

BELDEN & RUSSONELLO
RESEARCH AND COMMUNICATIONS

Human Values and Nature's Future:

Americans' Attitudes on Biological Diversity

An Analysis of Findings from a National Survey

by

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I. Introduction and Methods

Introduction

We are living in a time when the environmental and scientific communities are reporting that the loss of biological diversity is reaching alarming proportions. Yet, polls and focus groups over the last few years report that the loss of biological diversity is not an urgent or even recognizable concern for most Americans. The national survey analyzed in the following report was designed to assist all those who wish to engage in the education of the American public on biodiversity.

The survey identifies key messages for communicating the impact of the loss of species and habitats. The survey is different than many others on environmental issues because it measures the values that underlie Americans' feelings about the environment. We believe that knowing the value judgments that an audience brings to a subject is critical to effective communications.

This survey is the third phase of a three-part research project for the Consultative Group on Biological Diversity, under contract with the Communications Consortium Media Center. The project is funded by several foundations, including the W. Alton Jones Foundation, the Charles S. Mott Foundation, and the Joyce Foundation. The first phase consisted of a series of focus groups with voters who were sympathetic but not committed to environmental action. The groups explored currents of opinion on biodiversity issues, identified barriers to public acceptance of the importance of protecting habitats and species, and suggested ways to overcome these obstacles. The second phase investigated and analyzed existing survey data on environmental issues since 1992.

This national survey of 2,005 adults, conducted February 29 through March 12, 1996, builds upon what we learned in the first two phases, quantifies many of the opinions expressed in the focus groups, and analyzes how values and attitudes come into play in an educational effort.

Methods

Sample: The universe for this study is all adults 18 and older in the continental United States, living in telephone-equipped households. The sample for this study was selected in two stages. In the first stage, the sampling frame was a list of randomly created phone numbers (a technique known as random digit dial or RDD) for telephone exchanges in the continental United States, created by Survey Sampling, Inc. Telephone numbers were selected at random from this frame.

The second stage of sample selection was selection at the household level. In residences where working telephones were reached, the survey respondents were selected using a random probability method, *i.e.*, interviewers requested to speak with the adult 18 years or older, in the household who had the most recent birthday.

A total of 2,005 telephone interviews were conducted. Belden & Russonello (B&R) monitored all stages of interviewing to ensure that the proper gender and racial mix of interviews was obtained.

The margin of sampling error for the entire survey is plus or minus 2 percentage points at the 95% level of tolerance. The margin of sampling error for smaller subgroups within the sample will be larger. For example, the margin of sampling error for men (n=954) is plus or minus 3 percentage points, and for women (n=1,051) is plus or minus 3 percentage points.

Questionnaire and Interviewing: The questionnaire used in this study was designed by B&R and Research/Strategy/Management (R/S/M) in conjunction with the Consultative Group on Biodiversity. A draft of the questionnaire was subjected to a pretest, resulting in modifications to the questionnaire both in terms of question wording and length.

The fieldwork was conducted by telephone using a computer-assisted telephone interviewing (CATI) system, from February 29 to March 12, 1996 by a team of professional, fully trained and supervised telephone interviewers. A briefing session was conducted to familiarize the interviewers with the sample specifications and the instrument for this study. The average length of interview was 24 minutes. The interviewing and data collection were monitored at all stages by B&R to ensure quality and that proper gender and racial mix of interviews were being conducted.

Data Analysis: The demographic characteristics of the sample, obtained via the selection methods described above, were matched to the most recent Census estimates to ensure we had sampled the correct proportions of adults.

All the questions in this study have been cross tabulated by demographic and other characteristics, such as gender, age, party ID, and income. Other statistical analysis performed using selected questions include: cluster analysis and stepwise multiple linear regression.

The following table shows the demographic composition of the survey respondents.

Composition of the Survey Interviews

	Number	Percent
Total	2005	100%
Male	954	48%
Female	1051	52
18-29 year olds	443	22%
30-39	453	23
40-49	415	21
50-59	223	11
60+	421	21
White	1537	77%
African American	204	10
Hispanic	117	6
Asian American	35	2
Other/Refuse	112	6
<HS/HS	773	39%
Some college	576	29
College +	607	30
<\$20K	348	17%
\$20K-\$35K	530	26
\$36K-\$50K	357	18
\$51K-\$75K	281	14
\$76K+	178	9
DK/Refuse	311	16

II. Executive Summary

A. Conclusions

The results of our national survey of Americans' attitudes on the environment and biological diversity lead to four broad conclusions:

- The American public is already aware generally of species loss and its causes.
- Committed support for saving species and habitat may be only half the level of support that Americans express for maintaining biological diversity. The survey finds that support for maintaining biodiversity diminishes when other considerations, such as job loss and unappealing species, are raised. Therefore, the main task for building support for maintaining biodiversity is not to inform the public that loss is occurring but to say why it matters.
- The best tools to teach the importance of maintaining biodiversity are ones that relate to human well-being, combined with an appreciation of special places in nature like old forests and recreational areas.
- The most widespread values that underlie attitudes on the environment are the responsibility to save the planet for future generations and wanting your family to live in a healthy, pleasing environment. Nature's connection to God is also an important value for many Americans.

B. Summary

1. Public has a low sense of urgency toward the environment generally, but is concerned over loss of places in nature and supports government action on the environment

Our survey of 2,005 Americans conducted from February 29 through March 12, 1996, indicates that Americans generally see environmental protection as a secondary priority for action by the federal government, compared to other issues such as crime, public education, the economy, health care, or cutting government spending.

