

U.S. PUBLIC ATTITUDES TOWARD MARINE ENVIRONMENTAL ISSUES

By Vikki N. Spruill

IT IS WIDELY RECOGNIZED among a growing number of scientists, environmentalists, and policymakers that marine environments are showing signs of change as a result of human activity and that understanding and conserving marine biodiversity are among the most important research priorities and policy issues of our time (Sullivan, 1996). In recent years, a growing number of popular books—for example, Benchley and Gradwohl (1995), Earle (1995), Norse (1993), Thorne-Miller (1993), and Weber and Gradwohl (1995)—have been published, sounding the clarion call of concern for ocean conservation issues. However, until recently, there has been no concentrated effort to determine to what extent these messages were being received, or in fact, how the general public felt about the ocean and ocean conservation issues.

In the summer of 1996, The Pew Charitable Trusts, a Philadelphia-based philanthropy, established SeaWeb, a multimedia educational initiative for ocean issues. Designed to raise awareness of the world ocean and the life within it, SeaWeb aims to provide information from a broad spectrum of sources to help all become more connected and involved in the life of the sea. SeaWeb's approach is objective but not neutral—its bias is to protect the living ocean.

As an early component of this effort, SeaWeb commissioned a public opinion poll, the first of its kind, to gauge public attitudes toward the ocean. It is important to note that the SeaWeb campaign is not a direct response to the results of the

public opinion poll. Although critically important, it is only one of several tools used to determine the salience of SeaWeb's communications. The research has given SeaWeb a strong sense of what will work to engage the public, and can therefore be useful as a starting point for ways to frame and discuss other, sometimes more significant issues.

The survey, conducted by telephone by the Washington, D.C.-based polling company The Mellman Group in May, 1996, interviewed a nationwide sample of 900 adults, with an oversample of 400 residents of coastal communities. The statistical margin of error for the base

sample as a whole is $\pm 3.3\%$; for the coastal oversample is $\pm 4.9\%$.

In general, the survey found:

- Although oceans are not currently a top priority, this is an issue waiting to be made. There is a strong latent, if not manifest, concern for the fate of the ocean. It does not rank high on people's list of everyday anxieties, or even as a top environmental issue, but there is recognition of the ocean's importance, concern about its health, and a sense of responsibility to protect the ocean for present and future generations.

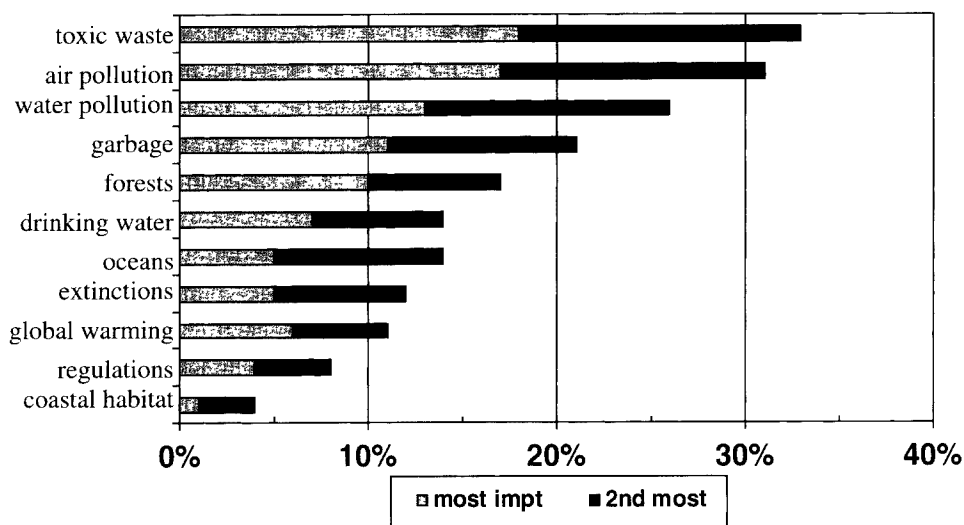


Fig. 1: Respondents were asked "Which if the following do you think is the most important environmental problem facing this country? And which is the second?" and then read a rotated list of problems: air pollution, oceans being destroyed, dealing with household garbage and waste, plant and animal species becoming extinct, unsafe drinking water, forests being destroyed, water pollution, global warming, coastal habitats being destroyed, toxic and hazardous waste, and excessive environmental regulation. Graph indicates percentage of people indicating problem is most important and second most important.

