

THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

THE POLITICS OF ENVIRONMENTAL PRESERVATION AND UTILIZATION:
A CLASH OF ECONOMIC AND LIFE-STYLE ISSUES

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
DOCTOR OF PHILOSOPHY

By
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Norman, Oklahoma
1984


THE POLITICS OF ENVIRONMENTAL PRESERVATION AND UTILIZATION:


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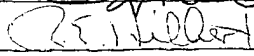
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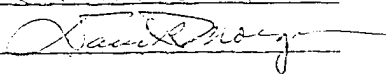
By











ACKNOWLEDGEMENTS

I would like to acknowledge the professional guidance of my committee members, Wilbur Scott, Harold Grasmick, Thomas Hall, Richard Hilbert, and David Morgan. The contributions of each to this dissertation are appreciated. I would especially like to thank professors Scott, Hall, and Grasmick whose academic inspiration and assistance helped me throughout my graduate program.

Thanks also go to my dear friends, Janet Heitgerd, Lisa Riggs, Jennifer Wanzer, Robert Bursik, and Carolyn Morgan, for their encouragement and companionship through the bad times as well as the good. And to Tom Skehan, I extend a special note of gratitude for the affection and consideration that eased my very stressful last year.

Finally, I want to thank my family for their unselfish love and support throughout all of my life.

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CHAPTER ONE

STATEMENT OF THE PROBLEM

Concern for environmental problems is high and widespread. It crosscuts most social, political, and economic categories of individuals. However, active support for strategies designed to solve environmental problems is limited and sporadic when compared to the level of concern. The primary goal of this dissertation is to account for this discrepancy between environmental attitudes and behavior. Two lines of explanation are used. One deals with a distinction between class and status politics, the other with the free-rider problem. The first introduces a theoretical framework for analyzing both the high concern-low support dilemma and the history of environmental struggles. The second addresses the problematic link between sympathy and support as an obstacle which confronts the environmental movement as well as social movements of all kinds.

Although much has been written about the numerous environmental issues such as wildlife and natural habitat preservation, natural resource and land use planning, air and water pollution, and nuclear energy and weapon development, this body of literature lacks a consistent theoretical structure. A re-evaluation of environmental issues from initial conservation movement of the Progressive Era to the contemporary environmental movement and the futuristic "appropriate tech-

nology" movement reveals a history of tension between life-style and economic concerns. Typically, these concerns have focused upon economic utilization of the environment vs. its preservation for aesthetic and recreational purposes.

These concerns are generated from different sources of interest and conflict. On the one hand, interest in the economic utilization of the environment coincides with a class analysis of environmental issues which argues that societal conflict originates in the unequal way people are related to the mode of production. The environment, to a large degree, is the economy's foundation. Its utilization for profit benefits some and is disadvantageous for others. Most classes depend upon some type of utilization of the environment for their livelihood; however, some individuals feel that their interests are served by maximum utilization (i.e., exploitation) of the environment for economic profit. On the other hand, concern for environmental preservation and aestheticism symbolizes a clash between different life-style groups. Modern industrial societies spawn a variety of competing styles of life. One is protective of the "naturalness" of the environment, while another is "recreational-use" oriented toward the environment. However, individuals whose overriding concern is the economic utilization of the environment are necessarily against environmental protection. Similarly, individuals who are very protective of the environment do not necessarily oppose environment-based economic enterprises. Thus, these orientations are not entirely antithetical, but they do generate different solution strategies. The divergent

motivations for environmental concern and the consequent disagreement over what should be done explains, in part, why environmental awareness does not translate directly into environmental protection.

Many strategies for solving environmental problems focus upon voluntary, individual change in consumptive patterns, while others concentrate upon government-induced change in patterns of both consumption and production. The type of strategy preferred depends upon whether the supporters view the issues as life-style or economic threats. This dissertation contains a test of this proposition that environmental problems threaten different groups of individuals in different ways, and as a consequence, preference and support for environmental reform varies with the issues and the type of perceived threat, namely class or status. The more an individual defines environmental issues in terms of preservation as the overriding theme, the more likely she/he is to support changes in consumption. On the other hand, the more an individual sees the environment as an economic resource to be utilized fully, the less likely she/he is to prefer solutions aimed at changes in production.

A second reason why environmental concern does not translate directly into environmental support is the free-rider problem. This can be described generally as a conflict between individual and collective interests that modifies the link between attitude and behavior. It is in the collective's interest to mobilize widespread participation in the attainment of some collective good. But once the collective good is attained, it cannot be withheld from individuals who did not partici-

pate in its attainment. Realizing this, many individuals choose to act in their own interest by not participating in collective action even though they may be sympathetic to the collective's cause.

Two factors which enter into the free-rider phenomenon are the extent to which an individual's own strategy and the collective's strategy agree and the level of specificity of the costs/benefits of participation in collective action. For instance, if an individual favors voluntary, individual efforts at environmental improvement, she/he will see collective effort aimed at the government level as not being worthwhile. Additionally, an individual may perceive the benefits of an improved environment as being too distant or negligible when compared to the costs of immediate personal or economic sacrifices involved in its attainment. Either of these situations will tend to inhibit an individual's participation in collective environmental efforts.

Research in the area of environmentalism indicates that there are certain demographic characteristics related to environmental support, four of which are age, social class, residential background, and political ideology. These characteristics are associated with different life-styles and socioeconomic positions and therefore should be indicative of class or status perceptions of environmental issues. It is expected that individuals who are older, urban, politically conservative and members of the upper classes will perceive environmental issues as life-style concerns, while younger, rural, politically liberal, lower and working class individuals will view the environment in terms of economic issues.

The second chapter of this dissertation presents a review of the literature which details the evolution of the conservation/environmental movement and establishes within it a history of preservation (status) and utilization (class) themes. Also presented is a description of the environmental movement's reform liberal policies for changing consumption and production patterns, as well as a typology of its members. In addition, this chapter examines the emergence and structure of the contemporary environmental movement and offers a summary of the criticisms of the movement, evidence of a decline in environmentalism, and a brief look at future environmental issues and trends.

In the third chapter, relationships are hypothesized between the antecedents of environmentalism--age, social class, residential background, and political ideology--and class/status perceptions of environmental issues, and between these perceptions and three solution strategies--voluntary individual regulation of consumption, government regulation of consumption, and government regulation of production. Giving consideration to the free-rider problem, additional conditional relationships are hypothesized between class/status dimensions of environmental concern and preference for the proposed strategies. Data collected in the Spring of 1984 from a simple random sample ($N = 344$) of Oklahoma City residents age 18 and over are used to test the hypotheses.

Chapter four deals with the development of measures to assess the variables in the model of environmental support. It includes a factor analysis of the life-style and economic issue items designed to

tap the status/class dimensions of environmental concern. Presented in chapter five are findings derived from analysis of variance and regression analysis which test for the significance of additive effects of the independent variables, and their interaction with the free-rider variables.

In the sixth and final chapter is a discussion of the research project, a summary of the findings, and a discussion of the implications of findings have for strategies designed to address environmental problems and for the mobilization efforts of the environmental movement.

CHAPTER TWO

REVIEW OF THE LITERATURE

Although the concepts of status and class politics have not been systematically applied in the study of environmentalism, the literature indicates that the specific organizations devoted to environmental concerns and the perception of environmental issues by the general public both encompass a variety of lifestyle and economic themes. On the one hand, environmentalism reflects concern for maintaining the quality of the natural environment for aesthetic and recreational purposes; on the other, the natural environment is viewed as an array of resources to be tapped for economic gain and development. This dualism extends into the domains of how people should live and how they should work. It includes conflicting positions on the nature and limits of economic activity in a capitalist society. A theory of status politics focusing on nonmaterial concerns appears useful for describing and analyzing the one aspect of environmentalism; a theory of class politics addressing purely material concerns is appropriate for dealing with the other aspect of environmentalism. Hence, this chapter contains an overview of theories of status and class politics and an application of these theoretical frameworks to the dimensions of environmentalism.

STATUS VS CLASS POLITICS

The concept of status politics can be traced to Max Weber's (1946)

writing on stratification, although he himself did not use the term. Weber perceived the stratification system as being multidimensional with conflict groups, i.e., status groups, parties, that are analytically and possibly empirically distinct from economic classes. In contrast, Marx's unidimensional notion of societal stratification subsumes Weber's status and party dimensions, making material concerns the basis for all political conflict. Economic classes, defined by Marx on the basis of their distinctive relations to the means of production, are the basic structural conflict groups. Hence, the underlying conflict and consequent political action always consists of struggle for control over the means of material production.

In a critique of Marx's theory of class and class conflict, Weber argues that there is competition and conflict based not solely on economic concerns but on social honor or status concerns. Class conflict occurs when one set of economic interests challenges a particular distribution of material goods established by another set of economic interests. Marx considered all other manifestations of conflict to be an epiphenomenon of such class divisions. Status politics, by contrast, is engaged in by status groups which Weber distinguishes from classes or interest groups. While classes are based on the sharing of a similar economic capacity to command scarce resources and life chances, status groups are based on the sharing of similar claims to social honor and prestige. Status conflict arises when one set of established values in society is increasingly displaced by another set of antithetical values, with opponents in the conflict attempting to

maintain or raise their positions vis-a-vis each other.

Since Weber's initial conceptualization and the articulation of the term "status politics" by Hofstadter (1955), there have been a number of reformulations. Common to all these are two premises. One is that status politics is distinct from class politics in that the former arises from status aspirations while the latter arises from material aspirations. The other is that status politics represents an effort on the part of participating groups to heighten their status vis-a-vis other groups in society (Scott, 1982). Three distinguishable conceptualizations of status politics can be subsumed under these twin notions.

The first conceptualization, proposed by Hofstadter (1955) and Lipset (1955), places primary emphasis on prestige concerns. They state that individuals who are discontent about the loss of personal prestige, or who perceive threat to their personal prestige, participate in movements aimed at rectifying or regaining individual prestige loss. Examples of such movements are the American Protective Associations, the Ku Klux Klan, or the John Birch Society. This formulation has been criticized because it is not clear whether individuals with equal prestige develop a common life-style and then attempt to promote or protect that life-style or whether individuals with a common life-style fall into categories of relatively equal prestige. As a result of this causality problem, few if any contemporary investigations of status politics issues employ the "individual prestige loss" model.

The second conceptualization of status politics emphasizes pres-

tige and life-style concerns equally, arguing that perceived threat to cultural dominance prompts individuals to participate in status politics. In this model, status politics is recast as cultural conflict. The typical opponents in this conflict are cultural traditionalists and cultural modernists. Gusfield's (1963) study of the American Temperance Movement and the research by Zurcher and his associates (1971) of anti-pornography campaigns follow this scenario. Both studies conclude that cultural traditionalists enter the political arena to protect their once dominant way of life by attempting to prohibit or restrict the consumption of an item (alcoholic drink, pornographic material) which symbolizes the crux of the problem. Clelland and Guess (1975) argue that, although this approach to status politics represents an improvement over the prestige model, the equal emphasis on life-style and prestige concerns fails to develop explicitly the fact that cultural modernists are active proponents of an alternative life-style and not merely opponents of the prestige claims made by the traditionalists.

The final conceptualization of status politics, advanced by Clelland and Guess (1975) as the one most consistent with Weber's original conception, focuses solely on the politics of life-style concerns. In this model, conflict arises when members of a particular life-style group strive to maintain their way of life in a rapidly changing, pluralist society. Status politics, then, refers to the political action taken by a group in an attempt to protect a way of life against the perceived erosion and degradation of alternative life-styles which may emerge and flourish in a society characterized by urbanization and

modernization (Page and Clelland, 1978).

For instance, Scott (1982) uses this life-style model of status politics in an examination of the struggle over the Equal Rights Amendment. He contends that those individuals who perceive threat to the traditional role of women as housewives and mothers are most likely to oppose the ERA in defense of that valued way of life. Similarly, Page and Clelland (1978) analyze the controversy over school textbooks as a situation in which more traditional individuals oppose the use of "progressive" textbooks which symbolize the new and challenging values of contemporary life-style groups. Thus, it is the demise of a cherished life-style, not loss of prestige or cultural dominance, which is the essence of status politics.

Applying these concepts to support for environmentalism, the environment may be perceived as an issue where one set of traditional consumptive values (those with an abundance-oriented life-style) comes into conflict with a challenging set of alternative consumptive values (those with a scarcity-oriented life-style). On the other hand, when applying a class-based understanding of support for environmentalism, the conflict becomes one of redistribution of a scarce commodity, i.e., the natural environment, between economically motivated opponents. That is, class politics focuses upon conflict which occurs over the utilization of the environment and natural resources for profit.

In this context, environmental deterioration can be conceived of as a status politics issue where one life-style group views the environment within the context of abundance-oriented consumptive values,

while another group is attempting to avert further environmental degradation by promoting a preservationist, scarcity-oriented way of life. Environmental degradation is the surface or symbolic issue over which two contending ways of life are battling. For example, one group may see recreational development such as the building of ski slopes, lakes, or resorts as the way to enjoy and protect the natural environment, while another group may view development of any kind as destructive of the natural environment. Victory in status politics struggles goes to the group who is able to promote (or restrain) some political action that prohibits or reforms the activities of the opponents, thereby designating their values as being less favorable or inferior. Environmental deterioration, in other words, is the focal issue for a deeper, more fundamental societal conflict.

In the class politics perspective, the environment and its use/abuse is an economic issue over which materially concerned classes struggle. That is, the environment represents a resource to be utilized for economic purposes and profits rather than a symbol of a life-style. The literature indicates that economic conflict over environmental issues often takes the form of "jobs/profit vs the environment." However, more recent analysis of this conflict propose that, in the long run jobs as well as the environment will suffer as natural resources become increasingly depleted due to the continuing pursuit of industrial expansion and short term profit. Consequently, the modern class position argues that the real environment-as-class scenario is not one of "economic well being or environmental betterment" but of

"profits or survival."

ENVIRONMENTALISM: CONSUMPTION VS PRODUCTION ORIENTATIONS

Reform liberalism, conservatism, and environmentalism A defining characteristic of the environmental movement, and its predecessor the conservation movement, has been its reliance upon reform liberal political ideology, as opposed to conservatism, as the means through which to address environmental issues. This precedent was set during the Progressive Era when both reform liberalism and conservatism were beginning to take hold in the nation's political arena.

Conservatism is generally identified with laissez-faire capitalism. In the economic realm, this translates into a firm belief in the sanctity of business activity and strong opposition to trade unions; in the political realm, it means a demand for minimal government intervention and regulation (Lipset, 1981; Dolbeare and Dolbeare, 1973; Buttel and Flinn, 1978). Accompanying tenets of conservative political ideology include the following: 1) an emphasis on economic individualism and protection of private property; 2) resistance to social welfare legislation or the widening of popular involvement in government processes; 3) belief in the free market system and its adequacy as a regulator and distributor; and 4) belief that freedom is guaranteed by either avoiding or controlling the use of political power as much as possible (Dolbeare and Dolbeare, 1973). Stemming from these tenets is the position that societal planning or legislation protecting against social or economic jeopardy eventually leads to the over regulation of the public

and private lives of individuals.

Reform liberalism, on the other hand, views the political system as pluralistic and just, but as placing too little emphasis on citizen participation; further, it sees the capitalist economic system as desirable but too committed to productivity and maximization of profit. Reform liberalism reduces the importance given to individual competition and privately generated solutions to societal problems. Instead, it emphasizes remedial or even structural solutions to social problems and views government action as a desirable means to this end (Dolbeare and Dolbeare, 1973). Hence, reform liberals seek to make large corporations more public-interest oriented by providing the legislative context within which profit can be acceptably pursued.

Liberal-minded environmentalists, on the whole, have utilized established political mechanisms to address and correct environmental problems (Ridgeway, 1970; Ash, 1972). At the national level, the environmental movement's strategy has been to resolve specific issues using legislation and mediation or interaction between the movement and government agents or private parties, such as the Environmental Protection Agency (EPA) or the Council on Environmental Quality (CEQ). Both of these were established to monitor compliance with established pollution and environmental protection laws and to develop new environmental policies (Albrecht, 1976). The National Environmental Policy Act (1969) and the Environmental Policy Act (1970) established guidelines which require every government and private initiative to go

through environmental impact assessments, public disclosure of governmental agency plans, and the incorporation of environmental activists into federal agencies as advisors or consultants (Gale, 1983; Sills, 1975; Humphrey and Buttel, 1982). Additional legal impact of the environmental movement includes the following legislation: the Air Pollution Control Act (1970), Clean Air Amendment (1970), Clean Water Act (1972), Clean Water Act (1977), Federal Water Pollution Control Act (1972), Clean Air Act Amendments (1977), Resource Conservation and Recovery Act (1976), and the Control and Reclamation Act (1977), all of which established environmental standards and non-compliance penalties (Reese, 1983; Axelrod, 1981; Humphrey and Buttel, 1982; Albrecht, 1976).

