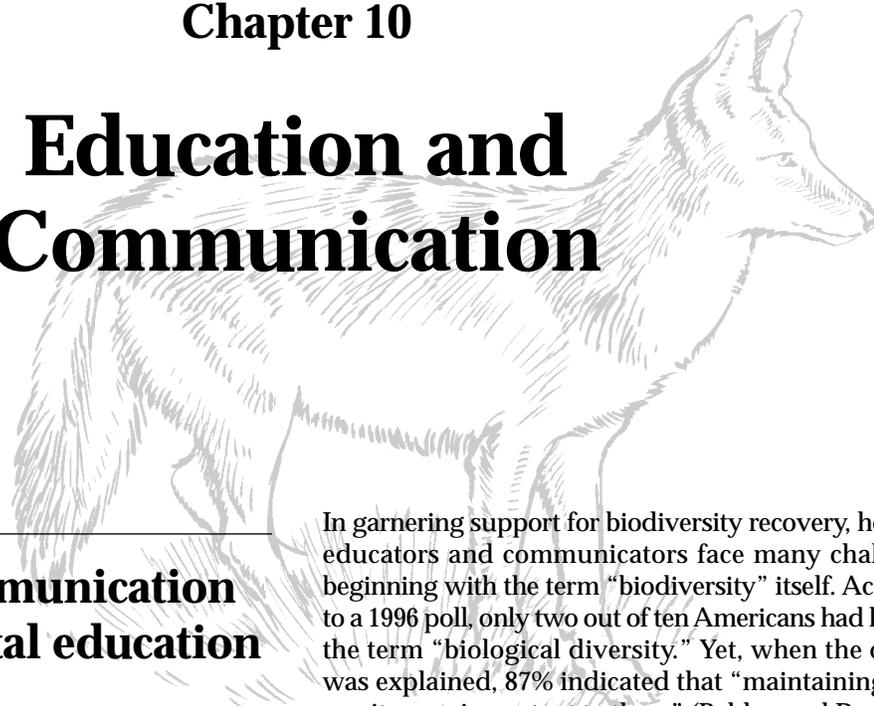


Chapter 10

Education and Communication



10.1

The role of communication and environmental education

10.1.1 Background

Public awareness and support are inherent elements in the recovery of this region's biodiversity. As we head into the next century, we are faced with a variety of threats to the unparalleled natural wealth of the Chicago region. The decisions to address those threats will be made by a variety of groups, including elected officials and public landowners, as well as by individuals. Individuals not only drive the larger decisions with their votes but also make daily decisions affecting the health of our natural ecosystems, ranging from home building to checking their boats for zebra mussels before transportation. Individuals are also the past, present, and future of the region's renowned volunteer stewardship efforts. Indeed, the future of our native landscapes depends upon the support and involvement of our citizenry.

Fortunately, most Americans consider environmental protection a priority, and there is widespread concern about air and water pollution, destruction of tropical rain forests, and toxic waste contamination (Gallup News Service 1999). While not ranked as highly, habitat lost to development also elicits broad concern (Belden and Russonello 1996). On a local level, people have a strong affinity for our parks and forest preserves, and they have demonstrated solid support for increased land acquisition. Conservationists, then, have a base upon which to build public support, a base that includes appreciation for the beauty of nature, a sense of responsibility to future generations, and the desire for a healthy environment.

In garnering support for biodiversity recovery, however, educators and communicators face many challenges, beginning with the term "biodiversity" itself. According to a 1996 poll, only two out of ten Americans had heard of the term "biological diversity." Yet, when the concept was explained, 87% indicated that "maintaining biodiversity was important to them" (Belden and Russonello 1996). In order to strengthen and broaden public awareness, conservation communicators need to not only define but also to make biodiversity real and to convey its connection to our own quality of life.

While it will take time for the word and the concepts of biodiversity to enter the public vocabulary and consciousness, concerned organizations must act with a sense of urgency. As earlier chapters indicate, the region's remaining natural communities and habitats urgently need to be protected and restored in landscapes of sufficient size and quality to protect biodiversity. In order to inform the public, organizations must, therefore, employ short-term communication strategies while building longer-term educational approaches.

By definition, environmental education is long term in scope and takes significant investment in resources and time, but it produces powerful results. The goal of environmental education has been characterized as trying to shape the knowledge, awareness, attitudes, skills, and participation of a target audience. The following specific objectives, as outlined by UNESCO in 1978, have been adopted by the Chicago Wilderness Education and Communication Team:

- Fostering clear *awareness* of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas
- Helping social groups and individuals gain a variety of *experiences* in and acquire a basic *understanding* of the environment and its associated problems

- Helping social groups and individuals acquire a set of values and feelings of *concern* for the environment and the motivation for actively participating in environmental improvement and protection
- Helping social groups and individuals acquire the *skills* for identifying and solving environmental problems
- Providing social groups and individuals with the opportunity to be actively *involved* at all levels in working toward resolution of environmental problems

These objectives help guide the development of an environmentally literate citizenry, capable of making well-informed decisions about protecting local biodiversity. While short-term communications strategies can raise awareness and get the public involved at an entry level, both formal and nonformal programs in biodiversity education are needed to sustain that interest and develop the deeper understanding that will lead to the active public support required to ensure biodiversity recovery.

