader plane, ideological explanations have provided empirical evidence to support Inglehart's postmaterialist thesis that a cultural shift has occurred in advanced industrial societies. Structural explanations, while offering little by way of empirical evidence, have helped explain the political behavior

of environmental activists; demographic variables provide the link in to these broader questions by explaining environmental activism at the individual level within an issue-specific setting.

Data analysis set out in chapter four has suggested that, in terms of demographic and attitudinal characteristics, two general profiles of environmental activists can be distinguished in British Columbia. Share Group members, on average, were found to be 40 year old males residing in rural communities with occupations in the resource extractive industries - primarily in forestry. Sierra Club members, on the other hand, were found to be - on average - 50 year old males and females, the majority of them residing in urban areas and employed as 'professionals' in the service sector. One distinguishing feature of Sierra Club members was the fairly high percentage of 'retirees' many of whom were formerly employed in similar 'service' occupations.

In terms of attitudinal variables, the two groups were found to be very different in most respects. The major difference between them was in their attitudes toward the natural environment. Among Share Group respondents, nature was viewed primarily as a 'store house' to be used to produce material goods. While the group in general acknowledged some changes were required to address the problem of sustainability

of the forest resource, for example, fundamental changes in how these resources are to be exploited were not perceived to be necessary. The attitude of Sierra Club members toward nature were significantly different, the most obvious being in the *value* they attached to wilderness areas. For many, the non-human world has the inherent right to exist of itself. As well, Sierra Club respondents were much more likely to think in terms of the inter-relatedness of human existence and the natural world. However, Sierra Club respondents were not insensitive to forest workers' concerns. Rather, they advocated a redistribution of forest resources away from the control of large corporations to smaller, community-based enterprises. On the question of political decision-making, both groups had very different attitudes toward 'elite-challenging' and 'nonconventional' forms of political action. While Sierra Club members viewed direct action such as protests, demonstrations and blockades as a legitimate form of political activity, Share Group respondents generally were much more 'law-and-order' oriented and less likely to challenge elite decision - making however much they might disagree with the outcome.

There were some areas in which both groups held similar views. These were based primarily on the notion that in public policy issues which affect them directly, local

communities should have a greater role in decision-making thus enabling them to have more control over their own well-being. There was, however, much stronger support for decentralized decision-making among Sierra Club respondents than among Share Groups. And in this, there is a certain irony in Sierra Club members' endorsement of greater local autonomy given the centrality of jobs and economic benefits to forest industry workers as well as the utilitarian attitudes they hold toward natural resources.²⁰⁰

It had been hypothesized in this study that environmental activists differ significantly in terms of demographic and attitudinal variables, and that there is a positive relationship between these two sets of variables. As has been demonstrated, there are significant demographic and attitudinal differences between the two groups, and although the strength of the demographic/attitudinal relationship is modest, certain trends are clearly discernible. Among Share Groups respondents, occupation and gender variables reflecting the male-dominated, occupationally-uniform nature of this group, stand out from other demographics in predicting

²⁰⁰ Eckersley also alludes to such irony in that "the positive externalities of industrialism and modernization that have produced a new class which, by virtue of its structural location and predominantly critical sensibility, is more attuned to the negative externalities of the very system that secured its own relative affluence and education opportunity in the first place!" see Eckersley "Green Politics and the New Class: Selfishness or Virtue?"

attitudes. There is considerably more diversity among Sierra Club respondents in that age, income, sector of economy, education and gender all appear to predict various dimensions of environmentalism.

And finally, many of the attitudes examined in this study have been identified in empirical studies elsewhere. They form the basis of opposing categorizations labelled the 'dominant social paradigm' (DSP) and the 'new environmental paradigm' (NEP) or, as Inglehart has identified them, 'materialists' and 'post-materialists'. The attitudes, values and beliefs expressed by Sierra Club respondents in this survey cluster around postmaterialist values while those expressed by Share Group members are more closely related to materialists.

This thesis has argued that because of its complexity, no single approach adequately explains environmental activism in British Columbia. While more research is clearly called for, this study has demonstrated that all three approaches combined - demographic, ideological and structural - contribute to a better understanding of environmental activism than can each individually. Many analysts have argued that, given the present scale and gravity of environmental degradation,

environmental issues are permanently on the political agenda.²⁰¹ Often however the concerns of environmentalists do not readily appeal to the traditional working class. As noted in the literature review set out in chapter two, the exclusion of industrial workers from ideological and structural theories leaves unaccounted for important actors directly involved in environmental conflicts. A case can be made, therefore, for future research at the meso level in other industrial areas both in rural and urban settings. The results of this study suggest that despite the major differences between the two groups of environmental activists in British Columbia, bridge-building opportunities exist. Further research can aid in that process.

