

**TALKING TO AMERICANS ABOUT  
BIODIVERSITY**

**An Approach for Environmental Activists**

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# TALKING TO AMERICANS ABOUT BIODIVERSITY

## An Approach for Environmental Activists

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This guide is a summary of information about biodiversity and American public opinion. It is intended as a compact tool for the use of environmental activists as they converse with the public and specific target audiences on this most fundamental of issues.

Much of the information in this paper has been gathered over the past year. Polls and focus groups have been conducted for the Consultative Group on Biological Diversity (CGBD), the Communications Consortium Media Center (CCMC) and the Biodiversity Project and others throughout the country on what Americans know about biodiversity, what information about biodiversity is most meaningful to them, and what varieties of language seem most useful and persuasive to them. This paper was written by Conn Nugent of Liberty Tree Alliance for CCMC and The Biodiversity Project under a grant from the W. Alton Jones Foundation.

This paper is based on a number of other excellent recent studies. We are indebted to their authors, and apologize for the absence of citations in the text, a stylistic decision we thought crucial to the success of the document as a tool.

## PART ONE: BASIC INFORMATION

### 1. BIODIVERSITY AND THREATS TO BIODIVERSITY

**“Biodiversity” denotes the variety of species, the variety of genetic material within species, and the variety of places where species reside.** “Loss of biodiversity” is generally understood to mean the contemporary extinction of animal and plant species at a rate much faster than would occur without human intervention. The places where species reside are called their **habitats**. Species and their habitats interact with each other within larger biogeographic communities called **ecosystems**.

**The surest and cheapest way to protect biodiversity is to protect habitats and ecosystems.**

**Threats to habitats and ecosystems can come from strictly natural sources, but human activities are much more powerful.** Scientists estimate that today's rate of extinction is ten thousand times that of the pre-human era. The most significant threats to biodiversity come from:

- **Expansion of settlements:** including dwellings; commercial buildings; and transportation infrastructure.
- **Conversion of wild landscapes for production:** including agriculture and grazing; logging; fishing; and mining.
- **Introduction of exotic species into new ecosystems.**
- **Changes to the atmosphere:** including climate change; ozone depletion; acid rain.
- **Systemic or Persistent Pollution.**

Until recently in the United States, and still today in most of the world, farming, grazing, and logging have caused the greatest loss of species. For contemporary Americans, the expansion of settlements (and their transportation infrastructures) is probably the greatest short-term threat to biodiversity. Synthetic chemicals which disturb species reproduction and which linger for decades are a newly-emerging threat. Many experts argue that if carbon dioxide emissions continue to grow, then climate change is probably the greatest long-term threat, both here and abroad.

## 2. BIODIVERSITY IN SERVICE TO HUMANS

**Ecosystems provide useful, but difficult-to-quantify, public services.** Among those services: cleansing air and water; ameliorating climate; controlling floods; pollinating crops; controlling pests; and cycling wastes. The degree to which an ecosystem can sustain biodiversity loss and still function in these ways is incompletely known, as is the degree to which natural ecosystem processes can reduce the need for parallel human processes.

During recent history, the loss of biodiversity has imperiled **economic development** in some places (tropical islands, fishing villages), but more often it has not, at least not in the short term (Europe and Japan). In a number of communities where resource-extraction gives way to tourism or other service industries that place a high value on natural beauty (parts of the Rockies, Pacific Northwest, and New England), biodiversity preservation and growth of the cash economy have complemented each other.

Though human longevity is still greatest in industrialized countries with historically high rates of species extinction, medical scientists describe biodiversity loss as a threat to **human health**, through three mechanisms:

- Rapid expansions of human settlements and inexpensive opportunities for travel expose billions of people to pathogens previously unencountered (HIV);
- Removal of natural predators, expansion of habitats through climate change, and development of resistances confer new vitality on already-known disease carriers (malaria mosquito, TB bacillus);
- Extinctions of plant species, particularly in forest ecosystems, preclude the development of promising new pharmaceuticals.

These threats affect poor people in the tropics first and most, but Americans might not be able to buy medical protection indefinitely.

In the United States, many ecosystems with a high degree of biodiversity (Pacific Coast forests, the Everglades) are widely considered as places of special **aesthetic significance**. Some other rich ecosystems (mangrove swamps, savannahs) are less prized. And sometimes landscapes stripped of biodiversity can be regarded as attractive (the English countryside).

Nonetheless, there is considerable evidence of a distinctive American aesthetic which especially values the country's parks and wilderness areas.

There is also a broad sentiment among Americans that the conservation of wild species and wild places for future generations is encouraged by **spiritual and personal values**. The strength of the sentiment appears directly related to understanding information about the human sources of biodiversity loss and the possible consequences of that loss.