10.1.2 Communication opportunities

Through the work of professionals and forums in market research, much has been learned about the communications challenges for Chicago Wilderness. The Consultative Group on Biodiversity initiated the Biodiversity Project in 1995 to assess public opinion on biodiversity, develop collaborative strategies to increase public awareness and engagement, and lay the groundwork to implement those strategies. The Biodiversity Project (1998) identifies six objectives to guide conservationists toward fostering public support:

1. Help the public recognize biodiversity in its everyday experience.
2. Help the public understand its dependence on nature.
3. Raise fundamental ecological literacy.
4. Help the public understand the specific human impacts on biodiversity.

A New Environmental Education Initiative in Northwest Indiana

The Indiana Dunes Environmental Learning Center provides a new resource for biodiversity education for the entire Chicago Wilderness region. Launched in October 1998, the Learning Center is a not-for-profit residential facility developed in partnership with the USDI National Park Service. Located in Indiana Dunes National Lakeshore, the project is receiving widespread support from area businesses and industry.

The new facility, located on the site of an old summer camp, has overnight capacity for eighty people in ten cabins, with plans to triple the capacity through expansion. One-fourth of the capacity of the Learning Center is reserved for classes that need financial assistance to attend, supported by funding from diverse sources. The primary service area is considered to be a 90-mile radius, or a 1½ hour drive, from its location near Chesterton in Porter County.

The initial program for 4th-6th grade classes aims to provide understanding of ecological principles and the importance of biodiversity through hands-on experience in the outdoors. Teachers and administrators are enthusiastic about how the curriculum helps them meet new state science curriculum requirements. There are also art, language arts and social science elements. A high school program that involves students in ecological monitoring and stewardship will be expanded in the 1999-2000 school year.

The Learning Center has been successful in attracting classes from diverse ethnic and racial communities. This result also reflects the diverse membership and the high level of cooperation with local environmental organizations such as the Grand Calumet Task Force and the Minority Health Coalition of Michigan City. The Learning Center has also organized an Environmental Education Network of agencies and private groups that is providing the means for outreach to educators and the general public. In May 1999, for example, twenty agencies participated in a resource fair for teachers, with a second such event scheduled for early in the 1999-2000 school year. Weekend and summer programs are also provided for adults and special groups including teachers and children. The Learning Center is also made available to other groups, provided at least 25% of their program schedule is devoted to environmental issues.

5. Help the public understand its capability to act to conserve biodiversity.
6. Motivate the public to act to conserve biodiversity.

The conservation agencies and organizations of the Chicago region, in concert with our highly visible botanic gardens, zoos, and museums, have the opportunity to realize these objectives and, working together, to effect positive change. They must integrate current efforts in communication, marketing, and education and direct them toward these objectives. Local organizations and agencies involved with conserving biodiversity need to prioritize their efforts and devote more resources. They can then create comprehensive campaigns and programs that connect biodiversity conservation to core values that people already hold, applying the knowledge gained through public-opinion research and thorough evaluation of the effectiveness of various efforts.

People get the information that forms their attitudes and behaviors from a wide range of sources beyond the communication and education programs of conservation organizations. Schools, the media, and community leaders contributing in important ways to the values held by the public. They also interpret conservation issues for the public. Outreach and education to these audiences is crucial to developing “third-party” endorsements and affirmation of actions such as ecological restoration.

The most successful marketing strategies are those that catapult issues into popular culture. Smokey the Bear is a prime example in the conservation arena. Another is the attention drawn to the devastation of tropical rain forests, which has resulted in a remarkably high level of awareness for an issue occurring thousands of miles from our shores. If conservation communicators can employ these strategies to the local situation, they have the advantage of using issues that have a much more direct impact on our citizens’ quality of life. By working together, utilizing market research, devoting more resources, and adopting innovative approaches, we can engage the public and realize the goals of this plan.

10.1.3 The current state of biodiversity education in the Chicago Wilderness region

Since 1995, the Chicago Wilderness Education and Communication Team has been working to identify and resolve issues of biodiversity education specific to the region. They have assessed and addressed the state of current biodiversity education efforts in a number of areas. Information from this work is summarized below.

Biodiversity education does not appear to play a major role in the region’s public schools. Surveys from two states in the Chicago Wilderness region (Sebasto-Smith and Small 1997, Lane et al. 1994) show that, although teachers want to integrate environmental education into the curriculum, a number of barriers exist. According to the surveys, 90% of Illinois teachers and 94% of Wisconsin teachers “agreed” or “strongly agreed” that it is important to integrate environmental concepts into their subject or grade level. In addition, 87% of Illinois teachers and 90% of Wisconsin teachers “agreed” or “strongly agreed” with the statement “a goal of my teaching is to increase students’ level of environmental responsibility.” However, 65% of Illinois teachers reported they were not infusing environmental education into their curriculum and 76% of Wisconsin teachers spend less than 15% of their overall teaching time infusing environmental concepts.