²⁰¹ See, for example, *Ibid.* as well as Hay and Haward, "Comparative Green Politics: Beyond the European Context?"

QUESTIONNAIRE ON RESOURCE/ENVIRONMENTAL ACTIVISM.

The purpose of this questionnaire is, primarily, to seek your opinion on environmental issues in general and some forestry-related environmental issues in particular. These are complex problems with conflicting values, and we would like to know **what you really think**. Your views on these issues are a very important part of our academic research on environmental activism in the forest industry of British Columbia.

The questionnaire is confidential. Your organization has agreed to participate in the survey and is in charge of distributing this material to you; we do not have access to membership information. A stamped, self-addressed envelope is provided for you; please use it to return the completed questionnaire to us at the Political Science Department at Simon Fraser University in Burnaby.

Please note the instructions throughout the questionnaire. In many questions, you will be asked to circle the number from 1 to 6 which **most** closely represents how much you agree, or disagree, with a statement. For example, if you strongly agree, circle 1; if you strongly disagree, circle 6; if your feelings are less definite, circle 2 or 5, and if it doesn't make much difference to you, circle 3 or 4. In each case, circle one **number**. We would like your opinion on all questions, but if, for some reason, you feel you cannot answer a particular question, leave it and go on to the following items.

Please fill in the questionnaire now and mail it to us; it will take about 10 or 15 minutes of your time. The survey will not be complete without your help.

Thank you for participating in this study!

Please circle (where applicable) the letter which represents the answer most relevant to you.

1. In which of the following four regions of the province do you live?
 - a. Lower Mainland
 - b. Vancouver Island
 - c. Northern British Columbia
 - d. Southern Interior

2. To how many resource/environmental organizations do you belong?
 - a. one
 - b. two
 - c. three or more

- 3.1 What is your involvement in these organizations?
 a. paid membership only
 b. paid membership and other activity.
- 3.2 Have you ever held (or do you hold) an executive position in these organizations?
 a. yes
 b. no
- 3.3 Have you ever, as a member of these organizations, attempted to influence decisions by politicians or government on resource/environmental issues by such activity as writing letters, presenting briefs, disseminating information?
 a. yes
 b. no
- 3.4 Have you ever, as a member of these organizations, attempted to influence decisions by politicians or government on resource/environmental issues by such activity as demonstrations, protests, etc.?
 a. yes
 b. no
4. How long have you been involved in these groups?
 a. less than one year
 b. 1 to 3 years
 c. 3 to five years
 d. more than 5 years
5. What first motivated you to become involved?

Please circle the number from 1 to 6 which most accurately reflects your view on each of the following items.

- 6.1 The environmental problems we are experiencing are:
 not serious 1 2 3 4 5 6 extremely serious
- 6.2 Some people suggest protecting the environment could lead to higher unemployment; if that were the case, would it be more important to:
 protect jobs 1 2 3 4 5 6 protect the environment

- 6.3 Depletion of natural resources (trees, minerals, wildlife) is:
not an urgent matter 1 2 3 4 5 6 a very urgent matter
- 6.4 Long term solutions for our environmental problems depend on:
changing our lifestyles 1 2 3 4 5 6 developing better technology
- 7.1 A priority of government should be:
keeping spending under control 1 2 3 4 5 6 providing citizens with social services (health, education, social assistance)
- 7.2 In making big decisions that affect the lives of many people, it is more important to:
put up with some delay in order to let more people have their say 1 2 3 4 5 6 let a few people make the decisions in order to get things done quickly
- 7.3 If tough standards to protect the environment are considered too costly and government is asked to relax the standards, would you:
support relaxing standards 1 2 3 4 5 6 oppose relaxing standards
8. Generally speaking, what do you consider the most appropriate uses of our natural resources?

Please indicate how much you agree or disagree with each of the following statements about society and the environment.