### 3. WHERE PEOPLE GET INFORMATION ABOUT THE ENVIRONMENT

Television has replaced the newspaper as the primary source of information on general news for American voters.

**Newspapers remain an important source of information on national or global environmental news**, however. Much, if not most, of this environmental news is presented through feature stories in the "living" sections of local newspapers. Two story lines predominate: possible threats to family health posed by toxic pollution; and the satisfactions derived from personal experiences in natural settings or with animals.

**Local television news programs are the primary sources of information about local environmental news** (the health of a nearby river, for example).

Except on the issue of recycling, there is little evidence that schoolchildren provide their parents with memorable environmental information.

Whether through television, newspapers, or magazines, people are learning about environmental news increasingly by means of **short features aimed at linking the news story to the personal life** of the viewer/reader. These features typically emphasize statistical **data**. Often within or alongside the feature story are **graphs, "scorecards," and other visual aids** designed to summarize and dramatize key points, especially those that are quantifiable.

Such stories often include graphic and textual emphases on a threat to the well-being of the viewer/reader's family ("Does Fast Food Cause Health Problems for Kids?") linked with other emphases on **remedial steps** ("Ten Ways to Help Your Family Eat Fast and Healthy").

The percentage of Americans whose primary source of news is their computers remains minuscule. But the numbers who use their computers

for information and entertainment is increasing rapidly, particularly for voters under the age of 30.

#### 4. RECENT TRENDS IN PUBLIC AWARENESS & PUBLIC OPINION

Generally, the basic **scientific knowledge of the average American is limited**. There is little appreciation of the facts of species extinction; nearly half the American public is unaware that dinosaurs and humans did not live at the same time.

**Trust** in the factual and ethical authority of the institutions of public life — government, corporations, the media, universities — is also at an **all-time low point**. It is now assumed more widely than ever by American voters that the reliability of information provided by those bodies is colored by their institutional self-interests and ideological predispositions.

There is a good deal of evidence, however, that effective education can affect the "hierarchies of concern" of a person, and can elevate to the first tier an issue previously stuck on the second tier.

**Current "cluster analysis" techniques allow planners to identify those elements of the population ready to support an environmentalist position, those who might support the position if it were described persuasively, and the messages that would work best for the particular sub-populations in question.**

Many studies now reveal that the **attitude taken by a voter on a given question of public policy depends less on knowledge of, or conviction about, that particular question than it does on the way in which the question can "fit" into a more general set of personal values**. Hence policy advocates are increasingly describing their objectives in terms of the personal values held most strongly by the sub-populations they seek to mobilize or persuade.

#### 5. PUBLIC OPINION ON THE ENVIRONMENT

**Large majorities of American voters — 60% to 80% — describe environmental protection as "critical" or "very important."** Though this puts the environment ahead of homelessness and abortion, it lags well behind the economy, crime, education, health care, and the federal deficit. **Only seven percent of the voters in the 1994 elections cited the environment as a major reason for voting the way they did.**

A declining percentage of American voters describe themselves as "active environmentalists": (29% in 1992; 21% in 1995 and 11% in 1996).

Six out of 10 Americans describe the quality of the environment as good or excellent; 4 in 10 say the national environment is good or excellent.

A majority of Americans believes that there is too much government regulation, but **only about 20% think that there is too much government regulation of the environment.** Only 30% of registered Republicans believe that environmental laws are too stringent.

Americans overwhelmingly believe that "**environmental protection and economic development can go hand-in-hand,**" and that natural resources can be protected without restricting human activities. People want to hear that a "**balance**" is possible. Only in communities where the economy is resource-based do voters see more of an environment-versus-jobs conflict.

**Americans overwhelmingly believe that the most serious environmental problems are problems of environmental health. "Pollution" is always at the top of the list of concerns, followed by "toxics" and various ways of expressing anxiety about the healthfulness of water and air.**

Nonetheless, there is **broad sentiment for protecting natural settings** from overdevelopment. Two-thirds of those polled opposed opening up the Arctic National Wildlife Refuge to oil and gas exploration, and three-fifths opposed legislation to expand logging, mining, and ranching on public lands.

Those results are consistent with polls that show that **Americans do not believe that large corporations can be trusted to protect the environment. Environmental groups have more credibility, but it is declining.** Environmentalists are often criticized for lacking balance and perspective.

## 6. PUBLIC OPINION ON BIODIVERSITY

**Only one in five Americans say they have heard of "the loss of biodiversity."** The term "endangered species" has a much wider currency, though respondents are much more likely to think of animals (birds and mammals) than plants.

**The links between habitat and biodiversity are not widely understood.** Fewer than one in ten cite loss of habitat as a reason for



species extinction, and eight in ten believe that most of the effort to save endangered species has come from work done in zoos and aquariums.