At the regional and community level, environmentalist strategies have included passing referenda dealing with nuclear plant construction and operation and waste disposal, organizing resource investigation planning boards, publishing technical information separate from that published by federal agencies and private corporations, using lawsuits to challenge administrative procedures, publicly protesting specific issues or cites, and establishing the environment as a field of study in the educational system as well as a field in legal practice (Sills, 1975; Albrecht, 1976; Gale, 1983; Vogel, 1980; Andrews, 1980).

Proponents of each political ideology offer different types of solutions for environmental problems. Reform liberals tend to view environmental problems as production issues and suggest that environment reform or protection can be achieved through governmental inter-

vention in producing processes. Conservatives, by contrast, perceive environmental issues in terms of consumption and suggest that the appropriate line of action is individual voluntary alterations in patterns of consumption. These opposing orientations are an artifact of not only fundamental differences in opinions of the role of government in American politics but also of vested economic (productive) and life-style (consumptive) interests.

Because environmental issues span both material and social concerns, people often disagree in defining environmental problems and in proposing alternative strategies to deal with them (Steinman, 1979). Generally speaking, the disagreement centers upon whether environmental problems originate in consumption or production patterns. Solution strategies typically correspond to this division with some focusing on altering consumptive patterns and others on changing productive patterns. Classic consumption-based environmental issues are those that reflect aesthetic and recreational life-style concerns such as land-use planning, litter, air and water pollution, scenic beauty and wilderness preservation, and protection of endangered species and wildlife. Concern for such issues basically represents a concern for protection of life-style based consumptive patterns. Prescriptions to correct threats to such cherished values include voluntary clean-up campaigns and use of political action to restrain other consumptive patterns or specific production activities.

Many of these same issues also reflect economic interests, e.g., productive patterns. Some of the typical production-based environ-

mental issues are resource scarcity, occupational health and safety regulations, pollution standards, and alternative energy systems research and development. A key or central issue which encompasses many production agendas is that of the development and use of nuclear energy. Some of these agendas, included under the nuclear issue umbrella, are health and safety issues, environmental destruction, and the potential for elitest domination of energy decisions through centralization of electrical energy production (Ladd et al., 1980). The latter issue has been used as a springboard by many "deep ecologists" as an argument for increased emphasis on the development of soft technology and alternative systems of energy production.

Concern for such issues basically represents a concern for the protection of jobs and wages or profits against threats of change in productive patterns e.g., installation and maintenance of pollution abatement devices. Prescriptions for confronting these threats include the use of restraint of political action to forestall changes in economic production. Frequently, political competition is generated over environmental issues because one individual's pollution may be another's livelihood. The following passage illustrates this class politics dimension of environmentalism:

Each day clouds of arsenic-laden smoke from a 585-foot copper smelter stack rains down on Anaconda, Montana. The arsenic smoke is the principal reason why the community has an abnormally high death rate from cancer and respiratory diseases. However, there is little agitation to shut down the Anaconda operation. "Without the smelter, this town couldn't support two cowboys and a saloon," says the bargaining agent for the local union that represents 1100 smelter workers (Gilbert, 1976).

Similarly, Steinman (1979) argues that because of the vast sums of money, costly capital equipment and people involved in existing large and complex technological production structures, there is a powerful force working to the advantage of the status quo and to the disadvantage of new energy systems development or increased environmental protection activities.

The existence and protection of these vested consumptive and productive interests has hindered the achievement of environmental goals. This has been the case because of the differing perceptions of environmentalism as status issues and/or class issues and the consequent proposals and pursuit of diverse solutions to environmental problems. Additionally, these contrasting perceptions of environmental problems have often lead to life-style or consumptive concerns being pitted against economic or productive concerns. Economic interests generally have won out, so that jobs, wages, prices, and profits have taken priority over such things as clean air and water, parks, and wildlife preserves.

Environmentalism and political pluralism. The utilization of traditional political processes by environmentalists is predicted on the belief by both conservatives and reform liberals in the existence and sufficiency of competitive-pluralist politics. Briefly, the competitive-pluralist model proposes that government policy is essentially a compromise between the various interest groups who exert pressure on decision makers and that no one group of interests dictates

since each group has veto power over the policy of the others (Wassburn, 1982; Dowse, 1972). Pluralist politics supposedly "work" because of the concepts of countervailing power and crosscutting solidarities. The former implies that power relevant resources are dispersed so that it is unlikely that one group can concentrate enough power to dominate, but if one group does prove strong enough to dominate, the threatened groups organize their resources as a counterweight to the dominant group's power (Dahl, 1967). The latter concept explains why interests are not pursued in such a way as to overload the political system by positing that in complex societies, individuals are involved in many organizations and are faced with competing loyalties and demands which forces them to have to choose among alternative lines of action (Dowse, 1972).

Ideally, the overall effect of the pluralist structure of competing groups is that the government is protected from excessive or extreme demands from the mass electorate via the mediating effect of crosscutting solidarities and moderate group leadership. The important factor in the pluralist model is not the number or competitiveness of groups but the extent to which the groups' leaders are responsive to and representative of their constituencies.

Dowse (1972) offers the following critique of how competitive pluralist model of politics works in reality. 1) It restricts attention to decisions made by political officials, thereby neglecting the exercise of power by corporations; 2) available evidence suggests that power relevant resources are cumulative rather than evenly

dispersed; 3) the pluralist model assumes that power is totally embodied in concrete decisions and, in so doing, ignores the fact that power may be exerted by restricting the realm of decision making to safe issues; 4) the stability of the political system may rest upon political apathy or the absence of institutionalized channels through which discontent can be voiced effectively rather than upon popular participation and satisfaction; and 5) it is not the case that interests compete on equal terms.

With regard to this last criticism, Dowse (1972:144) states,

Not only are many people, almost certainly the majority, systematically undermined in terms of effective participation, but issues that are potentially important to the least powerful sections of the community do not have an equal chance with those that are built into the political system.

These criticisms are especially relevant to environmental politics since environmental agendas are channeled into mainstream reform liberal political processes which according to much evidence are an inappropriate vehicle for mobilizing environmental reform (Buttel and Flinn, 1974; 1976; Humphrey and Buttel, 1982; England and Bluestone, 1973; Dunlap and Gale, 1974; Bowman, 1977). Liberal environmental reform policies seem to have met with opposition from groups who generally oppose all reform liberal programs, e.g., conservatives, as well as from groups who usually bear the costs of reform, e.g., working classes (Morrison, 1973; Buttel and Flinn, 1976).

More radical environmentalists argue that American party elites are ineffective at promoting or adopting forceful environmental policies because they are convinced of the sanctity of private property and

economic expansion. Likewise, the pervasive influence of entrepreneurial and corporate interests mitigates against radical right policy implementation, while the generally privileged socioeconomic position of environmentalists makes radical left stands equally unlikely (Morrison, 1973; Buttel and Flinn, 1976; Sills, 1975; Humphrey and Buttel, 1982; Buttel and Larson, 1980). Mitchell (1980:348) argues that environmentalism seems destined to press for reforms "that are neither too deep nor too left to alienate either its middle class constituency or its potential allies among the less affluent sections of society." Thus, the reformist nature of the environmental movement has been and is a continuing source of criticism.

THE CONSERVATION MOVEMENT

The Progressive Conservation Movement arose during the early twentieth century during the Roosevelt-Pinchot era out of concern for environmental destruction wrought by heavy industry expansion following the Civil War (Humphrey and Buttel, 1982). In the early phases of the movement, a basic distinction emerged between conservation preservationists and conservation utilitarians. The former group was concerned with keeping the natural environment free from human interference for historical, scientific, and aesthetic purposes, while the latter group favored conservation for economic reasons in the belief that wise and efficient environmental management would both preserve the environment and promote economic growth (Sills, 1975; Humphrey and Buttel, 1982; Molotch, 1971).

The preservation dimension of the Progressive Conservation Movement was an attempt to promote a life-style which grew out of relative prosperity and emphasized the aesthetic and recreational aspects of environmentalism. This preservationist impulse emerged from the increased affluence and subsequent growth in popularity of outdoor recreation and wildlife aestheticism during the Progressive Era. It manifested itself in upper and middle class voluntary associations such as the Sierra Club founded in 1892 and the Audubon Society established in 1905. These organizations sought to use legal and political power to protect forests and wildlife from resource exploitation and natural habitat destruction.

The conservation utilitarian dimension, championed by the owners of large ranches and extractive industries, was not a reaction against environmental degradation by large scale production processes but rather an opposition to unrestrained competition and undirected economic expansion. Conservation to this group was equated with the efficient use and management of natural resources, a concept which was very compatible with increased economic growth and consumption. Hunting and fishing associations, such as the Boone and Crockett Club, founded by Theodore Roosevelt, further exemplified the consumptive-user orientation of the utilitarians.

The conservation policies of President Roosevelt were designed to accommodate both sets of interests. In 1908, Roosevelt introduced his policy of "protection, preservation, and wise-use" of natural resources by establishing the National Conservation Commission, the

National Park Service, and other environmental agencies (Andrews, 1980; Albrecht, 1976). The purpose of these was to perpetuate natural resources by professional management and efficient use, and as a consequence, to forge a firmer relationship between business and government in utilization of the environment. Such policies directly reflected the liberal political ideology of the Progressive Era which legitimated greater government control over private enterprises and public domain.

Environmental utilitarianism dominated Roosevelt's administration and helped to promote, rather than restrain, political and monopoly capitalism and its consequent resource depletion (Albrecht, 1976; Andrews, 1980). The increased government involvement in the economy and rationalization of the economy did insure a more stable pattern of economic growth. Large corporations were the major beneficiaries of the Progressive Conservation Movement, while small enterprises were often the victims. Large corporations could more readily afford to undertake conservation (i.e., wise-use) policies. For instance, large operators could afford the newest, most efficient technological innovations in resource utilization; small ones could not. Therefore, Progressive Era "environmentalism" often resulted in the elimination of small competitors thereby contributing to a reduction in number, but an increase in size, of extractive and other industries. These policies of wise-use also "set in motion the trajectory of government augmented economic growth (and consequent ecological destruction) that eventually led to the successor of the conservation movement, the contemporary environmental movement" (Humphrey and Buttel, 1982:119).

THE CONTEMPORARY ENVIRONMENTAL MOVEMENT

Context and components. The contemporary environmental movement emerged only in part from conservation movement organizations and agencies. It was triggered by broader concerns and different historical factors than those of the Progressive Era movement. Several factors have been identified as giving impetus to the modern environmental movement. One is the precedent set by the Civil Rights and anti-Vietnam War movements of the 1950's and 1960's. Concern for environmental destruction became a part of the overall challenge to the legitimacy of the social system (Buttel, 1979; Dunlap and Gale, 1972; Sills, 1975; Schnaiberg, 1973; Vogel, 1980; Albrecht, 1972; Harry, 1974). In addition, the Civil Rights movement established new techniques for participating in social protest activities which then had been successfully applied to anti-war issues and could be applied to other public issues such as environmentalism as well. Further evidence does indicate that these movements provided a base of support and supply of activists for the environmental movement (Vogel, 1980). For instance, a survey of leading national environmental organizations' members showed 80% to be sympathetic to the Civil Rights, anti-war, womens, and consumers movements, and 20-25% to have been active in either the anti-war or Civil Rights movements (Mitchell, 1980).

A second factor giving rise to the environmental movement is the emergence of a popularized perspective on environmental problems (Schnaiberg, 1973; Molotch, 1971; Albrecht, 1972). Hendee et al. (1969) state that during the 1960's, more than ever before, the natural

environment became a source of personal gratification for the American people and hence stood as an issue uniting shared feelings of dissatisfaction with its deterioration. Some of the intellectual precursors of the environmental movement were 1960's authors, mostly biological-ecologists, who mixed ecological problems with social policies (Humphrey and Buttel, 1982). For instance, Rachel Carson's The Silent Spring (1962) introduced people to the dangers of pesticides and herbicides; Paul Erlich's The Population Bomb (1968) argued for zero population growth; and Barry Commoner's work, Science and Survival (1966), The Closing Circle (1971), The Poverty of Power (1976), and The Politics of Energy (1979), blamed ecological problems of hard technology and the corporations who use it to promote economic growth.

A third and related impetus to the emergence of the environmental movement was the testing of nuclear devices in the 1950's and early 1960's. The resulting fear of radioactive fallout made citizens aware that science and technology could have detrimental effects and increased their desire to monitor scientific and technical development (Sills, 1975).

Three principal components make up the structure of the modern environmental movement. The first is what Buttel and Larson (1980) call "public environmentalism." It is characterized by local consumption-oriented groups based in communities or on college campuses who express a preference for cleaner and more ecologically harmonious residential, work, and recreational surroundings. The environmental activities of these groups are generally issue-specific, involving clean-up and

recycling campaigns, local lobbying, disseminating information, and attending public hearings.

The second component is that of organized voluntary environmentalism which is composed of many regional, national and international associations, such as the Issac Walton League, National Wildlife Federation, League of Conservation Voters, Zero Population Growth, International Council for Bird Preservation, International Council for the Conservation of Nature, International Institute for Environment and Development, and the European Environmental Bureau (Humphrey and Buttel, 1982; Lowe and Goyder, 1983). These associations, concerned with both consumption and production aspects of ecology and energy issues, influence national elections and legislation as well as initiate litigation in the courts to block projects destructive to wild life or wilderness areas.

Finally, the third structural component of the environmental movement is institutional environmentalism, i.e., organizations whose role is to administer environmental laws (Humphrey and Buttel, 1982; Buttel and Larson, 1980). This component includes federally and privately funded organizations such as government regulatory agencies, university based institutes, and other private or public research and educational centers, e.g., Bureau of Land Management, Department of Energy, National Park Service.

Age characteristics of supporters. Age is negatively correlated with environmental concern, i.e., younger people tend to be more concerned about the environment than older people (Buttel and Flinn,

1976; 1978; Grossman and Potter, 1977; Martinson and Wilkening, 1977; Hummel, et al., 1978; Buttel, 1979; Tucker, 1978; Mitchell, 1978; Malkis and Grasmick, 1977; Van Liere and Dunlap, 1978; Murdock and Schriener, 1977; Hornback, 1974; Springer and Constantini, 1975; Tognacci, et al., 1972; Dillman and Christenson, 1972; McEvoy, 1972).

One explanation for this relationship is an aging or maturational effect. Young people are less integrated into the dominant social and economic structure (Malkis and Grasmick, 1977; Buttel, 1979; Hornback, 1974). Solution strategies for environmental problems often propose substantial change in the social order and traditional values. Moreover, Buttel (1979) states that, in so much as some of the more extreme solutions propose changes in property rights and criteria for political decision making, the environmental movement challenges established power structures. Consequently, young adults can be expected to support these solutions more readily than middle-age or older people who presumably have more investment in current arrangements. Another explanation identifies a cohort or generational effect (Malkis and Grasmick, 1977; Buttel and Flinn, 1978; Dunlap and Gale, 1972). Mannheim's theory of generations suggests that significant historical events occurring at the youth-stage permanently impact on a cohort. Drawing upon his theory, this age explanation holds that the environmental involvement of young adults today may be due in part to the radicalization and mobilization of youth during the 1960's over Vietnam War and Civil Rights issues (Humphrey and Buttel, 1982; Sills, 1975; Schnaiberg, 1973; Mitchell, 1980; Molotch, 1971). If so,

environmental concern should remain a preoccupation among those currently young throughout their lifetimes.

Social class characteristics of supporters. Evidence for a positive relationship between social class and environmentalism is weak and conflicting, but generally, environmental awareness, concern, and support are positively correlated with social class as measured by some combination of education, income, and/or occupational prestige (Swan, 1970; McEvoy, 1972; Koenig, 1975; Murdock and Schriener, 1977; Buttel and Flinn, 1974; 1976; 1978; Grossman and Potter, 1977; Malkis and Grasmick, 1977; Van Liere and Dunlap, 1978; Tucker, 1978; Mitchell, 1978; 1980). This contradiction in findings can be attributed to conflict between status politics and class politics concerns. On the one hand, middle and upper class individuals exhibit a higher level of concern for environmental issues for life-style reasons: 1) these classes tend to be more highly educated; 2) these classes have solved their subsistence needs and therefore, are free to focus on aesthetic concerns such as environmental quality; and 3) these classes are more politically and socially active than are lower classes. Thus, environmental support may be an extension of upper class concern with social problems in general (Martinson and Wilkening, 1975; Althoff and Greig, 1977; Dunlap et al., 1975).

On the other hand, for material reasons, middle and upper class non-support of, even opposition to, environmental reform can be expected in that strong environmental action would mean further govern-

mental involvement in the market place along with disruption of industrial growth and production resulting in lower profits (Buttel and Larson, 1980). In other words, the affluent might oppose environmental protection because they benefit economically from its exploitation (Schnaiberg, 1973).