- | | Agree | | | | | Disagree |
|---|-------|---|---|---|---|----------|
| 9.1 If we continue to use our natural resources as we are now, there will be serious shortages of raw materials in the near future. | 1 | 2 | 3 | 4 | 5 | 6 |
| 9.2 We should emphasize economic growth because of the benefit it brings to society. | 1 | 2 | 3 | 4 | 5 | 6 |

		Agree			Disagree		
9.3	We rely too much on technology to solve our environmental problems.	1	2	3	4	5	6
9.4	Abuse of our environment is not a serious problem.	1	2	3	4	5	6
9.5	There are limits to growth even in industrialized societies.	1	2	3	4	5	6
9.6	We have an obligation to preserve natural resources for the benefit of future generations.	1	2	3	4	5	6
9.7	Other species do not have as much right to the natural environment as do humans.	1	2	3	4	5	6
9.8	We should concern ourselves with the needs of society now and let future generations work out their own solutions.	1	2	3	4	5	6
9.9	Pollution is rising to dangerous levels.	1	2	3	4	5	6
<hr/>							
10.	To what degree do you think an individual can influence resource/environmental policy? none at all 1 2 3 4 5 6 a great deal						
11.	How important do you think it is for individuals like you to become involved in the resource and environmental policy process? not important 1 2 3 4 5 6 very important						
12.	Do you think there is much opportunity for citizens to become involved in important resource policy decisions that affect their lives? not much 1 2 3 4 5 6 a good deal						
13.	To what degree do you think environmental activists in general have influenced resource policy in British Columbia? none at all 1 2 3 4 5 6 a good deal						

14. What is your attitude toward people who break the law in an effort to influence resource policy in this province?
 strongly oppose 1 2 3 4 5 6 strongly support
15. Is there any situation in which you might be prepared to engage in some form of civil disobedience in an effort to influence resource policy in the province? (Please circle one answer)
 a. no
 b. yes - please specify situation, if you wish _____
 c. perhaps - please specify situation, if you wish _____
16. Please list in order of importance, what you consider are the **three most important** forest policy issues in British Columbia at the present time.

17. How would you rank the following uses of B.C.'s **old growth forest areas**? (Please put #1 for what is the **most important** to you down to #7 as the **least important** in the blank spaces provided.)
 _____ a. to preserve for future generations' use
 _____ b. to create/maintain forestry jobs
 _____ c. to preserve for biological diversity
 _____ d. to provide recreational opportunities
 _____ e. to provide critical habitat for threatened or endangered wildlife species.
 _____ f. to log so as to contribute to the overall provincial economy.
 _____ g. to preserve for esthetic values
18. Do you think the provincial government is doing a poor job or a good job in dealing with environmental problems in general?
 poor job 1 2 3 4 5 6 good job
19. How would you rate government actions in dealing with the problem of pulp mill pollution?
 inadequate 1 2 3 4 5 6 adequate

24. How much say do you think each of the following should have in solving environmental problems in B.C.'s forest industry? (Please circle the number which most closely expresses your opinion.)

	not much					a lot
a. trade unions	1	2	3	4	5	6
b. environmental groups	1	2	3	4	5	6
c. government	1	2	3	4	5	6
d. the general public	1	2	3	4	5	6
e. native peoples	1	2	3	4	5	6
f. scientists and technicians	1	2	3	4	5	6
g. industry	1	2	3	4	5	6

The following information of each respondent is required to make comparisons. As we have no way of knowing who is providing the information, it is strictly confidential. Please circle the appropriate letter in each question, or fill in the blanks where provided.

25. Sex:
 a. male
 b. female
26. Age:
 a. under 21
 b. 21 - 30
 c. 31 - 40
 d. 41 - 50
 e. 51 - 60
 f. 61 - 70
 g. over 70
27. In what sector of the economy are you employed?
 a. forestry, fishing, mining, agriculture
 b. manufacturing, construction, industry
 c. transportation, communications, etc.
 d. wholesale/retail trade
 e. finance, insurance, real estate
 f. services (including homemaker)
 g. other _____ (please specify)
 h. unemployed
28. What is your occupation?
 a. managerial, administrative
 b. professional, technical
 c. forest worker
 d. machine operator (including transportation)
 e. sales, clerical
 f. labourer
 g. services (including homemaker)
 h. student
 i. other _____ (please specify)
 j. unemployed

29. Number of years of formal education:
- 0 - 8 years
 - 9 - 11 years
 - 12 years (finished high school)
 - college/university:
 - number of years _____
 - degree(s) obtained _____
30. Total yearly family income
- less than \$14,999.
 - \$15,000 - \$24,999.
 - \$25,000 - \$34,999.
 - \$35,000 - \$45,999.
 - over \$55,000.
31. What is the population of your community?
- | | | | |
|----|---------------|----|-----------------|
| a. | 0 - 2,499 | d. | 10,000 - 49,999 |
| b. | 2,500 - 4,999 | e. | 50,000 - 99,999 |
| c. | 5,000 - 9,999 | f. | over 100,000 |
32. How long have you lived in your community?
- _____ (months or years)
33. Which provincial political party do you think has the best approach to handling environmental issues?
- Social Credit
 - N.D.P.
 - Liberal
 - other (specify) _____
 - none
34. Which of the three main B.C. political parties would you tend to vote for in the forthcoming provincial election?
- Social Credit
 - N.D.P.
 - Liberal
 - undecided
 - not likely to vote.