Nonetheless, the overwhelming majority of Americans say they are **“very concerned”** or **“somewhat concerned”** when informed about the **current mass extinctions of plant and animal life**. Support for the Endangered Species Act is high (more than 60% of voters oppose new restrictions on its scope). Americans often talk of a basic belief that all living things are interrelated.

This belief is undermined by other beliefs, with the result that support for public policies to preserve biodiversity rests on an uneasy foundation. These **undermining beliefs** are:

- Loss of *some* species will not affect things in a way that matters personally.
- The goal of trying to preserve all, or even most, species is unrealistic.
- A particular species cannot be presumed to be valuable; its value must be demonstrated.
- There are undesirable species (mosquitoes, tarantulas) to which we should bid good riddance.
- Short-term human needs often take precedence over saving habitats and species.
- Nature is responsible for much current extinction, and new species are being created all the time.

Members of environmental groups are less prone to these beliefs, and are especially more reluctant to choose between good and bad species.

Focus group participants often were **unimpressed by local evidence of the harm occasioned by biodiversity loss**; the issue seemed to lack urgency. They were also **skeptical about the facts on biodiversity**, particularly on rates of extinction, and questioned the trustworthiness of the presenters. In a number of focus groups and surveys, respondents said they **wanted to hear about biodiversity loss from scientists**.

## PART TWO: ACTION STEPS

### 7. STRIKE A BALANCED TONE

**Show respect.** Focus groups reveal that most voters believe that environmentalists are trying to protect important interests, that they are often well-informed, and that they play a useful role in society by counteracting entrenched forces. But often we are regarded as just another special interest group, with three annoying habits: **not listening well, overdramatizing our arguments, and scolding people.**

Remember that everybody's in this together, and that an upper-middle-class Sierra Club member contributes more to biodiversity loss than a working-class Wise-User. Say "we" instead of "you" whenever possible.

**Take people where you find them.** A small minority of voters will be able to appreciate the importance of biodiversity as a global issue of long-term practical consequences. Most people, including most environmentalists, will need more information before they even approach that stage. And almost everyone needs to begin by learning how to draw larger conclusions from a memorable personal experience. **Don't be afraid to go slowly on this issue;** it involves a big switch in thinking and doing.

**Support other environmentalists and other approaches to environmental protection.** Engaging people's concerns means respecting their hierarchy of environmental anxieties: protecting health and preserving quality-of-life. Even though those anxieties may be tangential to biodiversity concerns in a sophisticated ecological sense, they are important in themselves and crucial to environmentalism as a successful democratic movement. Those of us who care about biodiversity in the long run can't succeed without those who want to clean up pollution in the short run.

**Don't over-promise or over-threaten on the short-term utilitarian dimensions of biodiversity.** In most regions of the United States, for the next few years at least, preserving biodiversity cannot be presented as a near-term imperative for public health or economic development. It may be that preserving biodiversity is essential for the long-term health and survival of the human species, and it may be that preserving biodiversity is essential for long-term sustainable economic development. But even those propositions are not easily proven.

## 8. A WORD ABOUT LANGUAGE

**Don't worry about "biodiversity."** There are some people with whom you can talk about "biodiversity," but there aren't many of them. Usually, it's better to talk about the *conditions* of biodiversity, e.g. **"the protection of natural places,"** or **"the conservation of natural ecosystems"** or "saving wilderness."

**Balance, balance, balance.** The side that persuades American voters that it is balanced and moderate is the side that wins. Remember that Americans strongly hold that nature protection, health protection, and economic development can all go hand in hand. Even the most radical biodiversity defender can say: **"We favor a balanced policy. We believe that it's important to work for a goal of healthy people and healthy natural ecosystems in a society where we can raise our kids to lead decent lives."** Or "We want a moderate approach to this issue, where all of us can balance short-term needs for business with the long-term needs we all have for a safe, natural, healthy world for ourselves, our kids and their kids."

**Don't be afraid to be a literal conservative.** Focus groups reveal that the word **"conserve"** has positive connotations (much better than "preserve" or "restore"), as does the label **"conservationist."** Don't back off from the "environmentalist" tag, but don't hesitate to describe yourself as someone who wants to **"safeguard"** our heritage. **"Stewardship"** works well with many people.

**Avoid government talk.** Don't "oversee natural resource use." Do **"protect our forests and rivers."** Don't push for "zoning." Do call for **"local control."** Don't call for "regulations." Demand **"standards."** Avoid "needs assessment" or "service provider." Don't say "growth management." Use "community" when you're talking about an actual place.

**Endorse collaboration.** Protecting biodiversity requires cooperation from a lot of different people: business executives, farmers, scientists, government leaders, environmentalists, and ordinary taxpayers. Emphasize how "we're all going to have to work together on this."