This conflict between status and economic concerns also can be extended to the lower and working classes' relation to environmentalism. Buttel and Flinn (1978) suggest that because the working classes are subjected to highly polluted work and home places (i.e., life-style disadvantages) and because of the hostility of some workers toward corporations and other targets of environmental reform, they should be expected to express concern about the environment (Albrecht, 1972; Morrison, 1973). Evidence indicates the contrary however. Working class individuals generally oppose environmental reform because of the threat of economic ill effects posed by production policy reforms (Schnaiberg, 1973; England and Bluestone, 1976; Buttel and Flinn, 1978).

Residence characteristics of supporters. Urban residents are more likely than rural residents to be environmentally concerned and supportive and more likely to feel that environmental problems are serious (Buttel and Flinn, 1974; 1976; 1978; Grossman and Potter, 1977; Van Liere and Dunlap, 1978). Likewise, the three general explanations for this relationship, suggested in the literature, can be grouped under life-style and material concerns. Urban residents are

more concerned about environmental decay than rural residents because they are exposed to higher levels of pollution and litter. They also have less of a utilitarian orientation toward the environment than rural residents who are more likely to be employed in extractive occupations (Trembleday and Dunlap, 1978; Harry et al., 1969). Finally, Murdock and Schriner (1977) argue that because rural areas generally have a lower standard of living, rural residents are assumed to value and promote economic growth over environmental protection. In other words, urban residents support environmental reform in protection of their way of life, while rural residents oppose environmental reform in protection of their economic interests.

Political characteristics of supporters. Democrats and liberals tend to be more concerned about and supportive of environmental quality than Republicans and conservatives (Koenig, 1975; Constantini and Hanf, 1972; Buttel and Flinn, 1976; 1978; Buttel and Johnson, 1977; Springer and Constantini, 1974; Tognacci et al., 1972; Van Liere and Dunlap, 1978; Lester, 1980). Similarly, Buttel and Flinn (1976; 1978) found socio-political liberalism and party preference to be related to support for environmentalism among middle and upper class individuals but not among the lower classes. In part, this conditional relationship can again be attributed to a difference in status politics (lifestyle) and class politics (economic) priority concerns. On the one hand, the higher levels of education and the consistency as well as decisional import of political beliefs found more often among the

middle and upper classes than among the working classes is more likely to influence the former groups' support of environmentalism than the latter groups'. The finding that neither party nor ideology is related to environmental concern or reform among individuals with a high school or less education, while ideology is strongly related to concern and reform for the college educated endorses this observation. On the other hand, ideological disputes are apt to be irrelevant to the working and lower classes whose main concerns are more likely to be economic in nature. It is not surprising then that these classes exhibit little enthusiasm for reform liberal policies that frequently entail inequalitarian consequences (Buttel and Flinn, 1976).

Additionally, Lester (1980) argues that while partisan differences influence environmental issues, the organizational structure of the state exerts a mediating effect on environmental policy support and adoption. More specifically, Lester (1980:126) posits that "those states with a professional legislature and a consolidated state environmental agency have regulated their environment to a significantly greater degree than those states with a fragmented decisional system," and that in states without strong organizational frameworks, elections of Democrats provides a means for adopting pro-environmental policies.

Finally, the relationship between party affiliation and environmentalism is complicated by the fact that the two party structure of American politics is insulated from both radical left and right influences. As a consequence, extreme ideological stands on behalf of either party are diluted. Moreover, there is only a slight alignment

of class and political party preferences in the United States. Therefore, the existence of crystalized partisan differences on environmental issues among the mass electorate cannot be assumed (Buttel and Flinn, 1978).

Typology of participants. Schnaiberg (1973) has identified four types of participants in the environmental movement, cosmetologists, meliorists, reformists, and radicals. Cosmetologists, typically civic and community based voluntary groups, are primarily concerned with litter and its disposal. Their clean-up activities do not include any analysis of the disposal process or of the consumptive/productive cycle of the litter problem. Nor do the cosmetologists associate the environment with other major social issues, such as social welfare or inequality. Theirs is the lowest level of participation in that they are concerned with only the immediate environment, e.g., their own neighborhoods and favorite recreation areas, and with a post-consumptive level of action, e.g., picking up litter.

Although they remain focused on consumptive related activities, meliorists recognize problems of waste disposal and act to recycle the reusable litter such as glass, paper, and aluminum. Meliorists, like cosmetologists do not locate the source of environmental degradation in consumption/production preferences or processes; consequently, they too participate in only local voluntary activities. Both cosmetologists and meliorists, because of their exclusive concern with narrow ecological issues and consumer behavior, often support clean-

up campaigns (i.e., Keep America Beautiful) sponsored by major bottling and packaging industries and believe that environmental problems can be solved with minimum cost and inconvenience.

Reformists go beyond cosmetologists and meliorists in the depth of their analysis of environmental problems as well as in the scope of thier reform activities. Reformists comprise national environmental organizations and special interest groups. Because they consider both consumptive and productive sources of decay, these groups engage in tactics such as congressional and local lobbying, campaigning against particular producers, educating consumers, providing technical expertise, and advertising and informing through the media. Moreover, reformists utilize a joint "grassroots-elite" strategy in achieving their goals because of their typically high level of professional and technical skills. These groups usually take a benign view of the political and economic system and, therefore, stress only the need for stricter control and revision of industrial production and consumption activities, not a total restructuring.

In contrast, radicals view environmental destruction as inherent in "capitalist industrial processes" and see little opportunity for change within the present politico-economic system. As a consequence, there groups aim at restructuring the social and economic institutions by seeking to adapt the socio-philosophical goals of society to the natural environment via the use of soft technology and a greater national emphasis on social equality as opposed to the emphasis on economic growth.

With regard to the four demographic characteristics of supporters of environmentalism, both cosmetologists and meliorists tend to be urban, middle to upper class, older, and politically conservative. Likewise, reformists and radicals tend to be urban and relatively affluent, but they are likely to be younger and more politically liberal than cosmetologists or meliorists.

Analytically, these four types of participants can be recast in status-class framework. The environmental concerns and activities exemplified by cosmetologists and meliorists represent those of relatively pure status issues, while reformists' environmentalism reflects both status and class concerns. By contrast, the environmental support of radical participants represents that of relatively pure class concerns. In the early period of the environmental movement, cosmetologists and meliorists (life-style oriented participants) made up the majority constituency. Presently, the core of the active movement is reformist; however, some strong radical (class) elements are emerging stimulated by a new emphasis on development of appropriate technology and increased "energy" opposition to environmental action.

The change in constituency coincides with a shift away from participation strategies, which urged people to alter voluntarily their consumptive behavior, to power tactics and organized collective efforts to influence environmental policy. This shift is a part of an overall transition of the environmental movement away from status politics and moral protests to increasingly coordinated strategies for class politics and the eventual restructuring of production

(Morrison, 1973; Schnaiherg, 1973; Humphrey and Buttel, 1982).

No longer calling for only conservative consumption strategies, the developing environmental coalition has become sensitive to social equity and political conflicts and has made social structure and class relations as much as feature of environmental analysis as ecological agendas. For instance, the reshaping of environmental issues in terms of growth-no-growth debates addresses the fact that corporations, labor unions, etc., are economically dependent upon industrial expansion which thus far has entailed a continual amount and level of usage of nonrenewable resources. This transition from status to class politics is due in part to the perceived ineffectiveness of voluntary changes in meeting movement goals and perceived effectiveness of collective political strategies. Because the new strategies represent a challenge to the existing economic system, the movement has met with considerable and increasingly coordinated opposition from major capital interests and labor groups. This opposition, in turn, has spurred more organized efforts on the behalf of environmental interests (Humphrey and Buttel, 1982).

The Appropriate Technology Movement: growth vs no-growth. As indicated earlier, the present official and popular priority of the United States is to maintain or raise the standard of living to which most of us have grown accustomed even at the expense of the environment. Thus, the issue of economic growth and standard of living are at the heart of environmental problems and solution strategies.

Environmentalists herald the dangers of unfettered economic and population growth in terms of detrimental pollution and natural resource depletion (Schnaiberg, 1975; Morrison, 1976; Buttel, 1976). Arguments in defense of growth include the assertion that economic growth is not an end but a means to the goals of satisfying social, economic, and ecological problems, as well as promoting development in underdeveloped countries. Similarly, pro-growth advocates not only assert that the major function of the state is to make environment usage easier for individuals and corporations but also that the purposeful blocking of economic growth is unAmerican (Sills, 1975; Albrecht, 1972). These same advocates claim that maintaining a large and continual supply of energy (primarily through nuclear and oil production) is required to support employment and customary standards of living. However, some evidence suggests the contrary. For instance, in 1979, the gross national product continued to climb but at a slower rate, although energy usage decreased (Axelrod, 1981). Moreover, research by Mazur and Rose (1974) reveals that while income levels were highly correlated with energy levels, indicators of social welfare were only weakly related to per capital energy consumption levels. Thus, the reported positive correlation between energy usage and levels of employment/standard of living may not be so straightforward. Social welfare may be attainable without high levels of energy utilization.

Proposals for the alleviation of environmental problems by left and right environmentalists hinge upon their positions on the growth

issue. The solutions offered by environmentalists of the right focus upon three interrelated aspects of supply expansion, i.e., conservation: 1) a technological mode which involves developing new, more efficient technologies and subsidizing energy firms to provide incentives for greater and more efficient production; 2) an economic mode which involves setting higher prices for energy as a way to discourage excessive usage; and 3) a social-psychological mode which involves altering values and patterns of consumption (Humphrey and Buttel, 1982; Walker and Large, 1975). The supply expansion is designed to maximize economic growth and energy production given resource constraints. Generally speaking, total emphasis upon conservation and efficiency leaves intact the traditional reliance on hard technology or the hard path, i.e., capital intensive, large scale, complex energy-intensive technologies, and the decisional structure for distributing resources in ways that are ecologically and economically harmful for a substantial portion of the lower and working classes.

Environmentalists of the left propose a counter solution, one that is incompatible with centralized, industrialized, hard technology, abundance-oriented capitalism and socialism. More specifically, small capital investments, small scale organizational structure, less resource-more labor intensive technologies and the use of renewable energy resources, e.g., sun, wind, tides, geothermal energy, falling water, play a prominent role in the appropriate technology movement or the "soft path" (Lovins, 1976; Morrison, 1980; Mitchell, 1980).

This shift in emphasis emerged to a large extent as a response

to organized economic development of the Third World and to the energy crisis of 1973-1974. Soft path proposals were generated as an alternative to the "inappropriate" hard path approach to economic development in countries that are lacking in capital but abounding with potential workers. The energy crisis of 1973-1974, moreover, raised awareness of vulnerability to centralized national and international energy controllers, thereby making decentralized sources and production of energy more attractive. The appropriate energy technology potentially enables the environmental movement to address energy questions in a manner which promises stable living standards for the less affluent and assurance that community members will no longer be vulnerable to the pricing decisions of corporate energy controllers (Humphrey and Buttel, 1982). The appropriate technology movement also proposes change in the economic and political substructure based on an incorporation of comprehensive sustenance and habitat concerns. It is not a moral crusade against environmental degradation but a movement toward a societal alternative.

The movement's organizational efforts range from institutionalized organizations such as the National Center for Appropriate Technologies, Ozark Institute, Institute for Local Self Reliance, California Office of Appropriate Technology and the Solar Energy Research Institute to voluntary groups such as the Long Island Appropriate Technology Group, Western Sun, and the National Solar Lobby, to organizations operating in the Third World Countries such as the Appropriate Technology Development Association, Intermediate Technology Development Group,

and Volunteers in Technical Assistance (Morrison, 1980).

Critique of the environmental movement and countermovement activity.

Criticisms of the environmental movement stem from both left and right sources. Those commonly offered from the left include charges of elitism and superficiality. Environmentalists are said to represent a privileged group whose values, concerns, and strategies narrowly reflect their class positions (Humphrey and Buttel, 1982; Sills, 1975; Morrison, 1979). Radical environmentalists and proponents of the left argue that "economic expansion and environmental degradation are inherent in the capitalist mode of production, and therefore attempts to solve environmental problems within the rubric of capitalism are doomed to failure" (Humphrey and Buttel, 1982:130; Sills, 1975; Buttel and Larson, 1980). Subsequently, environmental agendas and ideology are regarded as superficially critical, or even uncritical, of the capitalist system of maximum exploitation, maximum consumption/production and, hence pointless.

Radical critics question a capitalist society's ability to implement effective energy programs without disproportionately depriving lower and working class people and/or drastically reducing living standards (Caldwell and Woolley, 1976). This dilemma, according to the Marxist perspective, originates in the capitalist state's obligation to meet three contradictory demands: 1) justifying an economy based on a continuous growth ethic, 2) avoiding fiscal crisis, and 3) legitimating state policies (Humphrey and Buttel,

1982). That is, the simultaneous need to subsidize economic growth and expand the welfare state in order to take care of those who bear the major costs of economic growth leads to a progressively worsening fiscal and ecological situation (Schnaiberg, 1973; Buttel and Larson, 1982; O'Conner, 1973; 1975).

The most common critique of the environmental movement by the right is that reforms cost too much. More specifically, curing environmental problems "will hamstring production, slow expansion, raise prices, cause unemployment, eat up capital and in general create economic problems that will be worse than our environmental ones" (Gilbert, 1976;9). Beyond these national costs, critics of the environmental movement argue that there are international costs, i.e., that environmental reform policies hinder economic development in underdeveloped countries (Sills, 1975; Morrison, 1980). Sills states that this criticism is an extension of the allegation that environmental reform discriminates against the poor, an allegation which is the essence of conflict between the environmental movement and its critics on both the left and right camps (Schnaiberg, 1973; Buttel and Flinn, 1978).

Reform is costly; pollution abatement in 1979 was 7.143 million dollars and in 1980, it was 9.2 million dollars (Martorella, 1983; Russo, 1983). Although a large percentage of these costs was paid by industries themselves, much of the cost was born disproportionately by the poor who consume less energy than the affluent but still pay more per unit. In addition to increased consumer prices, the poor

disproportionately pay for environmental reform by way of economic slowdown and loss of jobs. Further, Zwerdling (1973) argues that the less well off also pay "costs of opportunities foregone," since the resources that are allotted to environmental protection are not available for application to problems of poverty.

Often these criticisms of the environmental movement have been manifested as countermovements which, like environmental concerns, have taken shape along status and class politics lines. The first counterattack, reflecting life-style concerns, is an attempt to link the movement to a larger communist conspiracy. This strategy in the past has been used to way lay the fluoridation of water and the teaching of sex education. It essentially accuses environmentalists of seeking to destroy the American way of life (Albrecht, 1972; Schnaiberg, 1973). Expressing class concerns, the second form of counterattack involves pitting jobs and wages against pollution abatement and other environmental reforms. Frequently then, opposition groups emerge in response to the same issues that generate environmental concerns. Examples of this include the logging opposition to the "Save the Pete" groups in Oregon (who organized to save a forested area from being overfarmed by the logging industry). Similarly, the Four-Corners Development Association formed to combat environmental organizations, such as the Escalante Wilderness Club, opposing electrical and industrial development in the Four-Corners area (Albrecht, 1972).

Environmental countermovements concentrate primarily on material

issues, draw heaviest upon industrial sources for their adherents and usually take shape as industrial or economic interest coalitions (e.g., Western Environmental Trade Association, International Brotherhood of Electrical Workers). These coalitions usually attempt to unite labor and management in opposition to environmental activities (Gale, 1983; Smith, 1980; Buttel, 1975). Other counterattack strategies focus on lobbying against environmental legislation, delaying or reducing the enforcement of environmental regulations, and countersuing in the courts. Thus, the environmental countermovement typically represents corporate and/or union (class) interests which are motivated by the possible ill effects of environmental reform on employment and production. It also indicates that material concerns usually win out when the environmental battle is perceived as "economic well being vs. clean air, parks, and streams" (i.e., class vs. status). Evidence for the success of environmental countermovement activity, along with other mitigating factors, is the general decline in support of environmental issues.

DECLINE IN SUPPORT: SPECIFIC CAUSES AND THE FREE-RIDER PROBLEM

Support for the environmental movement peaked in the early 1970's and has since experienced serious decline. This decline is reflected in the collapse of many environmentally focused magazines and publications, in loss of enthusiasm for environmentally targeted public spending priorities, and in several major setbacks, such as the failure to stop the nuclear detonation under the island of Amchitka in the Alutians,

the construction of the transAlaskan pipeline, and the return to widespread usage of coal (Sills, 1975; Hornback, 1974; Dunlap and Dillman, 1976).

Several explanations have been offered for this retreat from environmentalism. One is the ecological backlash argument which proposes that environmental controls must be relaxed in order to meet the nation's energy needs (Humphrey and Buttel, 1982; Dunlap and Dillman, 1976). The energy crisis of 1973-1974 and the more conservative administrations of the mid-1970's and early 1980's have contributed to this position that energy production, a class concern, is the ultimate priority. For instance, President Carter either suspended or relaxed many environmental regulations in order to increase the production of synthetic fuels and the utilization of high sulphur coals. The rationale behind this course of action was the expedition of "the development of new energy sources to avert potential disruption from further shortages of energy" (Humphrey and Buttel, 1982:134). Furthermore, the beginning of the Reagan administration in 1980 marked the beginning of an administrative commitment to deregulation and the building of a new federalism. Reagan's position on the energy vs. the environment debate was made clear by his appointment of "allegedly anti-environment" individuals to Secretary of Interior and Environmental Protection Agency Administrative posts and by a major reduction in both the budgets and staffs of the Interior Department, the EPA, and the CEQ (Reese, 1983).