Despite a relatively low sense of urgency toward the environment generally, Americans do view several environmental problems as serious. When asked to rate the seriousness of 10 specific environmental problems, Americans tend to give highest ratings to toxic waste, the loss of rain forests, and the rate at which land is being developed and places in nature are being lost. Air and water quality, overconsumption of resources, and the rate of the world's population growth are also strong concerns, while the rate of extinction of plants and animals, acid rain, and global warming are seen as less serious. The relatively strong concern over land development and loss of places in nature suggests that Americans may be ready to listen attentively to communications which highlight the loss of natural habitats in their local communities.

The survey also reveals broad support for government action to protect the environment. Americans are three times more likely to think the environmental laws are not tough enough than to think the current laws are too tough (28% to 8%), and better than five in 10 (54%) believe the laws are tough enough but need better enforcement. Over eight in 10 Americans express support for maintaining "hundreds of regulations" in the Clean Water Act, and over seven in 10 support maintaining the Endangered Species Act. More controversial is the takings issue. When forced to choose between the rights of property owners to use their land as they wish and the rights of the public to a safe and clean environment, Americans slightly favor the rights of the public, 50% to 43%.

2. Americans have general awareness of species loss and causes

Americans generally think species are declining and humans are the cause. Nearly seven in 10 (69%) Americans believe the number of plant and animal species in the world is decreasing, about two in 10 (22%) think the number is staying about the same, and fewer than one in 10 (6%) think the number is increasing. Nearly six in 10 (59%) believe most species become extinct because of the actions of humans, one-third (36%) of the public blames both human actions and natural causes, and only one in 20 (5%) blames only natural causes.

3. *Public broadly supports maintaining biological diversity, but support is not deep*

The term biological diversity is practically invisible over the American landscape. Only two in 10 Americans report hearing about “the loss of biological diversity,” about the same proportion that registered awareness of the term in 1994.

After hearing biodiversity described as “the variety of living plants and animals in the world,” and maintaining biodiversity described as “preventing the extinction of plants and animals,” almost nine in 10 (87%) Americans say that maintaining biodiversity is important to them personally, and four in 10 (41%) say it is very important.

However, support for saving species and habitat is cut in half when jobs and ugly species are considered. Nearly half of all Americans (48%) agree that “protecting jobs right now is more important than saving habitat for plants and animals,” while 45% disagree, and 19% disagree strongly. In reaction to a more extreme statement, 46% of Americans disagree that “the world would not suffer if some species like poison ivy and mosquitoes were eliminated.” Twenty-three percent disagree strongly with this statement, reflecting a baseline of hard support for maintaining biological diversity.

4. *Messages about human health threats and ecosystem services raise the most concern for maintaining biological diversity*

Educational messages that register the greatest concern among Americans for maintaining biological diversity relate directly to imminent human health threats and ecosystem services. Other links to biodiversity, such as protecting nature’s beauty, America’s precious natural resources, jobs, and saving plants and animals that could provide medical cures in the future are also important messages that make the point about biodiversity’s importance, but they are secondary to its more immediate link to humans.

The survey asked Americans their level of concern for ten specific problems associated with the loss of species and habitat, in order to test which messages are most effective for raising the sense of importance for maintaining biodiversity. The two problems most likely to be rated “of great concern” to Americans were:

- the relationship between toxic chemicals in fish and bird species, toxics in food and water consumed by humans, and the possibility of birth defects and lower sperm counts; and
- the eco-system services argument that says marshes, forests and rivers are nature's tools for cleaning air and water and by destroying these habitats we are endangering the services that nature performs for us.

Americans also register concern over these other examples of the impact of the loss of species and habitat:

- fewer recreational areas because of the cutting of forests and the development of wetlands;
- a loss of places of natural beauty due to over-development;
- a reduction in fishing and tourism jobs due to pollution of oceans and rivers and overdevelopment;
- the elimination of unique eco-systems for fish, birds, and animals because of the cutting down of old forests that have taken hundreds of years to establish; and
- the elimination of the possibility of finding new medicines to cure some diseases.

Less direct linkages between humans and biodiversity elicit lower levels of concern. Such less urgent losses for Americans are:

- costly shortages of food and other products which may occur from relying on fewer species of crops and livestock;
- excessive flooding of towns and rivers caused by the development of land and marshes too close to rivers and coasts; and
- communities, where the natural environments have been ruined by poor environmental practices and land use, and are no longer attractive to employers.

5. *Responsibilities to families and to future generations are key values relating to the environment*

Underlying all attitudes on environmental issues are American values -- those deeply held beliefs that guide opinions and behavior in our daily lives. After much study of values and focus group discussions to identify how Americans describe the values they are most likely to relate to the environment, we used this survey to quantify the fundamental reasons Americans have for protecting the environment.

Americans were asked to rate the importance of seven reasons for protecting the environment. The two reasons most likely to be rated "extremely important" to people to personally care about protecting the environment are stewardship and family:

- wanting your family to live in a healthy, pleasing environment (79% rating it extremely important); and
- a responsibility to leave the earth in good shape for future generations (71%).

The next most important values that relate to the environment are:

- nature is God's creation and humans should respect God's work (67%);
- an appreciation for the beauty of nature (63%);
- wanting to protect the natural resources and beauty of this country, as an American (58%);
- your own personal need for a balanced environment so you can have a productive, healthy life (59%); and
- all life found in nature has a right to exist (55%).

When Americans are forced to choose only one most important reason for them to personally care about the environment, responsibility to future generations tops the list (27%), followed by nature is God's work (23%), the desire for family to enjoy a health environment (18%), and the personal need to live in a healthy environment (13%). Less dominant reasons are an appreciation for the beauty of nature (9%) and nature's rights (8%).