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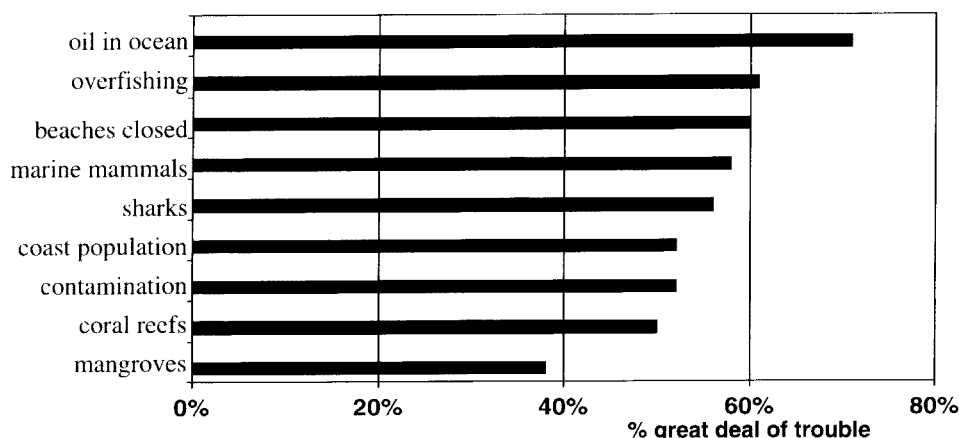


Fig. 2: One-half of all respondents were asked: "Now I'm going to read you some things people have said about the ocean. After each, please tell me whether this statement makes you think the ocean is in trouble or doesn't say much about the condition of the ocean." If respondent felt it indicated that the ocean was in trouble, they were then asked, "Does it make you think the ocean is in a great deal of trouble, some trouble, not too much trouble, or not at all in trouble?" The rotated list of statements were as follows: some 30 percent of existing coral reefs will die in the next 30 years; people are cutting the fins off living sharks for food and then throwing the sharks back in the water to die; in the last 20 years, an estimated 50% of the world's mangrove forests have been lost due to shrimp farming; marine animals like whales, dolphins, sea lions, and sharks are being destroyed; chronic overfishing of the ocean has led to the commercial extinction of 14 of the most valuable species of fish; 17 of the world's major fishing areas have already been fished to the limits; ~3.25 million tons of oil enter the oceans of the world each year; because more than $\frac{1}{2}$ of the world's populations lives close to the coastline, so much development is being done along the the coast that our coastal habitat is being destroyed; U.S. beaches have been closed or had advisories issued against swimming over 5,000 times this decade because of pollution in the ocean; state and federal governments have been forced to issue hundreds of seafood contamination warnings over the last several years. Graph indicates percentage of respondents who thought the statement indicated the ocean was in a great deal of trouble.

- Although interest and concern are high, information is low. The issues that Americans identify as the most serious threats to the ocean are not necessarily those that would be chosen by experts. However, although people recognize that there are such differences, they believe citizens' concerns should be afforded greater weight than those of scientists.
- Government action and personal action are popular. A majority of Americans believe that the government should do more to protect the ocean, including devoting more resources to ocean exploration. However, although people profess themselves likely to take personal action, they are not inclined to join environmental groups, lobby governments, or participate in organized activity.

Americans Believe the Ocean Is Under Threat From Human Activities

In general terms, respondents expressed a belief that the ocean is under

threat from human activity and are concerned about their condition now and in the future. Although the ocean did not rank as a top environmental concern—when asked to rate the most important environmental problems, the largest number (33%) cited toxic waste, followed by air pollution (31%) and water pollution (26%), with "oceans being destroyed" coming further down the list with 14% (Fig. 1)—82% of respondents agreed with the statement that "oceans are being destroyed." In contrast, 10% said they believed the oceans are so vast and plentiful that there is little humans can do to destroy them. Although only 6% said the condition of the ocean has improved over the past few years, the majority (58%) believes it has deteriorated.

Over one-half (52%) viewed the destruction of the ocean as a very serious threat to the quality of life today, whereas an even greater number (63%) saw it as a very serious threat 10 years from now. A

plurality of respondents (49%) said the condition of the ocean was very important to them personally; among coastal communities, this figure rose to nearly two-thirds (64%).