A second explanation for the decline in support for environmental-

ism focuses upon a change in the perceived seriousness of environmental problems due to the implementation of governmental regulations and controls to deal with environmental issues (Dunlap and Dillman, 1976). It now appears that the public perceives environmental problems as being solved and therefore have lost interest. This explanation illustrates Down's (1972) concept of the "issue attention cycle" which is that the public tires of a single crisis issue after an initial phase of alarm and enthusiastic support or opposition.

Finally, decline in public support for the environmental movement is attributed to the process of elite co-optation, or "the tendency for foundations and private companies or corporations to fund social movement organizations in order to exercise control over potentially disruptive movements, and thereby temper their agendas for change" (Humphrey and Buttel, 1982:127; McCarthy and Zald, 1973). An example of the "overlap" between corporate and environmental interests is found in the fact that Westinghouse, Crown Zellerbach, the Philadelphia Electric Company, and the Ford Foundation are major funders of environmental organizations like the Sierra Club and the Nature Conservancy. This gives rise to statements such as: "Since its founding in 1948, the Conservation Foundation has recognized the importance of a healthy social and economic climate to the achievement of conservation goals" (Swartzman, et. al., 1982:xi; Humphrey and Buttel, 1982).

In addition to these issue-specific explanations for the decline in support of environmentalism, the environmental movement has faced the inherent mobilization problem of all social movements, the free-

rider attitude. The classic statement of the "free rider problem" has been laid out by Olson (1965) in his writings on collective action. Olson's theory of individual behavior within large collectivities is based on the assumption that individuals are rational, calculating actors. Consequently, unless coercion or special inducements are offered to make individuals act in their common interest, rational self-interested actors are expected to be motivated by individual gain. A collective good is any good whose benefits cannot be withheld from the collectivity regardless of the members contribution to its cost (Wrong, 1979; Oberschall, 1973). Thus, benefits distinct from the collective good itself must be offered in order for self-interested members to voluntarily organize to achieve a collective goal that will benefit them all. These distinct benefits or selective incentives may include prestige, leadership, access to social networks, material resources, psychological gratification, or other inducements (Gamson, 1975).

The free-rider problem may vary depending upon the nature and extent of the goals being pursued and of the costs involved in the pursuit. Regarding the environmental movement, Dolan (1971) states, "a free-rider attitude toward the protection of the quality of the environment has been a favorite pastime." This general and pervasive free rider attitude can be accounted for by the specific free rider problems associated with each of the environmentalists' solution strategies. One strategy involves voluntary changes in the consumptive patterns of individuals. Another involves governmentally induced

changes in the consumptive behavior of individuals, while a final strategy concentrates on stepping up governmental regulation of productive processes. In the case of voluntary, individual action, an actor may perceive his/her efforts at environmental betterment (e.g., driving less, using non-aerosol sprays, picking up litter, returning aluminum, glass, or paper products to be recycled) to be irrelevant given what the collective is doing (e.g., attempting to influence official environmental policy) and choose not to alter his/her behavior. The free-rider problem here is one of conflict between individual and collective interest.

The free-rider problems of the second and third strategies revolve around a difference in the level of specificity of the costs and benefits of collective action. Scott et al. (1981) and Buchanan (1979) argue that if the costs of collective action are concentrated and clearly specified while the benefits are diffused and generalized, individuals will be swayed by the costs and hence the tendency will be to oppose the benefits. Simply, if an actor thinks that personal inconveniences brought on by governmentally induced changes in consumption, e.g., increased littering fines, reduced speed limits, automobile emissions and mileage standards, private home and business thermostat regulations, outweigh the benefit of a protected environment or prolonged resources, he/she will not be in favor of government regulation of consumption of the environment. Hummel et al., (1978) show that upper middle class individuals are willing to pay higher consumer prices or taxes but are not willing to make personal sac-

rifices in their support of environmentalism.

Examples of specific costs of the more severe environmental regulations of industrial production proponents of this solution might incur are increased taxes and prices, decreased employment, and reduced profits. If these costs are perceived as being too high relative to the gain of increased environmental quality, individuals will be less likely to act in favor of such policies.

RESOURCE SCARCITY: THE FUTURE OF ENVIRONMENTALISM

The ideological and strategic posture of the present "environmentalism of the center" is that conservation can be achieved for the most part through wise and efficient use and management of the environment. Buttell and Larson (1980) argue that there are two fundamental problems with this center posture. One is its focus on only superficial or limited aspects of environmental problems (e.g., specific issues, post-consumption behavior), and the other is the tendency of environmental reform policies to disproportionately penalize the working class. The latter problem derives from (1) deep-seated divisions between the working class and environmental elites which results in programs that are "insensitive to distributional impacts;" and (2) concentration on environmental policies and issues which do not significantly interfere with the profit making and growth producing initiatives of powerful industrial corporations (Buttell and Larson, 1980).

The longevity of the middle class politics approach to environ-

mentalism, according to Buttel and Larson, is dependent upon the absence of a protracted energy resource crisis. Writers in this area propose that the emergence of severe materials and energy shortages will alter the environmental concerns of major social groups (i.e., economic classes), and will turn environmental struggles into class struggles (Buttel and Larson, 1980; Morrison, 1976; Schnaiberg, 1973). That is, resource scarcity will undermine economic expansion as we know it, thereby creating conflict over whether scarce material resources will be allotted to production or consumption processes. Capitalist interests will be best served as scarce resources are allocated to industrial production of commodities to sell for profit, while working class interests will be best served as scarce resources are allocated to production oriented toward social needs.

~~Since resource scarcity will constrain economic expansion, the~~
 incremental increases in wages and employment that have occurred in times of resource abundance will cease and result in a working class demand for changes in consumption and production institutions. Such changes may include, according to Buttel and Larson (1980), public ownership of and control over energy industries, localism or decentralization of production, and worker-controlled enterprises. In other words, these authors argue that the ever threatening resource scarcity will polarize the users and controllers of natural resources forcing environmentalism to assume either an extreme left or right political and economic position. Environmentalism of the right would entail state centralization and authoritarian control over

energy production and distribution along with managerial elite decisions concerning other natural resource allocations, while environmentalism of the left would involve the decentralization of control and promotion of new forms of energy production which would enable greater citizen participation in decisions of scarce resource allocation (Buttel and Larson, 1980; Gale, 1983).

Buttel and Larson elaborate further on this polarization suggesting conditions which might give rise to environmentalism of the right: 1) if middle class environmentalists actively cooperate with the dominant class in utilizing scarce resources to the benefit of industrial corporations or 2) if resource scarcity results in the liberal state's inability to regulate social conflict. On the other hand, active cooperation between middle class and labor and minority groups will give rise to environmentalism of the left. Combining these objectives will require an understanding of the common bond between environmental problems and material problems (Gale, 1983; Jezer, 1977).

MODEL OF SUPPORT FOR ENVIRONMENTAL REFORM

The literature indicates that although there is a high level of public awareness of environmental problems, there is little support for environmental protection and reform. Two explanations which account for the mobilization difficulties within the environmental movement are presented. One is that environmental issues encompass both lifestyle and economic concerns. The other is that the presence of a free-rider problem modifies the link between concern for the environ-

ment and support for specific solution strategies.

Dimensions of environmental concern. Throughout the history of the conservation and environmental movement, environmental issues have been manifested as either status politics or class politics concerns. This situation in which some people perceive environmental problems in life-style terms while others perceive them in economic terms has hindered the progress of environmental activities by generating distinct, if not conflicting, definitions of the problem and hence, differing solutions to the problem. A measure of environmental concern must then capture both the status and class dimensions of environmentalism as these concerns do not always overlap.

Correlates of support for environmental concern: bivariate relationships. As stated earlier, correlates of environmental concern include age, social class, political ideology, and residence. The relationship between these variables and support for environmental concern is different depending upon whether environmental problems are perceived in terms of status or class concerns. Consequently, any measure of environmental concern which does not distinguish between these dimensions will underestimate the strength of the Bivariate relationships. The following is a brief explanation of each of these relationships.

Young people who have less of a social or economic stake in the system are expected to view environmentalism in terms of class

concerns and therefore to support production reform, while older people have vested interests in the status quo and tend to be more conservative politically are expected to view environmental issues as those of status or life-style concerns, and therefore to favor solutions which would not entail major consumptive or productive changes.

Middle class individuals who are concerned with aesthetic and recreational quality of the environment will view environmentalism as life-style issues. Lower and upper class individuals, on the other hand, will more likely perceive environmentalism as class issues since their economic security/prosperity depends to a great extent on some form of environmental exploitation.

Given the traditional laissez-faire economic stance of conservatism, individuals who uphold this particular ideology are likely to view environmentalism as life-style issues, and therefore support reforms that do not lead to greater government control. In contrast, politically liberal individuals who are more apt to be concerned with social problems will view environmentalism in terms of class politics, and will therefore support interventionist policies of environmental reform.

Due to a generally lower standard of living in rural areas, rural residents are likely to view the environment from an utilitarian perspective, thereby taking a class position on environmentalism. Urban residents, who are exposed to higher levels of pollution, are more likely to perceive environmental issues as those of life-style

matters.

Correlates of support for environmental reform: bivariate relationships. Support for consumption or production reform varies according to whether environmental problems are perceived as life-style or economic threats. Individuals who view environmentalism in terms of status politics are concerned with threat to their way of life due to environmental degradation. They focus on consumptive related activities and generally do not locate the source of environmental erosion in productive processes. More specifically, life-style oriented supporters are concerned with immediate sense perception, so their efforts are usually geared toward residential and recreational litter or lake and stream pollution. These efforts are typically ad hoc grassroots campaigns which are very issue-, area-, and sometimes producer-specific and place primary emphasis upon voluntary action. In addition, status based supporters are apt to support national campaigns such as "Save the American Way of Life" and as a consequence, are likely to want government enforcement of the "proper" consumptive patterns of the environment, as well as other consumer items such as liquor or pornographic materials. More importantly, these individuals see environmental problems as capable of being solved with minor costs and inconvenience.

In contrast, individuals who view environmentalism in terms of class politics use economic criteria on which to base their environmental opinions and prescriptions. They consider both consumption

and production aspects of environmental decay but usually stress the need for control and revision in industrial productive processes, e.g., pollution abatement, use of soft technology. Similarly, class oriented supporters call for a restructuring of the economic system and a slow down in economic expansion as both are viewed as being predicated on natural resource and labor exploitation. These individuals make up lobby and special interest groups and are members of national environmental organizations. Most see large scale, government induced reform in productive behavior as the only solution to environmental problems. Consequently, individuals who view environmentalism in terms of class politics are not expected to support strategies which concentrate on consumptive change.

Environmental concern and support for environmental reform:
conditional relationships. The environmental movement strives to achieve environmental protection through two basic strategies: voluntary changes in consumption and governmentally induced changes in consumption and production. Associated with these strategies are two free-rider problems. The free-rider problem associated with consumption change involves specific individual costs defined in terms of life-style vs. gains in environmental quality. That is, when an individual perceives that the specific and immediate costs of personal inconvenience via personal sacrifice or voluntary efforts are greater than the diffuse gain of environmental quality, viewing environmentalism in terms of status politics will not lead to support

of voluntary changes in individual patterns of consumption or of government regulation of consumptive patterns. For instance, Hummel et al. (1978) found that upper-middle class individuals were willing to pay higher consumer prices and taxes but were not willing to make personal sacrifices in their support of environmental activities.

In the case of productive reform, the free-rider problem takes shape as specific individual costs defined in economic terms vs the gain of environmental quality. Thus, when an individual perceives that the economic costs of government regulation of production are greater than the gain of environmental quality, viewing environmentalism in terms of class politics will not lead to support for government regulation of production patterns. For instance, individuals who take a utilitarian stand on the environment or who see environmental reform as threatening the profitability of industrial production or economic growth will be more likely to support voluntary changes in consumptive patterns than government regulation of production. Similarly, individuals whose jobs are dependent on hard technology and environmental exploitation may fear for their positions as a result of strict governmental reform; therefore, these individuals will be more likely to support reform focused on consumption rather than production processes.

CHAPTER THREE

HYPOTHESES

The following hypotheses are derived from the proposed model of environmental support. They focus upon the status/class dimensions of environmental concern, the correlates of environmental support, and the potentially conditional relationships between the dimensions of concern and preference for solution strategies.

HYPOTHESES₁: Dimensions of Environmental Concern

H₁ Factor analysis of a set of items tapping consumptive and productive aspects of environmental concern will yield a two-factor solution indicating that environmental issues are defined in terms of either status or class politics.

Factor analysis of an environmentalism scale comprised of both life-style and economic items could yield either a one-factor or a two factor solution. A one-factor solution will result when all the items load consistently high or low indicating that environmentalism simultaneously has both status and class politics dimensions or neither. Alternatively, a two-factor solution will come about when half the items loads consistently on one factor, while the other half loads consistently on another. This situation would indicate that environmentalism has primarily a class or status dimension.

HYPOTHESES₂: Correlates of Support for Environmentalism

H₂ There will be a positive relationship between age and the status politics dimension of environmentalism and a negative relationship between age and the class politics dimension of environmentalism.

Young people, who have less of a stake in the system, are expected to view environmentalism in terms of economic or class concerns, while older people, who have vested interests in the status quo and tend to be more conservative politically, are expected to view environmental issues as those of status or life-style concerns.

H₃ There will be a positive relationship between social class and the status politics dimension of environmentalism and a curvilinear relationship between social class and the class politics dimension of environmentalism.

Middle and upper class individuals, having satisfied their subsistence needs and been more politically and socially active than lower and working class individuals, are expected to be concerned with the aesthetic and recreational quality of the environment and, in turn, view environmentalism in terms of status politics. Lower and upper class individuals, on the other hand, are more likely to view environmentalism in terms of class politics, since the jobs of the former and the profits of the latter depend to a great extent on some form of environmental exploitation.

H₄ There will be a negative relationship between liberalism and the status politics dimension of environmentalism and a positive relationship between liberalism and the class politics dimension of environmentalism.

Elsewhere, status politics has been described as the politics of the "right" (Lipset, 1955; Hofstadter, 1955). Coupled with the

laissez faire economic position of conservatism, this orientation suggests that individuals who maintain a politically conservative ideology are more likely to view environmentalism in terms of status politics issues. In contrast, liberals and individuals of more leftist political ideologies, are not only more likely to be concerned with social problems but also are not as likely to view regulatory or interventionist policies of environmental reform as threatening. Therefore, individuals who maintain a politically liberal ideology are expected to view environmentalism in terms of class politics.

H₅ There will be a positive relationship between urban background and the status politics dimension of environmentalism and a negative relationship between urban background and the class politics dimension of environmentalism.

Due to the predominance of extractive occupations and the lower standard of living in these areas, individuals from rural areas are more likely than individuals from urban areas to view the environment from a utilitarian perspective and to value economic growth at the expense of environmental quality. Consequently, individuals having rural backgrounds are expected to take a class or economic position on environmentalism.

H₆ There will be a positive relationship between the status politics dimension of environmentalism and support for voluntary changes in individual patterns of consumption and no relationship between the class politics dimension of environmentalism and support for voluntary changes in individual patterns of consumption.

H₇ There will be a positive relationship between the status politics dimension of environmentalism and support for government regulation of consumptive patterns and a positive relationship between the class politics dimension of environmentalism and support for government regulation of consumptive patterns.

Hg There will be a positive relationship between the class dimension of environmentalism and support for government regulation of productive patterns and no relationship between the status politics dimension of environmentalism and support for government regulation of productive patterns.

Individuals who view environmentalism in terms of status politics are concerned about threat to their way of life due to environmental degradation. They focus on consumptive related activities and generally do not locate the source of environmental erosion in productive processes. More specifically, life-style oriented supporters are concerned with immediate sense perception, so their efforts are usually geared toward residential and recreational litter or lake and stream pollution. These efforts are typically local campaigns which are very issue-specific and primarily emphasize the role of voluntary action.

Furthermore, status politics supporters of environmentalism are likely to want government enforcement of the "proper" consumptive patterns of the environment, as well as other consumer items such as liquor or pornographic materials and to see environmental problems as capable of being solved with minor individual and government reforms.

In contrast, individuals who view environmentalism in terms of class politics use economic criteria on which to base their environmental opinions and prescriptions. They consider both consumption and production aspects of environmental decay and stress the need for control and revision in both consumptive and productive processes (e.g., consumer item and industrial pollution abatement, use of soft

technology). Similarly, class oriented supporters call for a restructuring of the economic system and a slow down in economic expansion as both are viewed as being predicated on natural resource and labor exploitation. These individuals make up lobby and special interest groups and are members of national environmental organizations. Most see large scale, government enforced reform in productive and consumptive behavior as the only solution to environmental problems. Consequently, individuals who view environmentalism in terms of class politics are not expected to support voluntary changes in individual patterns of consumption.