**Use "enemy-language" with discrimination.** Though voters trust environmentalists more than they trust corporations, there's evidence that blanket criticisms of industry often backfire. Talking tough — very tough sometimes — about the anti-environmental records of big developers and big mining and timber corporations is essential, but **keep your targets and facts in focus. And never attack local ranchers and farmers.**

## 9. IDENTIFY EDUCATIONAL MESSAGES

Before persuading, **start with information**. Research shows that **once people are given key information about biodiversity, they become concerned about its loss**. This is particularly true when people are told **“what scientists are saying”** about the eventual results of continued biodiversity loss. Remember that even members of environmental groups need basic facts.

**Establish the facts that plants, animals and their habitats are disappearing forever; that the rate of extinction is much, much faster than in the past; that almost all the responsibility can be attributed to humans; and that extinct species and ruined habitats are not being replaced by new species or new habitats**. This is not a case of “nature taking its course,” but a case of human beings not taking responsibility for their own behavior.

**Focus on habitats or ecosystems, not species**. When you describe the benefits of biodiversity and the costs of losing biodiversity, use habitats (both local and faraway) as your frame of reference. Such an emphasis coincides with information that many voters have already: that natural things are interconnected; that saving one habitat is an efficient way to save many species; that healthy ecosystems provide benefits to people; and that natural places can provide deep aesthetic and spiritual comfort.

**Show how humans benefit** from healthy habitats and ecosystems. Over and over research shows that voters want humans “put in the picture.” Some of the benefits to humans can be portrayed in **utilitarian terms**. Healthy natural ecosystems help us:

- **clean our air and water;**
- **protect our crops from pests and disease;**
- **provide new medicines for the diseases of the future; and**
- **get early warning of new threats to public health.**

Some of the benefits to humans can be described in quality-of-life terms. Healthy natural ecosystems help us:

- **find countless recreational opportunities;**
- **experience unique beauty and peace-of-mind;**
- **provide an important education and resource for our children.**

**Make local connections.** As you tell the story of biodiversity, link the lessons from famous places (rainforests, the Everglades) with personal experiences from an **endangered ecosystem nearby**. Tell how the activities of **local human beings** can strongly affect its health. It may be a **scientist** from a nearby university who measures frog populations; a **state ranger** who helps campers appreciate woodlands; a local **entrepreneur** who uses natural products sustainably; a **Member of Congress** who takes big campaign contributions from anti-environmental interests.

## 10. OFFER SOLUTIONS

**Emphasize that People Can Make a Difference.** Often an educational effort can surmount the "No Need" hurdle (Is This Really a Serious Problem?) only to pull up short at "No Hope" (Yes, It May Be Serious, But What Can I Do?).

**Offer Options Close to Home but not Too Close to Home.** The most important personal contributions that most Americans could make to global biodiversity are those associated with the two things in their lives that they don't want to make any sacrifices about: their houses and their cars. Sprawl, energy consumption and auto-dependency are the crucial biodiversity killers, but only the brave or visionary will advocate density, frugality, and big taxes on Ford Explorers. In the meantime, emphasize education and values, and a small number of meaningful local actions:

- **Individual household efforts**, from native-plant yard care to family adoption of a pond in a threatened ecosystem.
- **Membership in, or support of, a local group** that monitors the health of a local ecosystem.
- **Support for local campaigns** to protect an ecosystem from pollution or overdevelopment.
- **Work with church or school groups to introduce kids** to an important local ecosystem or endangered species.
- **Special activities to link up hikers and backpackers with hunters, car-campers, boaters and fishers.** Environmentalists should make a particular effort to reach out to other stakeholders.

## Offer Options for National Impact.

- **Membership in a national environmental group.**
- Involvement in efforts by an environmental group or a civic group (e.g., League of Women Voters) to **question and then publicize the stands taken by the local Members of Congress on legislative issues** pertinent to the protection of natural ecosystems.
- Special involvement in efforts to **educate the public and public officials on the need for greater energy efficiency and the development of renewable sources of energy.** There is strong public support for those goals (at least notional), among Democrats and Republicans in almost equal measure. Biodiversity defenders need an element of a "technical fix" in their array of solutions, and efficiency advocates could use a grounding in the protection of real places.

**Sketch a Future.** Do you have a vision of what your town or region will look like in ten, twenty, or fifty years? Where do people fit in, and what kind of lives do they lead? What's happened to the local ecosystem you care about, and how do the people of your future relate to it?

### **Afterward: KEEP IT UP!**

This is all going to take a very long time. Public opinion specialists have recommended that "communication planners should not think in terms of less than a 5-10 year effort." Even short-term policy campaigners stress the need for a sustained drumbeat in the public ear. For an issue like biodiversity, we'll need an insistent rhythm and many hands.

As information on biodiversity increases and spreads, as we become more deeply educated about biodiversity and more adept at talking about it, messages and message strategies will surely evolve; at this stage, we know enough to start talking and to continue listening. Please let us know what you learn. Find us at:

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