Oil Companies, Corporations Widely Blamed; Scientists and General Public Have Different Concerns

Perhaps because of the wide media coverage such incidents receive, oil spills were widely perceived as one of the greatest threats to the marine environment. Of all respondents, 81% agreed with the sentiment that oil spills in the ocean are a very serious problem. Although 71% felt the fact that 3.25 million tons of oil enter the world's ocean each year was a strong indicator that the oceans are in a "great deal of trouble," 40% said that same statement also made them "very angry." Those polled felt that other meaningful indicators that the oceans are in a "great deal of trouble" included the following: overfishing and the loss of critical species (61%), beaches being closed 5,000 times in the last decade (60%), and marine mammals being "destroyed" (58%; Figs. 2 and 3).

Interestingly, only 30% felt that the killing of sharks was a serious problem; however, when asked their reaction to the

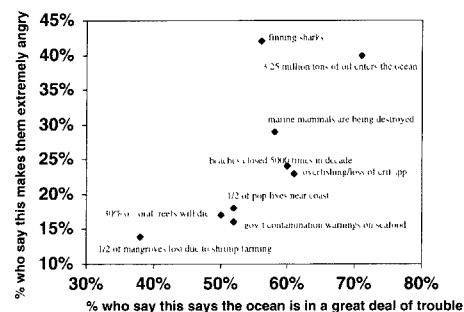


Fig. 3: One-half of all respondents were asked the question illustrated in Figure 2. The other one-half were asked: "Now I'm going to read you some things people have said about the ocean. After each, please tell me how angry this statement makes you—does it make you extremely angry, very angry, somewhat angry, not too angry, or not angry at all?" The statements were the same as in Figure 2. This graph compares the percent of people who said the statement made them think the ocean was in a great deal of trouble with the percent of people who said the statement made them very angry.

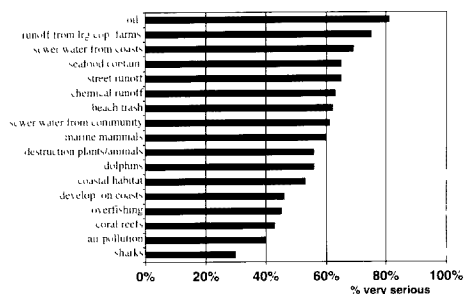


Fig. 4: Respondents were asked, "I'm going to list some specific problems that some people say affect our oceans. After each, please tell me if you think it is a very serious problem, somewhat serious problem, not too serious problem, or not serious at all. If you are not sure how you feel about a particular item, please say so and we will go on." The rotated list of problems were as follows: the deterioration of coral reefs; overfishing by commercial fisherman; too much building and development along our coastlines and beaches; contamination of seafood; oil spills in the ocean; the destruction of coastal habitat due to development; trash and litter being left on the beaches; the destruction of ocean plants and animals that may contain cures for diseases; trash oil and chemical runoff from our streets; improperly treated sewer water from your community running into the ocean; improperly treated sewer water from cities and towns near the coast running into the ocean; dolphins caught and killed in tuna nets; and air pollution from cars and industry settling into the oceans. In addition, $\frac{1}{2}$ of respondents were read "runoff of chemicals and pesticides from farms" and the other $\frac{1}{2}$ read "runoff of chemicals and pesticides from large corporate farms." Similarly, $\frac{1}{2}$ were read "the depletion of marine mammals like whales and sea lions" and the other $\frac{1}{2}$ read "the killing of sharks."

statement that, in some places, fins are cut off living sharks that are then thrown back into the water to die. 42% responded that it made them "extremely angry." This may indicate that inhumane treatment of any animal transcends how we may view a particular species.

The issues cited by respondents as the ones that posed the most serious threats to ocean environments were not necessarily those that would be selected by scientists or experts specializing in ocean issues. For example, contamination of seafood (65%),

trash and litter left on the beach (62%), and dolphins caught in tuna nets (56%) all were cited as "very serious" problems by a higher number than selected destruction of coastal habitats (53%), overfishing by commercial fishermen (45%), or deterioration of coral reefs (43%; Fig. 4).

Respondents seemed aware of these discrepancies. Over one-half (61%) of those polled believed that citizens and scientists disagreed on the problems facing the ocean. However, a plurality (42%) said that government should focus on citizens' concerns rather than those of scientists (37%; Fig. 5).