HYPOTHESES₃: Conditional Relationships

H₉ When conflict exists between individual and collective consumptive patterns, there will be no relationship between the status politics dimension of environmentalism and support for voluntary changes in individual patterns of consumption. When there is no conflict, the relationship will be positive.

H₁₀ When the costs of personal inconvenience imposed by government regulation of consumptive or productive patterns are greater than the gain of environmental improvement, there will be no relationship between the status/class politics dimensions of environmentalism and support for government regulation of consumptive/productive patterns. When the gain is greater, the relationship will be positive.

The environmental movement strives to achieve environmental protection through two basic strategies: voluntary changes in consumption and governmentally induced changes in consumption and production. Associated with each of these strategies is a specific free-rider problem. With voluntary action, an actor may perceive that his/her own efforts at environmental action are pointless given

the collective's efforts. If this is the case, viewing environmentalism in terms of status politics will not lead to a difference in support of voluntary changes in individual patterns of consumption than viewing environmentalism in terms of class politics.

Secondly, when an individual perceives that the specific and immediate costs of personal inconvenience are greater than the diffuse gain of environmental quality, viewing environmentalism in terms of status politics will not lead to more support for government regulation of consumptive patterns than viewing environmentalism in terms of class politics.

Third, when an individual perceives that the economic costs of government regulation of production are greater than the gain of environmental quality, viewing environmentalism in terms of class politics will not lead to more support for government regulation of production patterns than viewing environmentalism in terms of status politics. Individuals who take a utilitarian stand on the environment and see environmental reform as threatening the profitability of industrial production or economic growth will be more likely to support voluntary changes in consumptive patterns than government regulation of production. Similarly, individuals whose jobs are dependent on hard technology and environmental exploitation may fear for their positions as a result of strict governmental reform; therefore, these individuals would be more likely to support changes focusing on consumption rather than production.

CHAPTER FOUR

METHODOLOGY

The hypotheses are tested with self-report data collected in an annual survey project conducted by graduate students and professors in the Sociology department of the University of Oklahoma. The project was funded by the College of Arts and Sciences as part of a graduate training program. The questionnaire contains seven other projects beyond that reported in this study.

SAMPLE AND DATA COLLECTION

Data were collected during the Spring of 1984 in a survey of Oklahoma City and the surrounding areas. Three hundred forty-four adults (ages 18 and over) composed a simple random sample drawn from the Polk City Directory. Appointments for interviews were made over the phone or at the door after the selected respondents had been sent a letter of explanation. Refusals were replaced by either drawing another name from the Directory or interviewing an adult of the same sex in a three block radius of the original address. This procedure was repeated until 344 interviews were obtained.

MEASUREMENT: CORRELATES OF ENVIRONMENTAL CONCERN

Four variables are identified in previous pages as antecedents of environmental concern: residential background, political ideology,

age, and social class. The measure of residential background is derived from the question, "When you were growing up, where did you live most of your life?" Response categories include: on a farm (1); in a rural area, but not on a farm (2); in a small town of 10,000 or less not located near a bigger city (3); in a small town of 10,000 or less located near a bigger city (4); in a city of 10,000 or more people (5). Responses are coded so that a higher score indicates greater urbanness. Respondents with a score of 3 or above (i.e., those with an urban background) make up 64% of the sample.

To measure political ideology, respondents were asked, "If you were to label yourself on the basis of your typical political stance, would you say that you are basically conservative (1); middle of the road (2); or liberal (3)?" Responses are coded so that a higher score indicates greater liberalism. Just over one-half of the sample (51.5%) has a score of 2 or above.

Social class identification is assessed by the question, "If you had to say you were a member of a particular class, which class would you say?" Response categories include: lower class (1); working class (2); middle class (3); upper class (4). About a third of the sample (35.2%) categorized themselves as working or lower class; most classified themselves as middle class (60.2%), and few as upper class (4.7%).

Finally, the measure of age is derived from the question, "How old were you on your last birthday?" The average age of the sample is 41.9 years.

SCALE CONSTRUCTION

The remaining independent and dependent variables are treated as composite scales. Each is created by summing an individual's responses to a set or sets of questions designed to tap one or more underlying concepts. Composite scale construction is a method which approximates the interval level of measurement and allows for a more comprehensive examination of a concept than the use of a single item. Factor analysis is used to determine the number of concepts measured by a scale. If a concept is unidimensional, factor analysis will result in a one-factor solution made up of items with high loadings on the particular factor. The scale items must be standardized, using a z-score transformation technique, so that all items have the same variance (1.0) before item responses are summed. Standardization guarantees that the variance of each item contributes equally to the variance of the composite. After the scale has been constructed, Cronbach's alpha is used to estimate its reliability. All scale alphas are reported along with factor loadings in Tables 4.1 to 4.3.

ENVIRONMENTALISM SCALES: STATUS VS CLASS POLITICS PERCEPTIONS

Conceptually, the status politics aspect of environmental issues refers to the life-style concerns of individuals which focus upon the appreciation and preservation of the environment for aesthetic and recreation purposes; the class politics perception of environmental issues refers to the material concerns of individuals which focus upon the utilization of the environment for economic gain. Status

politics comes about as a reaction by various life-style groups to the on-going processes of change in society principally of industrialization and modernization. Class politics, on the other hand, arises out of the ways in which groups of individuals are related to and effected by the structure of production.

H₁ Factor analysis of a set of items tapping consumptive and productive aspects of environmental concern will yield a two-factor solution indicating that environmental issues are defined in terms of either status or class politics.

The question of whether these conceptual differences are also empirical differences may be answered by factor analyzing a group of items designed to assess environmental perceptions. Factor analysis of both life-style and material items simultaneously could yield either a one-factor or a two-factor solution. A one-factor solution will result if factor loadings for all items are consistently high or low, indicating that environmental issues are perceived simultaneously as containing both class and status politics themes or as containing neither set of themes. However, if one group of respondents favors environmental protection and conservation but disagrees about the economic utilization of the environment, while another category of respondents agrees about the economic usefulness of the environment but lacks consensus about its aesthetic value, a two-factor solution will emerge in an analysis of the items. In this case, items loading highly on one factor will at the same time load lowly on the second factor and vice versa.

Results of the factor analysis are summarized in Table 4.1.

TABLE 4.1
FACTOR ANALYSES OF ITEMS MEASURING ENVIRONMENTAL CONCERN

<u>Items</u> ¹	<u>Factor Loadings</u> ²		
	<u>1-Factor Solution</u>	<u>2-Factor Factor 1</u>	<u>Solution Factor 2</u>
<u>Status Dimension of Environmental Concern:</u>			
- preserving the natural beauty of parks and recreation areas	.80	.61	.08
- keeping our lakes, streams and rivers pure and clean	.79	.34	-.06
- keeping our air pure and clean even if businesses have to change the way they operate	.74	.56	.03
- setting aside more land for wildlife and natural habitat preservation	.75	.66	.003
- preserving the quality and beauty of our natural surroundings even if it means cutting back on energy production	.68	.63	.03
- preserving our environment in its natural state	.80	.69	-.07
- protecting and saving the environment for future generations	.75	.70	-.06
<u>Class Dimension of Environmental Concern:</u>			
- increasing oil and gas explorations in new or unexplored areas	-.04	-.13	.52
- developing methods of refining oil which are more profitable to oil companies	-.23	.04	.57
- freeing up more federally protected areas for economic use	-.59	-.02	.67
- maintaining our current standard of living by getting enough energy through whatever means are necessary	-.58	-.04	.69
- using our natural resources primarily for economic purposes even if it reduces the quality of our environment	-.09	-.03	.68
- pursuing the economic usefulness of the environment in its natural state	-.41	.13	.62

¹ Respondents were asked to rate the "importance" of each of these items. Response format is: "very important" (coded "3"), "somewhat important" (coded "2"), and "not important" (coded "1").

² Eigenvalues for principal components solution: 2.69, 2.38, 1.17, 1.01, .89, .78, .75, .64, .63, .63, .55, .47, .40.

The inconsistent and low loadings on the one-factor solution suggest that more than one underlying concept is being tapped. An examination of the two-factor solution shows that there are two factors before the greatest break in a plot of factors and eigenvalues which according to the scree test, is the number of significant factors. These results indicate that there are two underlying concepts, not one. This suggests that there are two separate concerns giving rise to or inhibiting environmental support among respondents in the sample.

A varimax rotation for a two-factor model, which assumes uncorrelated factors in deriving a solution, was performed. Items one through seven, the status items, load highly on Factor 1 but not on Factor 2, while the class items, items eight through thirteen, load highly on Factor 2 but not on Factor 1. This loading pattern, in addition to the near zero correlation ($-.015$) between the two factors, clearly confirms the hypothesis that class and status are different aspects of the more widely encompassing phenomenon of environmentalism. Therefore, two environmental scales were developed, a status dimension and a class dimension scale, each by summing the standardized scores of the items.

The class and status scale items, means, standard deviations, factor loadings, alphas and the percentages of respondents who think the items are important are listed in Tables 4.2 and 4.3. Each item has three response categories which include "not important," "somewhat important," and "very important." The categories are

TABLE 4.2
SUMMARY STATISTICS OF ITEMS MEASURING STATUS DIMENSION
OF ENVIRONMENTAL CONCERN

Items ¹	Mean	% Who Say:		Factor ² Loadings
	(Standard Deviation)	Somewhat Important	Very Important	
- preserving the natural beauty of parks and recreation areas	2.85 (.38)	13.4%	85.8%	.62
- keeping our lakes, streams, and rivers pure and clean	2.92 (.30)	7.3	92.2	.40
- keeping our air pure and clean even if businesses have to change they way they now operate	2.67 (.48)	29.4	69.9	.57
- setting aside more land for wild- life and natural habitat preserva- tion	2.45 (.63)	39.8	52.3	.67
- preserving the quality and beauty of our natural surroundings even if it means cutting back on energy production	2.31 (.60)	54.4	37.8	.62
- preserving our environment in its natural state	2.60 (.55)	34.6	61.9	.69
- protecting and saving the environ- ment for future generations	2.74 (.48)	22.7	75.0	.70

¹ Respondents were asked to rate the "importance" of each of these items. Response format is: "very important" (coded "3"), "somewhat important" (coded "2"), and "not important" (coded "1").

² Loadings for 1-factor solution. Alpha reliability when combining these items to form a single composite scale is .72.

coded so that the higher the score the greater the importance of the item. According to the mean scores for the status items in Table 4.2, preserving the natural beauty of recreation areas, keeping lakes and streams clean, and protecting the environment for future generations are very important (i.e., have the highest mean scores). While only 37.8% of the respondents feel that preserving the beauty of the environment is very important even if it means cutting back on energy production, over half of the respondents feel the rest of the status issues are very important (92.2% think keeping lakes and rivers clean is very important). Between 7.3% and 54.5% of the respondents consider all of the status oriented environmental issues to be "somewhat important." By combining these percentages, we see that the overall level of environmental concern is very high as over 90% think that all of these issues are important, while almost 100% think that the first three status issues, preserving the beauty of recreation areas and keeping lakes and streams and air pure and clean, are important. Other status oriented environmental concerns are preserving the environment in its natural state and reserving more land for natural habitat preservation.

Turning to the class items in Table 4.3, the greatest concern (i.e., the items with the highest mean scores) are increasing oil and gas exploration, pursuing the economic usefulness of the environment, and developing more profitable ways of refining oil. While the largest percentages of respondents feel that the status environmental issues are "very important," the largest percentages for class

TABLE 4.3
SUMMARY STATISTICS OF ITEMS MEASURING CLASS DIMENSION
OF ENVIRONMENTAL CONCERN

<u>Items</u> ¹	<u>Mean</u>	<u>% Who Say</u>		<u>Factor</u> ² <u>Loadings</u>
	(Standard Deviation)	Somewhat Important	Very Important	
- increasing oil and gas explorations in or unexplored locations	2.46 (.61)	41.0%	52.6%	.52
- developing methods of refining oil which are more profitable to oil companies	2.10 (.76)	42.2	33.4	.57
- freeing up more federally protected areas for economic use	1.87 (.73)	45.3	20.6	.68
- maintaining our current standard of living by getting enough energy through whatever means are neces- sary	1.97 (.71)	50.0	23.3	.69
- using our natural resources primari- ly for economic purposes even if it reduces the quality of our en- vironment	1.70 (.71)	41.4	14.2	.67
- pursuing the economic usefulness of the environment to its fullest extent	2.13 (.70)	49.1	31.4	.62

¹ Respondents were asked to rate the "importance" of each of these items. Response format is: "very important" (coded "3"), "somewhat important" (coded "2"), and "not important" (coded "1").

² Loadings for 1-factor solution. Alpha reliability when combining these items to form a single composite scale is .69.

environmental issues are in the "somewhat important" category. Approximately 50% of the respondents think that all of these issues are somewhat important, while the levels of "very important" range from 14.2% for using the environment primarily for economic purposes even if it reduces environmental quality to 52.6% for increasing oil and gas exploration. When these categories are combined, over half of the respondents think that all of these issues are important with the percentages ranging from 55.5% to 93.6%. More importantly, a comparison of the levels of concern for the environment as life-style issues vs economic issues shows that more concern is generated from status perceptions than from class perceptions of the environment.

Finally, an examination of the factor loadings for each scale provides the basis for naming the factors. Environmentalism perceived as class politics is best represented in the idea that maintaining our current standard of living is of utmost importance no matter the means used to do it; whereas, environmentalism perceived as status politics is best expressed in the notion that the protection and preservation of the environment for future generations is of primary importance.

SOLUTION STRATEGY SCALES: GOVCON INDCON GOVPRO

Three strategies for dealing with environmental problems have been identified in the literature: government regulation of consumption (GovCon), government regulation of production (GovPro) and

voluntary individual regulation of consumption (IndCon). While responses to a common problem, these strategies are divergent in their approach to solving the problem in two basic areas: 1) government vs individual action, and 2) consumption vs production targeting. Three separate solution strategy scales are created from items designed to assess respondents' preference for the different approaches.

Four items tap the perception that voluntary changes in individuals' consumptive habits are what is needed to protect the environment. A second set of four items deals with the notion that one way to solve environmental problems is to force people to change their consumptive patterns through government inducement. A final set of four items pertains to the proposal that government regulated change in production patterns and processes is the solution to environmental ills.

The scale items, means, standard deviations, alphas, percentages, and factor loadings are reported in Table 4.4. Response categories for the scale items range from strongly disagree (1) to strongly agree (4) with categories coded so that a high score represents overall agreement with the particular strategy. Examining the Gov-Con scale, the most highly agreed with item (63.9% of the respondents) is "The 55 mile per hour speed limit should be maintained in order to conserve gasoline," while the least agreed with item (20.4%) concerns the discouraging of the use of small electric appliances which are energy inefficient. Other strategies for government regu-

TABLE 4.4
SUMMARY STATISTICS OF ITEMS MEASURING SOLUTION STRATEGIES

<u>Items</u> ¹	<u>(Standard Deviation)</u>	<u>% Who Agree</u> ²	<u>Factor</u> ³ <u>Loadings</u>
<u>Government Regulation of Consumptive Patterns:</u> ⁴			
The government should set maximum heating and cooling costs for businesses and private homes in order to conserve energy	2.31 (1.09)	56.1%	.70
The 55 mile per hour speed limit should be maintained in order to conserve gasoline	2.83 (1.06)	63.9	.74
The government should require all vehicles to use only lead-free fuel to slow down air pollution	2.63 (.97)	59.0	.62
The government should discourage the use of products such as power tools and small electric appliances which are inefficient users of energy	1.82 (.91)	20.4	.58
<u>Voluntary Change in Consumptive Patterns:</u> ⁵			
I would be willing to drive less often and at relatively slower speeds in order to conserve gasoline	2.53 (.96)	44.4	.59
I would be willing to buy products in more costly and inconvenient returnable bottles rather than in the throw-away containers which waste raw materials	2.99 (.89)	74.7	.66
I would be willing to keep my thermostat set on a low temperature in the winter in order to conserve energy even if I had the money to pay bigger heating bills	2.92 (.91)	71.8	.74
I would be willing to cut down on the use of appliances like electric knives and can-openers which use a lot of energy unnecessarily	2.79 (.96)	67.7	.71
<u>Government Regulation of Production Patterns:</u> ⁶			
The government should force factories to shut down that are seriously polluting the environment	3.04 (.86)	75.9	.74

TABLE 4.4 (Continued)

<u>Items</u> ¹	<u>Mean</u>	<u>% Who Agree</u> ²	<u>Factor Loadings</u> ³
	(Standard Deviation)		
The government should make even more and stronger laws to reduce the pollution and destruction of the environment by oil and gas corporations	3.05 (.88)	79.9	.85
The government should prohibit the manufacturing of products which are hazardous to the environment or which are wasteful of energy	3.10 (.85)	79.4	.80
The government should sponsor more programs for the development of energy sources which do not damage or deplete our natural resources	3.43 (.83)	86.7	.53

¹ Response categories range from "strongly disagree" (coded "1") to "strongly agree" (coded "4").