Thank you - we appreciate you taking the time to complete this questionnaire!

Appendix B

Relationship Between Demographic and Attitudinal Variables
Within Share Group and Sierra Club Members

<u>Demographics</u>		<u>Indicators of Environmentalism</u>						
		Jobs Env	Deple- tion	Solu- tion	Pollu- tax	Prior- ity	Env prbs	Species
Age:								
	SHARE	.66	.43	.49	.81	.75	.85	.23
	SIERRA	.22	.96	.07	.71	.005	.11	.53
Education:								
	SHARE	.83	.43	.22	.51	.04	.18	.08
	SIERRA	.93	.80	.27	.01	.77	.60	.35
Occupation:								
	SHARE	.32	.17	.01	.36	.03	.003	.06
	SIERRA	.82	.99	.30	.93	.28	.50	.68
Sector of economy:								
	SHARE	.12	.83	.02	.80	.09	.06	.26
	SIERRA	.63	.01	.77	.04	.53	.15	.05
Income:								
	SHARE	.52	.05	.30	.25	.02	.32	.10
	SIERRA	.91	.01	.13	.81	.10	.04	.25
Residence:								
	SHARE	.87	.43	.08	.58	.99	.58	.58
	SIERRA	.95	.22	.48	.90	.36	.62	.71
Gender:								
	SHARE	.20	.12	.11	.69	.01	.01	.06
	SIERRA	.48	.08	.91	.37	.11	.84	.01

* The numbers in this table are the levels of significance between the two variables based on chi-square test of statistical significance.

Appendix C

Strength of the Relationship Between Attitudes / Demographics
Within Share Group and Sierra Club Members.

<u>Demographics.</u>	<u>Indicators of Environmentalism.</u>						
	<u>Jobs- env</u>	<u>Deple- tion</u>	<u>Solu- tion</u>	<u>Pollu- tax</u>	<u>Prior- ity</u>	<u>Env- probs</u>	<u>Species</u>
<u>Age:</u>							
SHARE	.66(.06)	.43(.03)	.49(.09)	.81(.05)	.75(.05)	.85(.04)	.23(.12)
SIERRA	.22(.10)	.96(.01)	.07(.14)	.71(.04)	.005(.20)	.11(.12)	.53(.06)
<u>Education:</u>							
SHARE	.83(.04)	.43(.09)	.72(.13)	.51(.08)	.04(.18)	.18(.13)	.08(.16)
SIERRA	.93(.02)	.80(.03)	.27(.10)	.01(.17)	.77(.04)	.60(.05)	.35(.08)
<u>Occupation:</u>							
SHARE	.32(.15)	.17(.17)	.01(.27)	.36(.15)	.03(.21)	.003(.24)	.06(.19)
SIERRA	.82(.08)	.99(.04)	.30(.14)	.93(.07)	.28(.14)	.50(.11)	.68(.10)
<u>Sector of Economy:</u>							
SHARE	.12(.16)	.83(.08)	.02(.20)	.80(.09)	.09(.17)	.06(.17)	.26(.15)
SIERRA	.63(.08)	.01(.17)	.77(.08)	.04(.15)	.53(.10)	.15(.12)	.05(.12)
<u>Income:</u>							
SHARE	.52(.09)	.05(.15)	.30(.12)	.25(.12)	.02(.05)	.32(.11)	.14(.14)
SIERRA	.91(.04)	.01(.15)	.13(.12)	.81(.05)	.10(.20)	.04(.13)	.05(.09)
<u>Residence:</u>							
SHARE	.87(.03)	.43(.09)	.08(.17)	.58(.07)	.99(.00)	.58(.07)	.58(.07)
SIERRA	.95(.01)	.22(.10)	.48(.07)	.90(.02)	.36(.09)	.62(.05)	.71(.04)
<u>Gender:</u>							
SHARE	.20(.13)	.12(.14)	.11(.16)	.69(.06)	.01(.21)	.01(.21)	.06(.17)
SIERRA	.48(.07)	.08(.13)	.91(.02)	.37(.08)	.11(.13)	.84(.03)	.01(.17)

The numbers in this table are (i) the levels of significance set out in Appendix B, and (ii) the strength of the relationship based on Cramer's V value: e.g.

SHARE (i) .66 level of significance between age and Jobsenv variables:
(ii) .20 Cramer's V value - age and jobsenv variables.

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