Government Needs to Do More; Personal Action Preferred to Joining Organizations; Ocean Exploration Favored over Space

In a country where polls indicate that the majority of the public wants the federal government out of their lives, 85% said they believed the government needed to do more to help protect the ocean. Perhaps most surprisingly, an overwhelming number (72%) believed funding for ocean exploration was a more important priority than funding for space exploration (17%).

Questioned on the kinds of actions people are prepared to take on behalf of the ocean, those polled indicated that Americans are most likely to engage in personal action and less likely to become involved in lobbying, participate in group activities, or join local or national envi-

ronmental organizations. Roughly one-half (49%) said they would be almost certain to recycle their used motor oil, and 42% said they would be almost certain to pick up litter at the beach. A much smaller number (20%) said they would be prepared to pay higher water bills to build better sewage treatment plants; 18% indicated that they would be very likely to contact politicians to urge they take positive actions to help the ocean; 12% said they would join an environmental organization; and only 10% said they would be almost certain to attend council or state legislative meetings on ocean issues.

These personal actions are apparently not only the most appealing, they are also considered by those polled to be the most effective. Nearly three-quarters (70%) stated that recycling used motor oil would be a very effective action toward ocean protection; 63% said the same of picking up litter on the beach.

In general, the poll suggests that Americans feel they have a responsibility to protect the ocean. There was strong agreement (84%) with the statement "we have a responsibility to protect the ocean for future generations," and 82% strongly agreed that the "destruction of the ocean is a threat to the health of future generations."

Conclusion: An Issue Waiting to Be Made

The poll findings indicate that, although concern for the ocean is not

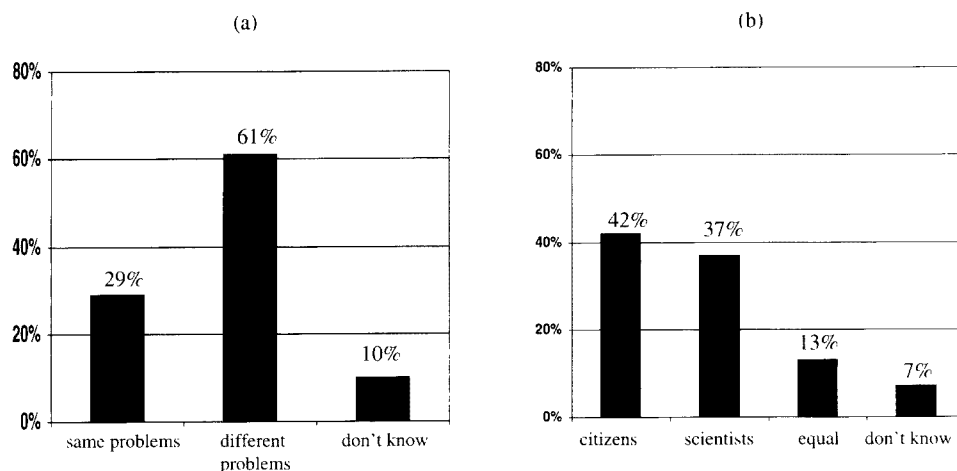


Fig. 5: (a) Respondents were asked "Do you think that citizens and scientists probably agree on which are the most important problems facing the oceans, or do you think scientists and citizens probably disagree about which are the most important problems facing the ocean?" (b) The next question was "If a conflict does exist, should government focus more of its attention on dealing with the problems that citizens are most concerned about or should government focus more of its attention on dealing with the problems that scientists are most concerned about—or don't you have an opinion on this?"

presently a priority for most people, it is, in the words of Mellman Group director, Mark Mellman, an "issue waiting to be made . . . Americans are ready and willing to accept the fact that the ocean is in danger. They are also ready and willing to do something about it. Indeed, the prerequisites are in place for ocean issues to become a significant public issue."

For educators, marine scientists, and others concerned with the state of the ocean, such findings can only be cause for optimism and encouragement. The challenge now is to tap into this latent

public concern, and to present Americans with information that is accurate, accessible, instructive, and helpful in enabling them to take the necessary steps to help protect marine and coastal environments.

For complete results of the SeaWeb poll, please visit the SeaWeb WWW site at <http://www.seaweb.org>, or contact SeaWeb at 1731 Connecticut Avenue, NW, 4th Floor, Washington, DC 20009, phone (202) 483-9570, fax (202) 483 9354, or e-mail seaweb@seaweb.org

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