² The "percent who agree" contains the combined percentages from the "agree somewhat" and "strongly agree" categories.

³ Factor loadings for each set of items are derived from a 1-factor solution.

⁴ Alpha reliability for these items is .57.

⁵ Alpha reliability when combining these items into a composite scale is .60.

⁶ Alpha reliability for these items is .71.

lation of environmental consumption included in this scale are setting maximum heating and cooling costs and requiring all vehicles to use only lead-free fuel.

"I would be willing to buy products in more costly and inconvenient returnable bottles rather than in the throw away containers which waste raw materials" is the item with the highest mean score and highest level of agreement (74.7%) in the IndCon scale. Driving less often and at slower speeds is the item with the least agreement (56.1%). Setting thermostats low in the winter and high in the summer and cutting down on the use of small electrical appliances are other examples of voluntary individual change in environmental consumption patterns. The most highly agreed with item (88.7% of the respondents) in the GovPro scale (Table 4.4) is "The government should sponsor more programs for the development of energy sources which do not damage or deplete our natural resources." Other proposals for government regulation of environmentally damaging production patterns are forcing factories which are seriously polluting the environment to shut down, the least agreed with item (75.9%) and making more and stricter pollution laws. A comparison of the levels of support for these three different strategies reveals that government regulation of production receives the support given by the most respondents.

An examination of the factor loadings for each scale enables us to identify the crux of each solution strategy. For GovCon, it is maintaining the 55 mile per hour speed limit in order to

conserve energy. For IndCon, the underlying theme is willingness to keep one's thermostat low in the winter and high in the summer even if one is able to pay bigger heating/cooling bills. Finally, the crucial factor in GovPro is agreeing that the government should make more laws to reduce the destruction of the environment by large oil and gas corporations. These percentages lead to the conclusion that although the level of support for environmentalism is high (over 50% in most cases), the level of concern is much higher (over 90% in all cases), a problem which the following analyses address

FRIDE1, FRIDE2: MEASURES OF THE FREE-RIDER PROBLEM

The free-rider problem has been defined generally as a conflict between individual and collective interests whether those vested interests are manifested in life-style or economic costs/gains. Two measures, corresponding to each of the two basic strategies for solving environmental problems, are used to assess the free-rider phenomenon. Respondents are asked to agree or disagree with the following statements, "the amount of energy I could save by lowering my thermostat in the winter and using less air conditioning in the summer doesn't seem worth the inconvenience (fridel)" and "reducing by government regulation the use of electric appliances like blenders, curlers, and toasters seems too big an inconvenience to me for the amount of energy it would save (fride2)." The response format ranged from strongly disagree (1) to strongly agree (4);

agreement is indicated by a higher score.

The first measure (fridel) applies to the conflict which might arise in support of the voluntary individual level solution strategy, while the second (fride2) refers to the potential conflict of interests in seeking government action. Approximately half of the sample (46.5%) agreed that the amount of energy saved by reducing heating/increasing cooling temperatures is not worth the inconvenience, while 74.7% agree that government regulation of the use of small electrical appliances is too big an inconvenience for the amount of energy saved by lessening their usage. Therefore, there does seem to be a conflict of interests for many of the respondents. The following analysis addresses this conflict and its effect on support for environmental solutions.

CHAPTER FIVE

ANALYSIS

CORRELATES OF SUPPORT FOR ENVIRONMENTALISM

Table 5.1 shows the correlation matrix for all the variables in the model of support for environmentalism. These initial findings should be interpreted cautiously since bivariate correlations assume linearity and absence of interaction. Among the antecedent variables, age is a major correlate of social standing, residential background, and political ideology. It is positively correlated with social class (.125), and negatively correlated with urbanness (-.279) and with liberalism (-.266), i.e., the older an individual is, the more likely she/he is to be a member of a higher class, to have had a rural background, and to be politically conservative. The probability of observing correlations of this magnitude when sampling a population where there is no relationship between these variables is less than five percent.

The following summaries concern the hypothesized bivariate relationships among the model variables:

H₂ There will be a positive relationship between age and the status dimension of environmentalism and a negative relationship between age and the class politics dimension of environmentalism.

The negative correlation between age and the status dimension

TABLE 5.1

BIVARIATE CORRELATIONS BETWEEN VARIABLE PAIRS

	<u>Sub Class</u>	<u>Urbanness</u>	<u>Liberalism</u>	<u>Class</u>	<u>Status</u>	<u>Govcon</u>	<u>Govpro</u>	<u>Incon</u>	<u>Fridel</u>	<u>Fride2</u>
<u>Antecedents</u>										
Age	.125*	-.279	-.266*	.124	-.136*	.089	.004	.117	-.012	-.049
Subj Social Class		-.010	-.097	.026	-.045	.001	-.049	.024	-.068	.053
Urbanness			.092	.074	.068	.017	.035	-.063	-.022	-.102
Liberalism				-.073	.063	.138*	.121	-.015	-.036	-.004
<u>Environmental Issues</u>										
Class					-.015	.147*	-.097	-.081	.214*	-.073
Status						.239*	.391*	.213*	-.145*	-.036
<u>Solutions Preferred</u>										
GovCon (government regulation of consumption)						.446*	.359*		-.028	-.069
GovPro (government regulation of production)							.251*		-.053	.036
IndCon (voluntary regulation of individual consumption)									-.284*	-.064
<u>Free-rider Problem</u>										
Fridel (individual effort not worth it)										.116
Fride2 (government regulation not worth it)										--

* p = .05 for all correlations larger than .13.

¹ Boxed coefficients refer to hypothesized relationships.

² Circled coefficients refer to other noteworthy relationships.

of environmentalism (-.37) is statistically significant at the .05 level, but the correlation between age and the class dimension of environmentalism (.124) is nonsignificant and therefore will occur fairly frequently (i.e., a correlation whose probability is greater than five percent) when sampling a population where there is no relationship between these variables. While these coefficients differ from our predictions, they are not all that surprising since young adults tend to be less financially anchored, and therefore, are "freer," in a sense, to see social and political issues as life-style issues rather than as financial or security interest issues. Moreover, since the "radicalizing 1960's" the quality of life has become a major societal concern. This "quality of life" orientation has been adopted by many young adults who apply it to issues such as the quality of the environment.

H₃ There will be a positive relationship between social class and the status politics dimension of environmentalism and a curvilinear relationship between social class and the class politics dimension of environmentalism.

Social class is not related to the status politics dimension of environmentalism (-.045) nor the class politics dimension (.026). Much of the research in this area argues in support of this finding (i.e., environmental concern bridges economic strata); however, the interpretation of these coefficients is complicated by the fact that there are very few lower class (2.9%) and upper class (4.7%) individuals in the sample. A curvilinear relationship between social class and the class dimension was predicted, but because Pearson

correlation coefficients assume linearity, the coefficient for such a relationship is likely to be very small (as is the case here).

H₄ There will be a negative relationship between liberalism and the status politics dimension of environmentalism and a positive relationship between liberalism and the class politics dimension of environmentalism.

The nonsignificant correlation between liberalism and the status politics dimension (.063) and between liberalism and the class politics dimension of environmentalism (-.073) shows that no relationship exists between political ideology and environmental support. This lack of association, while not predicted here, has been found elsewhere (see previous discussion of correlates of environmental support). In other words, many have observed that environmental concerns crosscut political boundaries.

H₅ There will be a positive relationship between urban background and the status dimension of environmentalism and a negative relationship between urban background and the class politics dimension of environmentalism.

Urbanness is related neither to the status dimension (.066) nor to the class dimension of environmentalism (.074). Residential background, then, does not seem to be a decisive factor in perceptions of environmental issues.

In summary, all but one of the antecedent variables (age) are unrelated to class/status politics perceptions of the environment. Further, with one exception, neither the solution strategies nor the free-rider problems are related to the antecedent variables. In other words, all but two of the correlations between age, sub-

jective social class, urbanness, and liberalism and either class/status perceptions of environmental issues, support for GovCon, GovPro, and IndCon, or free-rider problems 1 and 2 are less than .13. In addition, to the relationship between age and status politics, the other exception is that of liberalism which is positively related to GovCon (.138) (i.e., the more politically liberal an individual is, the more likely she/he is to support government regulation of environmental consumption). All these observations suggest, then, that environmentalism is a consensus issue.

H₆ These will be a positive relationship between the status politics dimension of environmentalism and support for voluntary changes in individual patterns of consumption and no relationship between the class politics dimension of environmentalism and support for voluntary changes in individual patterns of consumption.

As predicted, there is a significant positive correlation (.213) between the status perception of environmental issues and support for individual change of consumptive patterns, and no relationship (-.081) between the class perception of environmental issues and support for individual change of consumptive patterns. Thus, individuals who view the environment in terms of life-style concerns are more likely to support voluntary solutions than are individuals who view the environment in terms of material concerns.

H₇ There will be a positive relationship between the status politics dimension of environmentalism and support for government regulation of consumptive patterns and a positive relationship between the class politics dimension of environmentalism and support for government regulation of consumptive patterns.

As predicted, there is a significant positive correlation be-

tween support for government regulation of consumption patterns and both the status (.239) and class (.147) dimensions of environmentalism. This suggests that environmental issues perceived in either life-style or economic terms prompts support of government induced change in environmental consumption. It also follows that a status dimension than with the class dimension since consumptive patterns are very much a part of life-style orientation.

H₈ There will be a positive relationship between the class dimension of environmentalism and support for government regulation of productive patterns and no relationship between the status politics dimension of environmentalism and support for government regulation of productive patterns.

Status perceptions of environmentalism is positively correlated with support for government regulation of production (.391), while class perceptions of environmentalism is not related to support for this solution strategy (-.098). In light of past research and our hypothesis, these findings are somewhat problematic. Perhaps those individuals who view environmental issues as life-style concerns have little to fear from changes in production processes; whereas, those who view environmental issues in terms of material gains/losses may feel threatened by the prospect of greater government involvement in the workplace or market. Consequently, the former are more likely to support production targeted solutions than are the latter.

Three other relationships involving class/status politics dimensions of environmentalism are important to note. First, there is no relationship between status and class (-.015) indicating

that they are analytically distinct concepts. This observation adds credence to the factor analysis of these concepts which resulted in a two-factor solution. It also establishes an empirical distinction between these two perceptions (i.e., some people see environmental issues as life-style issues, while others see the same issues as class-based issues). Second is the positive correlation (.214) between class politics and free-rider1 (individual effort is not worth it). This relationship is consistent with the hypothesis that individuals who perceive the environment in economic terms are apt to favor governmental solutions, and consequently, see individual efforts as not being worthwhile. Finally, status politics is negatively related to free-rider1 (-.145), a finding which is also consistent with our contention that individuals who perceive environmental issues as life-style matters are likely to be supportive of individual level solutions. Therefore, while age, social class, residential background, and political ideology do not seem to enter into environmental concern or support, class vs status politics perceptions of environmental issues are clearly a factor in support of environmentalism.

Further concerning support for environmentalism, it is worth noting that, of the three solution strategies, only IndCon (voluntary regulation of individual consumption) is related to either of the free-rider problems. (IndCon is negatively correlated with free-rider1 (-.284), i.e., individuals who disagree with the idea that individual effort is not worthwhile are more likely to support individual solutions than those who agree.) This suggests that the

free-rider problem in and of itself does not determine solution preference for dealing with environmental problems and adds still more support to the argument that environmental concern is a widespread, consensus phenomenon.

An analysis of variance was performed in addition to the Pearson correlations to assess the mean responses for each variable. This information allows a comparison of responses across categories of the dependent variables, the preferred solution strategies. The analysis of variance statistical technique offers a test of whether group means differ significantly from each other and provides an "illustration" of a relationship rather than simply a summary statistic like the Pearson correlation coefficient. A oneway analysis of variance was employed to test the null hypothesis that group means of the predictor variables are equal. The predictor variables are status, class, age, social class, urbanness, liberalism, free-rider1, and free-rider2. The solution strategies, government regulation of consumption (GovCon), government regulation of production (GovPro), and individual regulation of consumption (IndCon), were trichotomized to form low, medium, and high score categories. In so doing we are able to examine the means of the predictor variables across categories of and between each of the solution strategy scales. The F-ratio, a test of significance of difference between means, is presented along with group means in Table 5.2.

The following observations are consistent with the correlations reported in Table 5.1: 1) With one exception, there are no signifi-

TABLE 5.2

MEAN DIFFERENCES ACROSS CATEGORIES OF INDIVIDUAL AND GOVERNMENTAL SOLUTION STRATEGIES

	GovCon ¹				GovPro				IndCon			
	LO	MED	HI	F ²	LO	MED	HI	F ²	LO	MED	HI	F ²
<u>Predictor Variables</u>												
<u>Antecedents</u>												
Age	40.61	41.31	43.76	1.32	42.05	40.84	42.75	0.44	39.70	41.68	44.72	2.87
Subj Class	2.66	2.75	2.61	1.41	2.72	2.60	2.68	1.04	2.67	2.65	2.68	0.11
Urbanness	3.83	3.71	3.84	0.22	3.65	4.04	3.70	2.15	3.94	3.75	3.69	0.85
Liberalism	1.56	1.61	1.79	3.47*	1.57	1.65	1.72	1.17	1.64	1.67	1.65	0.05
<u>Environmental Issues</u>												
Class	11.98	12.03	12.63	2.33	12.75	11.93	12.01	2.72	12.67	11.73	12.28	3.87*
Status	17.85	18.87	19.08	11.23*	17.35	18.40	19.50	35.04*	18.03	18.62	19.05	6.97*
<u>Free-rider</u>												
Free-rider1	2.41	2.53	2.37	0.73	2.56	2.37	2.38	1.29	2.81	2.19	2.24	15.46*
Free-rider2	3.06	2.96	2.87	1.40	2.94	2.94	3.00	0.22	3.03	2.97	2.88	0.89

* p = .05.

¹ Legend for column headings: GovCon = government regulation of consumption; GovPro = government regulation of production; IndCon = voluntary regulation of individual consumption.² Bivariate F-ratio test of overall differences among the three means; df = 2,337.³ Boxed means = findings consistent with Pearson correlation table.⁴ Circled means = findings inconsistent with Pearson correlation table.

cant differences among means of the antecedent variables across categories of any of the solution strategies.

The low to high score categories of liberalism contain the low to high levels of support for GovCon (government regulation of consumption). 2) In every solution strategy, the lowest scores on the status politics dimension of environmentalism are in the lowest level of support, while the highest concern for the environment as a status issue is in the highest level of support. 3) Finally, with one exception, the differences among means of either free-rider variable across categories of any of the solution strategies are not statistically significant. The strongest agreement with free-rider1 (individual effort is not worth it) is located in the category of lowest support for IndCon (voluntary regulation of individual consumption), while the lowest agreement is located in the category of highest support.

The following relationships are different from those found in the Pearson correlation table. First, the F associated with the class politics dimension of environmentalism and support for GovCon (2.33) is not significant when strictly adhering to the .05 rule; however, the probability of this F is 7% which is very close to statistical significance. Second, the F (3.87) associated with class politics and support for IndCon is significant at the .05 level. Looking across the mean class politics scores, we see that the highest scores are in the category of lowest support for individual solutions, while the lowest concern for the environment as a

class issue is in the category of highest support for IndCon. Since Pearson correlation assumes linearity, this curvilinear relationship is probably the reason for the nonsignificant correlation between class politics and IndCon. This finding is not inconsistent with our proposal that individuals who perceive environmental issues in economic terms are less likely to prefer voluntary, individual solutions. In sum, results of this analysis of variance basically confirm the relationships established by the statistical correlation of these variables.

CONDITIONAL RELATIONSHIPS: TEST FOR INTERACTION

As explained earlier, attitude does not always directly translate into behavior. Such is the case with the link between environmental concerns and active support. A proposed reason for this sometimes varied connection is the interaction between, rather than the additive effect of, the predictor variables. In collective behavior generally, and in the environmental movement particularly, the interaction effect takes the form of the phenomenon of the "free-rider" problem (i.e., discordance between individual and collective interests). The effect of the predictor variables on the dependent variables will vary according to whether the potential supporters perceive a conflict of interests in the strategy proposed to solve environmental problems. It is necessary, then, to examine the relationship between status vs class perceptions of environmental issues and the three solution strategies in the presence as well as in the

absence of the free-rider problem.

A second analysis of variance was performed using the solution strategies and free-rider variables simultaneously, a procedure which offers not only a test for interaction among these variables and the predictor variables but also a presentation of the actual levels of support for each of the three solution strategies. The class and status politics dimension scales and the variable age were recoded at the scores where approximately 33% and 66% of the respondents fell in order to make three categories-low, medium, and high. Similarly, urban background and social class were dichotomized forming low and high category. This recoding procedure is reported below:

<u>Predictor Variables</u>	<u>Categories</u>			<u>Scale Content</u>
	Lo	Med	Hi	
status-issue	7-17	18-19	19-28	composite score
class-issue	6-11	12-13	14-24	composite score
age	18-31	32-48	49-91	years of age
	Lo	Hi		
social class (subjective)	1,2	3,4		agree/disagree response format
urbanness	1,2	3,4,5		rural/urban continuum

Liberalism, as originally coded, had three categories and therefore recoding was not necessary.

Tables 5.3-5.5 display the mean scores on the solution strategy scales in each category of the predictor variables—status politics, class politics, age, liberalism, social class, and urbanness—according to whether respondents agreed or disagreed with the free-rider statements. F-values are reported for the predictor variables, the free-rider variables, and the interaction between the solution strategy and free-rider variables.

Table 5.3 reports the effects on support for voluntary regulation of individual consumption (IndCon) under disagree/agree conditions of free-rider 1(individual effort not worth it) and 2(government regulation not worth it). The $F(6.45)$ associated with the interaction between status and free-rider1 is statistically significant. Individuals who have the highest status-based perceptions of environmental issues and who disagree that individual effort is not worthwhile are the most supportive of individual solutions (mean = 12.91); individuals who perceive the environment less in terms of status issues and who agree that individual effort is not worthwhile are the least supportive of IndCon (mean = 9.52). None of the other predictor variables interact with free-rider1 in their effect on support for IndCon. Regardless of their class-based perception ($F = 13.71$), age ($F = 14.41$), political ideology ($F = 13.68$), or residential background ($F = 14.24$), individuals who disagree with free-rider1 have higher IndCon scores than those who agree.

Controlling for free-rider2, there is a significant positive relationship between status and support for voluntary regulation of

TABLE 5.3

EFFECTS ON INDCON (VOLUNTARY REGULATION OF INDIVIDUAL CONSUMPTION) UNDER CONDITIONS OF FREE-RIDER 1 AND 2 (N = 344)

Free-rider1: Individual Effort Not Worth It (first row)									
Free-rider2: Government Regulation Not Worth It (second row)									
Predictor Variable Categories:	Disagree			Agree			F _{iv} ¹	F _{fr} ²	F _{int} ³
	LO	MED	HI	LO	MED	HI			
<u>Predictor Variables</u>									
Status-issue	11.66 9.90	11.23 11.45	12.19 11.54	9.52 10.62	11.47 11.29	11.10 11.77	2.02 ⁴ 7.19*	1.93 ⁴ 0.50	6.45* 0.58
Class-issue	11.93 11.65	11.48 10.65	11.58 10.94	10.89 11.51	10.09 10.97	10.93 11.27	1.77 1.87	13.71* 0.25	0.57 0.26
Age	11.05 10.52	11.56 10.96	12.51 11.87	10.74 11.04	10.66 11.19	10.70 11.60	2.89 2.84	14.41* 0.27	2.74 0.57
Liberalism	11.89 11.90	11.71 10.48	11.07 10.45	10.58 11.09	10.60 11.43	11.39 11.44	0.05 ⁴ 0.00 ⁴	13.68* 0.00 ⁴	2.11 3.97*
	LO	HI		LO	HI				
Subj Social Class	11.97 11.26	11.58 11.04		10.50 11.20	10.83 11.31		0.71 0.01	0.16 0.25	0.97 0.26
Urbanness	11.92 10.73	11.65 11.19		10.70 11.37	10.70 11.24		0.15 0.00	14.24* 0.25	0.18 0.56

* p = .05

¹ Multivariate F-ratio test of difference of IndCon means across categories of each of the predictor variables controlling for differences in opinion on free-rider issues; df = 2,337.² Multivariate F-ratio test of difference of IndCon means across categories of free-rider variables controlling for differences in characteristics of the predictor variables; df = 1,337.³ Multivariate F-ratio test for the presence of interaction, i.e., the extent to which relationship between predictor variable and IndCon is consistent across categories of a free-rider variable; df = 2,337.⁴ In this case, F is recalculated to take into account the presence of interaction; df = 1,2.

individual consumptive habits (i.e., the lowest level of support for IndCon is in the lowest environment-as-status category and the highest level of support is in the highest category of environment-as-a-status issue regardless of agreement/disagreement with the free-rider statement) ($F = 7.19$). Liberalism is the only predictor variable which interacts with free-rider2 to effect IndCon ($F = 3.97$). In the presence of free-rider2, support for individual solutions does not differ across categories of liberalism, but in the absence of free-rider2 the highest support for IndCon comes from individuals who scored the lowest on liberalism (i.e., who are politically conservative). In other words, among those who think government regulation is worth the costs, liberals are more likely than those less liberal to oppose individual, voluntary changes in consumption patterns to solve environmental problems.

Table 5.4 reports the effects of the predictor variables on support for government regulation of consumption (GovCon) in the presence and absence of free-rider problems 1 and 2. There is no significant interaction terms associated with either free-rider variable. Furthermore, when controlling for the predictor variables, neither free-rider has an effect on support for GovCon. Controlling for either free-rider 1 or 2, the lowest scores on GovCon coincide with the lowest scores on both status politics and liberalism, while the highest level of support for government regulation of consumption is located in the highest category of status politics and liberalism. This same relationship holds between the variables

TABLE 5.4

EFFECTS ON GOVCON (GOVERNMENT REGULATION OF CONSUMPTION) UNDER CONDITIONS OF FREE-RIDER 1 AND 2 (N = 344)

Free-rider1: Individual Effort Not Worth It (first row)									
Free-rider2: Government Regulation Not Worth It (second row)									
Predictor Variable Categories:	Disagree			Agree			F_{iv}^1	F_{fr}^2	F_{int}^3
	LO	MED	HI	LO	MED	HI			
<u>Predictor Variables</u>									
Status-issue	9.00	9.36	10.06	8.42	10.43	10.08	8.59*	0.61	2.72
	7.81	9.09	9.58	9.30	9.60	10.26	9.05*	1.96	0.19
Class-issue	9.40	9.57	9.81	9.06	9.36	10.21	2.72	0.04	0.60
	9.10	9.09	9.58	9.30	9.60	10.26	3.10*	1.96	0.19
Age	9.64	8.93	10.08	9.78	9.49	9.68	2.12	0.12	0.93
	9.94	8.42	9.33	9.58	9.42	10.10	2.19	1.81	1.64
Liberalism	9.16	9.84	10.19	9.47	9.52	10.70	3.56*	0.15	0.67
	9.20	9.45	9.73	9.33	9.73	10.62	3.48*	0.77	0.27
	<u>LO</u>	<u>HI</u>		<u>LO</u>	<u>HI</u>				
Subj Social Class	9.58	9.54		9.31	9.87		0.71	0.16	0.97
	9.48	9.16		9.42	9.84		0.87	1.58	1.14
Urbanness	9.31	9.61		9.42	9.74		0.82	0.17	0.00
	8.67	9.40		9.53	9.75		0.88	1.77	3.38

* p = .05

¹ Multivariate F-ratio test of difference of GovCon means across categories of each of the predictor variables controlling for differences in opinion on free-rider issue; df = 2,337.² Multivariate F-ratio test of difference of GovCon means across categories of free-rider variables controlling for differences in characteristics of the predictor variables; df = 1,337.³ Multivariate F-ratio test for the presence of interaction, i.e., the extent to which relationship between predictor variable and GovCon is consistent across categories of a free-rider variable; df = 2,337.

class politics perceptions of the environment and support for GovCon, controlling for free-rider2 ($F = 3.10$).

The effects on support for government regulation of production under disagree/agree conditions of free-riders 1 and 2 are reported in Table 5.5. There is neither statistically significant interaction between free-rider1 and the predictor variables, nor a free-rider effect on support for GovPro when the predictor variables are controlled. The same holds for free-rider2, with one exception. The interaction term ($F = 3.22$) associated with status politics and free-rider2 is statistically significant, in addition to a strong relationship between status politics and support for GovPro ($F = 9.34$). Controlling for either free-rider measure, the only significant difference among means for any of the predictor variables is across categories of the status dimension of environmentalism. Low status politics scores are associated with low levels of support and high status politics scores are in the category of high levels of support for government regulation of production.

In conclusion, there are three instances of significant interaction, two in which each of the free-rider variables influences environmental support in interaction with the status politics perception of environmental issues, and one in which the second free-rider variable interacts with liberalism to influence environmental support. Except for these conditional relationships, the results of this analysis of variance suggest that the general effects of the predictor variables in the model of environmentalism are additive

TABLE 5.5
EFFECTS ON GOVPRO (GOVERNMENT REGULATION OF PRODUCTION) UNDER CONDITIONS OF FREE-RIDER 1 AND 2 (N = 344)

Free-rider1: Individual Effort Not Worth It (first row)									
Free-rider2: Government Regulation Not Worth It (second row)									
Predictor Variable Categories:	Disagree			Agree			F_{iv}^1	F_{fr}^2	F_{int}^3
	LO	HED	HI	LO	HED	HI			
<u>Predictor Variables</u>									
Status-Issue	11.20 11.57	11.99 12.57	13.85 11.73	11.65 13.04	12.61 12.52	13.64 12.59	29.01* 9.34* ⁴	1.05 1.65 ⁴	1.08 3.22*
Class-Issue	13.00 12.61	12.50 12.35	11.72 11.73	12.83 13.04	12.45 12.52	12.72 12.59	2.17 1.79	0.82 2.74	1.78 0.41
Age	12.56 11.90	12.43 12.35	12.64 12.40	12.39 12.69	13.13 12.88	12.53 12.65	0.35 0.29	0.27 2.84	1.07 0.25
Liberalism	12.21 12.05	12.71 12.45	13.22 12.18	12.57 12.48	12.50 12.67	13.48 13.67	2.81 2.77	0.26 2.49	0.47 0.82
		<u>LO</u>	<u>HI</u>		<u>LO</u>	<u>HI</u>			
Subj Social Class	12.64 12.58	12.49 12.00		12.79 12.77	12.61 12.73		0.33 0.33	0.22 2.98	0.00 0.69
Urbanness	12.44 11.80	12.56 12.29		12.47 12.61	12.76 12.79		0.42 0.56	0.32 3.15	0.07 0.15

* p = .05

¹ Multivariate F-ratio test of difference of GovPro means across categories of each of the predictor variables controlling for differences in opinion on free-rider issue; df = 2,337.

² Multivariate F-ratio test of difference of GovPro means across categories of free-rider variables controlling for differences in characteristics of the predictor variables; df = 1,337.

³ Multivariate F-ratio test for the presence of interaction, i.e., the extent to which relationship between predictor variable and GovPro is consistent across categories of a free-rider variable; df = 2,337.

⁴ In this case, F is recalculated to take into account the presence of interaction; df = 1,2.

(i.e., environmental support is not contingent upon the absence or presence of a free-rider problem). Furthermore, this effect is concentrated in the variable-status-based perceptions of environmental issues.

Regression analysis provides a further test of interaction as well as summary statistics of the strength and direction of the relationships while controlling for other predictor variables (Scott and Grasmick, 1981). First, dichotomizing the two free-rider measures created a subsample with high scores (agreement) and a subsample with low scores (disagreement). Then, in both subsamples each of the solution strategies were regressed on the predictor variables. Table 5.6 summarizes the results of this analysis. The first free-rider measure represents conflict of interest as it applies to the voluntary individual level solutions. The second applies to the government level solution strategies. Agreement with these statements indicates the presence of a free-rider problem.

Different from the findings of the analysis of variance are the several cases of interaction between the predictor and free-rider variables in their effect on preference for solution strategies. Also, there are some noteworthy differences in the interaction effect between the two free-rider variables. Controlling for the effects of other predictor variables while examining the interaction between each predictor and free-rider variable is the key to this contrast in results.

TABLE 5.6
EFFECTS OF PREDICTOR VARIABLES ON SOLUTION STRATEGIES UNDER CONDITIONS OF PRESENCE AND ABSENCE OF EACH FREE-RIDER
PROBLEM (N = 344)

DV	IV	Free-rider1				Free-rider2			
		The amount of energy I could save by lowering my thermostat in winter/using less air conditioning in the summer doesn't seem worth the inconvenience.		Reducing by government regulation the use of electric appliances like blenders, curlers, and toasters seems too big an inconvenience to me for the amount of energy it would save.					
		Disagree	Agree	Disagree	Agree	Disagree	Agree	Disagree	Agree
		Beta	R ²	Beta	R ²	Beta	R ²	Beta	R ²
<u>Solution Strategies</u>									
GovCon	Class-Issue	.04		.20*		.08		.15	
	Status-Issue	.18*		.26*		.31*		.21*	
	Liberalism	.19*	.094	.16*	.143	.02	.121	.22*	.138
	Age	.22*		.10		-.03		.22*	
	Subj Class	-.06		.07		-.09		.04	
	Urbanness	.04		.003		.03		.04	
GovPro	Class-Issue	-.18*		-.07		-.19*		-.05	
	Status-Issue	.38*		.38*		.31*		.43	
	Liberalism	.13	.208	.08	.155	.002	.158	.15*	.206
	Age	.18*		.04		.13		.09	
	Subj Class	-.08		.003		-.17*		.02	
	Urbanness	.01		.01		.09		.04	
IndCon	Class-Issue	-.17*		-.01		-.14		-.09	
	Status-Issue	.18*		.25*		.35*		.21*	
	Liberalism	-.09	.125	.11	.085	-.28*	.211	.09	.077
	Age	.27*		.06		.19*		.13	
	Subj Class	-.11		.12		-.05		.06	
	Urbanness	-.01		-.07		.23*		-.08	

* p < .05

SUPPORT FOR VOLUNTARY REGULATION OF INDIVIDUAL CONSUMPTION (INDCON)

Class-based perceptions of environmentalism do not interact with free-rider2 ($-.14$ vs $-.09$) but do interact significantly ($-.17$ vs. $-.01$) with free-rider1 in effect on support for IndCon. Controlling for status-based perceptions, liberalism, age, social class, and urbanness, disagreement with free-rider1 leads to a negative relationship between class-based perceptions and IndCon (i.e., the stronger the class politics orientation, the weaker the support for individual solutions), while agreement leads to no relationship between these variables. Individuals who perceive the environment in terms of status politics support individual change in consumptive habits regardless of the presence or absence of either free-rider problem. Both these findings accord with our expectations: 1) individuals, who see environmental problems as class or material issues, are likely to favor solutions which are production and government oriented, rather than consumption and individual oriented; whereas, 2) individuals, who see environmental issues as life-style issues, are likely to favor consumption oriented strategies for solving environmental problems.

As in the analysis of variance results, liberalism's interaction with free-rider1 is not significant but is with free-rider2 ($-.28$ vs $.09$). That is, individuals, who are politically liberal and who disagree that governmental regulation is not worthwhile, do not prefer individual solutions. Age is positively related to IndCon in the absence of free-rider 1 and 2 ($.27$ vs $.06$). Older

persons favor individual solutions when they disagree that neither individual or governmental regulation is worth the inconvenience. There is interaction between urbanness and free-rider2 (.23 vs -.08) but not free-rider1. Individuals who have an urban background and who disagree with the free-rider2 statement favor individual solutions to environmental ills.

SUPPORT FOR GOVERNMENT REGULATION OF CONSUMPTION (GOVCON)

Class politics perceptions of environmentalism lead to support of GovCon in the presence of free-rider1 and 2 (.20 vs .04; .15 vs .08). This support of government regulation of consumption is expected; agreement with free-rider2 is not. It could be that this specific example of regulation of consumption is not what these supporters have in mind as an appropriate regulation. Once again status politics is unconditionally positively related to support for GovCon.

Liberalism is positively related to support for GovCon regardless of the presence or absence of free-rider1 (.19 vs .16) but is positively related to GovCon only in the presence of free-rider2 (.22 vs .02) (i.e., only when they agree that government regulation of consumption is not worth it). This finding also seems to be contradictory; however, the application of government regulation of consumption in free-rider2 may not be the type of application the respondents would propose. Although being older leads to support for GovCon, age interacts differently with each free-rider problem to produce this effect. That is, older people, who disagree that

individual effort is not worthwhile, favor government regulation of consumption; whereas, when they agree that government regulation is not worthwhile (free-rider2), older people prefer this solution. Social class or urbanness do not interact with either free-rider problem in their effect on support for GovCon.

SUPPORT FOR GOVERNMENT REGULATION OF PRODUCTION (GOVPRO)

Class politics is negatively related to support for GovPro only in the absence of free-rider1 (-.18 vs -.07) and 2 (-.19 vs -.05). In other words, individuals, who see the environment in economic terms and who believe individual and governmental consumptive efforts are worthwhile, do not support government solutions aimed at production processes and patterns. Previously presented is the argument that people who view environmentalism in class politics terms see the present capitalist production structure as being uncondusive to serious environmental clean-up and protection. As a consequent, individuals who maintain this perspective that government regulation of production is futile given the present social structure are not likely to support these types of solution strategies. In contrast, individuals who perceive the environment in life-style terms favor government regulation of production regardless of the free-rider condition.

Liberalism does not interact with free-rider1 but does with free-rider2 (.15 vs. .002) to produce a positive effect on GovPro. Politically liberal individuals who agree that governmental efforts

aimed at consumption (free-rider2) are not worthwhile, prefer production targeted governmental efforts. While age does not interact with free-rider2, it does interact with free-rider1 to positively effect support for GovPro (.18 vs. .04). Older people, who disagree that individual effort is not worthwhile, are willing to support government regulation of production.

Up until GovPro, subjective social class has had no interaction effect; however, social class interacts with free-rider2 to negatively effect GovPro (-.17 vs .02). That is, with disagreement that governmental efforts aimed at consumption are not worthwhile, the higher the social class, the less the support for government efforts aimed at production. This finding is expected given the argument that higher social classes may have a lot to lose with the advent of production change.

The following observations summarize the results of the regression-based test for interaction (Table 5.6): 1) Controlling for the other predictor variables, class-based perceptions leads only to the conditional support of government regulation of consumption. On the other hand, perception of environmental issues as life-style concerns leads unconditionally to support for all three solution strategies. Thus, life-style perceptions, as opposed to class-based perceptions, of environmental problems result in greater environmental support. 2) In general, individuals who are politically liberal favor governmental solutions but not individual solutions, a finding which bolsters the argument that liberals are not as likely as conservative to see

governmental involvement in the market as interference. 3) In the table of bivariate correlations, age is negatively related to status politics perceptions of the environment, which, in turn, is positively related to support for all the solution strategies. However, when differences in environmental perceptions are controlled, age is positively related to support for all types of environmental solutions. Put differently, when young people perceive environmental problems as life-style issues, they are more environmentally supportive, but when they do not, older people are more likely to be environmentally supportive.

The following observations summarize the findings concerning the hypothesized conditional relationships:

H₀ When conflict exists between individual and collective consumption patterns, there will be no relationship between the status politics dimension of environmentalism and support for voluntary changes in individual patterns of consumption. When there is no conflict, the relationship will be positive.

The original $F(6.14)$ associated with the relationship between status politics and support for IndCon is statistically significant; however, when the term for significant interaction ($F = 6.45$) between status politics and free-rider1 is taken into account, the positive relationship between the status dimension of environmentalism and support for voluntary change in individual patterns of consumption is negated ($F = 2.02$). Thus, the hypothesis concerning the conditional relationship between these variables is confirmed.

H₁₀ When the costs of personal inconvenience imposed by government regulation of consumptive or productive patterns are greater than the gain of environmental improvement, there will be no relationship between the status or class politics dimensions of environmentalism and support for government regulation of consumptive/productive patterns. When the gain is greater, the relationship will be positive.

While there is no significant interaction between either class or status politics and free-rider2, the positive relationship between both class ($F = 3.10$) and status politics ($F = 9.05$) and support for GovCon is significant. However, the significant interaction between status politics and free-rider2 ($F = 3.22$) does not negate the positive relationship between status perceptions of the environment and support for government regulation of production ($F = 9.34$). Furthermore, neither the interaction between class politics and free-rider2 nor the relationship between class politics and support for GovPro is significant. Thus, rather than conditional relationships, class and status politics have either direct or no relationships with the government level solutions.

CHAPTER SIX

CONCLUSIONS AND DISCUSSION

The primary goal of this dissertation is to investigate the link between environmental concern and support using survey data collected among randomly selected adults ($N = 344$) in a metropolitan area. Two explanations for the weak link between concern and support are proposed. The first deals with conflicting orientations: utilization of the environment for economic purposes vs. aesthetic preservation of the environment and the other with the free-rider problem. A second goal is to systematically organize the history and current prospects of the environmental movement around the theoretical framework of status vs class politics distinctions.

An extensive overview of the evolution of environmentalism from its roots in Progressive Era conservationism to the contemporary environmental movement and its many subsidiaries (i.g., anti-nuclear, appropriate technology, zero population growth, and peace movements) establishes the dual themes of consumption (status) vs production (class) issues and the traditional use of reform liberal political processes to address these issues. Historically, contradictions between the efficient use of natural resources to promote economic growth and the preservation of natural surroundings for scientific and aesthetic purposes typify the production vs consumption themes and sets the stage

for status vs class politics struggles.

Primarily, this dissertation investigates the mobilization difficulties in the environmental movement in terms of some of its correlates of support, life-style vs economic concerns, preference for solution strategies, and the free-rider problem. Research indicates that active participation in the solving of environmental problems is considerably lower than the concern for these problems. The proposed explanation for this discrepancy between attitude and behavior is twofold. One, because environmental issues can be perceived as both life-style and economic concerns, they may pose a status threat to some individuals and an economic threat to others. As a consequence, the solutions prescribed for environmental problems, like their perceptions, do not always coincide. This situation makes mobilizing environmental concern difficult. Two, in weighing the costs and benefits of active environmental support, the costs, such as personal sacrifice and expense, often seem to be more concentrated and more immediate than the comparatively long term and diffuse benefits of a restored environment. This conflict of individual and collective interests, coupled with the likelihood that an individual will reap the benefits of environmental improvement regardless of whether she/he pays the costs (i.e., the free-rider problem), further inhibits the translation of environmental sympathy into environmental action.

A factor analysis of environmental items containing both life-style (consumption) and economic (production) issues produces a two-factor solution, indicating that status and class politics are analyt-

cally distinct dimensions of environmentalism. In other words, some individuals express concern about environmental protection but disagree about how this should affect economic utilization of the environment, while another group of individuals seeks maximum economic utilization of the environment but disagrees about protecting the environment's aesthetic value in the process. Therefore, two scales, one for each dimension, are constructed. The status dimension of environmentalism includes such issues as preserving the cleanliness of parks, lakes, and the air, protecting natural habitats and surroundings even if it means cutting back on energy production and preserving the environment for future generations. The class dimension encompasses such issues as increasing oil and gas exploration, freeing up protected areas for economic use, using natural resources primarily for economic purposes even if it means reducing the quality of the environment, and maintaining our current standard of living through whatever means necessary. The absence of correlation between these two scales further establishes the empirical distinction between class and status politics dimensions of environmental issues.

The antecedents of environmental concern and support for corrective action included in the analysis are age, political ideology, social class, and residential background. Three scales are developed to assess preference for each of the three types of solutions: voluntary regulation of individual consumption, government regulation of consumption, and government regulation of production. Finally, two

statements assess the free-rider problem by addressing the worth of individual efforts and of governmental efforts at solving environmental problems.

An examination of the correlations between all pairs of variables in the model reveals that, with few exceptions, liberalism, social class, urban background and age are not determinants of class vs status perceptions of environmental issues, preference for solution strategies, or agreement with the free-rider scenarios. This finding suggests that environmental concern is high in all social, political, and economic categories. Furthermore, the large percentage (over 90%) of respondents reporting that environmental preservation is "very important" or "somewhat important" to them supports the earlier findings that environmentalism is a consensus issue i.e., the vast majority of people are concerned about environmental issues. This consensus does not extend automatically to support for corrective action however. The level of environmental support ranges from 20.4% to 63.9% for government regulation of consumption, 56.1% to 74.7% for voluntary individual regulation of consumption, and 75.9% to 88.7% for government regulation of production.

The lack of correlation between the solution strategies and free-rider problems suggests that the free-rider problem does not enter significantly into the choice of a solution strategy. In contrast, the correlations between the solution strategies and status/class politics perceptions show that these different concerns have definite implications for preference in environmental solutions. Specifically,

perceiving the environment in life-style (status) terms leads to support for all three strategies--individual and governmental regulation of consumption and governmental regulation of production. However, perceiving environmental issues as class or economic issues leads to a preference for governmental regulation of consumption only. The exceptions to these general findings are that (1) younger people are more likely than older people to view environmental issues as life-style issues, and (2) political liberals favor government regulation of consumption more than conservatives favor this situation.

The analysis of variance statistical procedure tests for differences in the mean scores of all the predictor variables across categories of the three solution strategies. Results of this analysis generally concur with the Pearson correlations of these variables. More exact measures of these proposed correlates of environmentalism might have resulted in more significant relationships. For instance, rather than using a subjective categorization to measure social class, a more objective measure such as annual income, educational achievement, and/or occupational prestige, could be used. Furthermore, rural-urban differences, as well as social class differences, might be better assessed with the use of a national sample in which more extreme cases would be represented. In addition, the relationship between the correlates examined and support for various solution strategies might be enhanced by a different approach to the measurement of support such as a scale of degree of participation, e.g., donating money or protesting a nuclear site.

The analysis of variance and regression statistical techniques test for interaction between the predictor variables--status politics, class politics, age, social class, liberalism, and urbanness--and the free-rider statements in their effects on preferred solution strategies. Free-rider1 focusses on the utility of individual effort and free-rider2 on the usefulness of governmental regulation. Both concern the attitude that the designated strategy is worth the personal sacrifice required. Results of the analysis of variance show that those who think personal inconveniences worthwhile--such as lowering one's thermostat in summer time--are more likely to endorse the individual solution to environmental problems than those who do not think the sacrifice is worth it. In addition, two cases of significant interaction are reported in the analysis: of support for individual solutions, one between status perceptions of the environment and free-rider1 and another between liberalism and free-rider2. In the first case, the individuals who are most concerned with the environment as a status issue and who are convinced that voluntary effort is worthwhile, are the strongest supporters of individual level solutions. In the second case, the individuals, who are the least politically liberal and who believe government regulation is worth the effort, are the most supportive of voluntary regulation of individual consumption.

Government regulation of consumption is supported by both status and class politics oriented individuals and by politically liberal individuals. There are no significant interaction effects associated with this solution. However, there is one instance of significant

interaction between status perceptions of environmental issues and free-rider2 in relation to support for government regulation of production. The highest mean level of support for this solution is located among individuals who are the least status oriented and who agree that government regulation, as exemplified in free-rider2, is not worthwhile.

Finally, individuals who perceive environmental issues as life-style matters support all three solution strategies, while individuals who view the same issues as economic concerns support only government regulation of consumption. Thus, the effect on preference for solutions is concentrated in the status politics dimension of environmentalism. Moreover, support for the strategies generally is not inhibited by the free-rider problem with the exceptions discussed above. In other words, the analysis of variance results indicate that the effects of the predictor variables on support for environmentalism essentially are more additive than conditional.

The analysis of variance statistical technique used here initially examines the effect of one predictor variable and the conditional variable on the dependent variable. Regression analysis, on the other hand, examines the effect of all predictor variables and the conditional variable on the dependent variable and is therefore a more complete test for interaction. This latter procedure detected more cases of significant interaction than did the analysis of variance. Controlling for the effects of the other predictor variables, (1) class politics perceptions interact with both free-rider opinions

to hinder support of government regulation of production and voluntary individual regulation of consumption and to promote support for government regulation of consumption; (2) liberalism interacts with both free-rider statements to inhibit support of voluntary individual solutions and to bolster support for government regulation of both consumption and production; (3) age interacts with both free-rider attitudes to positively effect support for all three solution strategies. The relationship between the status dimension of environmentalism and support for all three solution strategies is additive and positive. Essentially, neither urban background nor social class affect environmental support, either directly or interactively. One exception to this finding is that, individuals who have an urban background and who disagree with either free-rider statement are more supportive of individual solutions than are those who agree with these statements. Another is that the higher the social class, the lower the support for government regulation of production in the absence of (i.e., disagreement with) free-rider². Individuals with urban backgrounds are more likely to see environmental issues as consumptive concerns than are individuals with a rural background. A preference for voluntary, individual change in consumptive patterns corresponds to these concerns. Government regulation of production, in contrast, is identified more with class/economic concerns, whether or not these concerns result in its support. Consequently, this solution corresponds to upper/lower social class preferences which, it has been argued, are more apt to be based on environment-as-material concerns.

The negative relationship between the class politics dimension of environmentalism and support for voluntary, individual regulation of consumption and government regulation of production probably is a reflection of both extreme left and right political/economic interests where the environment is concerned. From a "leftist" interpretation, a lack of support for individual solutions reflects the attitude that past voluntary efforts at improving the environment have been ineffective. Similarly, a lack of support for solutions aimed at production manifests the ideological stand that the government is incapable of effecting significant environmental change within the given (capitalist) production structure. Both of these viewpoints stem from, as well as give impetus to, the belief that more extreme political strategies entailing major structural change are what is needed in order to restore the quality of the environment. The lack of support for government regulation of production also reflects a more extreme right laissez-faire approach to any kind of government involvement in production processes. This approach stems from the fear of either decreased profits or loss of employment (i.e., lowered standard of living) which might result from major change in production patterns and processes.

In contrast, support of government regulation of consumption suggests that the reformist character of the environmental movement is still an appropriate label. This support not only represents a belief in structural solutions to social problems, but also reflects the position in liberal politics that the government is a tool to

use to correct social ills. Furthermore, the overall preference for government regulation of consumption indicates that individuals view the environment primarily as a consumptive or life-style problem. This viewpoint, coupled with the fact that the main influence on support for all the solution strategies is the concern for environmental perservation, indicates that the politics of the environment is status politics rather than class politics.

In summary, the findings are as follows: (1) individuals who perceive the environment in economic terms do not support individual, voluntary-consumption or governmental-production solutions; they prefer, instead, government level consumption oriented solutions; (2) individuals who view environmental issues as life-style issues support all three types of solutions; (3) controlling for the other predictor variable effects, the more liberal politically an individual is, the more likely she/he is to prefer government regulation of consumption as the solution to environmental problems; (4) older people are more environmentally supportive of these solutions than are younger people; (5) neither social class, liberalism, nor residential background are determinates of environmental concern; (6) younger people are more likely than older people to view the environment in life-style terms; and (7) the link between environmental concern and support is relatively uncomplicated by the free-rider problem.

In elaboration of this last finding when taking the free-rider problem into consideration, the lack of relationship between class and individual and governmental-production solutions changes to a

negative relationship. It does not modify the relationship between the status politics dimension and support for environmentalism, which is a positive relationship with all three solution strategies. So, even though approximately half of the respondents agreed that individual efforts are not worth the inconvenience, and three-quarters agreed that governmental regulation is not worth the inconvenience, the free-rider problem does not present a major stumbling block to support for environmentalism among our respondents. It could be that another free-rider measure is needed, particularly one that exemplifies the direct economic costs of environmental prescriptions. Such a measure, along with the two measures used here, might be able to discriminate more effectively between the sympathizers and the supporters.

The findings clearly indicate that environmental issues can be perceived in life-style and economic terms and that this multidimensionality has definite implications for environmental support. A lack of relationship with regard to the correlates of these perceptions shows that more research is needed to investigate the determinates of environmental concern. One suggestion is that survey items concerning this distinction between consumption and production issues should more directly address the environmental costs of a relatively high standard of living, as well as the economic costs of an improved environment. Emphasizing the link between the environment and the economy will more readily discern the characteristics of individuals who are concerned about consumption issues rather than production issues.

Since many very rural areas, such as Indian reservations, are presently undergoing industrial and natural resource development and since traditional Indian cultures are associated with great reverence for the environment, modernizing reservations present an opportune situation for the study of rural-urban differences in concern, general environmental issues (e.g., environment vs economy), and the link between environmental attitudes and behavior.

The study of industrializing rural areas would allow an investigation of the prediction that environment issues are quickly becoming class issues. (The findings here do not supply evidence that this is the case.) Writers in this area argue that increasing resource scarcity, coupled with the tendency for the poor to disproportionately have to pay for environmental improvement efforts, will push the politics of the environment from life-style to economic struggles.

The resource management approach to collective behavior argues that since there is "only politics," the distinction between status and class or extremist and pluralist politics is not important. What is important is the process of mobilization for the pursuit of group political struggles. Mobilization refers to what Gamson (1975) calls the "creation of commitment," a change from a generally low level of readiness to act to a high level of readiness to act collectively. Thus the push from status to class politics is really about a changing strategy for creating commitment to the environmental movement. As noted above, many argue that the overuse of rapidly depleting resources will heighten the inequalitarian costs/benefits

of environmentalism as presently operationalized. This, in turn, will supposedly instigate deeper and more widespread commitment to serious (i.e., drastic) environmental measures. At least for now, the findings indicate the contrary. Considering the high level of concern and support generated by status politics perceptions of the environment, environmental mobilization efforts would do well to concentrate on the life-style aspects of environmental problems.

Finally, "deep ecologists," members of the appropriate technology movement, and the like argue that the shift to class struggles over environmental issues plays a central role in achieving the larger goal of radically altering the social structure. However, research indicates that challenging groups who attempt to replace or destroy their antagonists tend to fail regardless of the means employed (e.g., class vs status politics struggles) or broadness of goals (e.g., regulating production of environmentally hazardous products vs totally restructuring production processes) (Gamson, 1975). The environmental measures offered here as strategies for dealing with environmental problems are admittedly reformist in nature. But considering the relatively high level of support expressed for these strategies and the evidence for the success of movements who do not represent a major threat to the established political/economic powers, environmentalists also would do well "to think small."

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