Why do teachers overwhelmingly say that environmental education is important but dedicate less than an hour per week to the topic? The top five reasons given by teachers in the two states are listed below:

Illinois:

1. Not enough resources/funding
2. Not enough preparation time
3. Not enough knowledge or background
4. Not enough class time
5. Other concepts more important

Wisconsin:

1. Concepts not related to subject matter
2. Not enough knowledge or background
3. Not enough class time
4. Other
5. Not enough preparation time

It is ironic that there are such similarities between the findings in both states, since there are major differences in how the two states mandate the integration of environmental education. Wisconsin has mandated 1) periodic assessment of the environmental literacy of its teachers and students, 2) pre-service training in environmental education for teachers, and 3) consideration of environmental education concepts in the development, implementation, and evaluation of school-district curriculum plans. In contrast, Illinois has a relatively ambiguous and unenforced mandate for environmental education in its schools. While these surveys did not cover the status of biodiversity education in Indiana, the third state in the Chicago Wilderness region, it is noteworthy that a position dedicated to integrating environmental education at the state level was recently left unfunded. In addition, the Indiana Department of Education currently has no mandated environmental education component for the K–12 curriculum.

10.1.4 Cultural diversity and biodiversity

Research shows that, in addition to children, other important audiences including minorities, low-income populations, and senior citizens are generally being left out of environmental education (U.S. Environmental Protection Agency 1996). An illustration of this void is the finding by Belden and Russonello (1996) that two in ten Americans said they had heard of “biodiversity.” These respondents were most likely to be men, upper-income, college-educated, and professionals. However, the same survey reveals the potential for building support among broader audiences. In describing who is most likely believe “maintaining biodiversity is very important,” Belden and Russonello state, “Demographically, they have lower incomes, live in cities, and are found in higher proportions among African Americans and Hispanics.”

A summary of 1990 census data for the portion of Chicago Wilderness in northeastern Illinois contains the following. As of that year, 12% of residents were born outside the United States. In that same year, 20% of all households spoke a language at home other than, or in addition to, English. Perhaps a better measure of the human diversity in the region are the proportions of Hispanics (12%), non-Hispanic blacks (19%), and non-Hispanic whites (69%) living in northeastern Illinois in that year. Forecasts prepared by the Northeastern Illinois Planning Commission indicate the population of this same area will be 22% Hispanic, 23% non-Hispanic black, and 55% non-Hispanic white in the year 2020. As our population grows more racially and ethnically diverse over the coming decades, the long-term success of Chicago Wilderness will be determined in part by its ability to attract the support of all segments of the population.

These numbers are particularly noteworthy because today the large majority of members of most environmental organizations are non-Hispanic whites. A combination of factors may account for this disparity, a circumstance that local environmental organizations need to fully understand if their messages are to reach all segments of the population. A recent report to Congress by the U.S. Environmental Protection Agency Advisory Council (1996) offers several reasons for the failure to reach diverse audiences, including:

- lack of materials, commitment and, organizational support
- uncertainties in knowing how to engage Hispanic and non-white audiences
- difficulties in adapting traditional strategies to non-formal environments within these communities

Further information on the importance of culture in shaping attitudes toward the natural environment can be gleaned from a 1998 survey of leaders and a cross-section of citizens in two sample areas in the region, the Uptown neighborhood of Chicago and the Butterfield Creek watershed in southern Cook County. The survey showed that one’s age, economic status, and place of residence are associated with attitudes about the environment. For example, suburban environmental concerns included over-development and flooding, while inner-city concerns included air pollution, poor water quality, litter, asthma and lead poisoning (Babcock 1998).

The survey also showed that open space evoked powerful images of home and cultural history for immigrants as well as native residents. City parks are often used as gathering places for ethnic communities, not to celebrate nature per se, but to enable these groups to share in their common language and culture. Other findings indicated that fishing and gardening were viewed differently by different groups. Motivations for these activities ranged from a desire to follow cultural traditions to simple economic necessity. A key finding for conservationists to consider was the respondents’ low level of familiarity with the natural resources found in the Chicago region, especially among immigrant communities.

In a study of nonformal outreach programs, Sayre et al. (1997) interviewed Chicago residents to determine what types of programming they might find interesting and desirable, and why they may not be participating in existing programs. This study found that many of the institutions that are charged with educating the public about the environment are not viewed as an educational resource by certain population segments. Further, though a myriad of good programs is available, people interviewed were not aware of them. Most important, however, was the finding that under-served communities are receptive to environmental outreach efforts, if awareness of diverse communities is enhanced and input collected from them.

10.1.5 Tools for communicating and teaching about biodiversity

While evaluating the current state of biodiversity education in the Chicago region, Chicago Wilderness has also begun to create the tools needed to improve both the scope and methods of communication and education efforts. Some of these tools, which are described in greater detail in Appendix 7, are:

For Educators:

- Biodiversity Kit

“12 Natural Wonders of the Chicago Wilderness”

A Collaborative Campaign to Foster a Connection to Chicago Region Natural Areas

From April 1998-May 1999, Chicago Wilderness conducted a communications campaign called “12 Natural Wonders of the Chicago Wilderness.” Its aim was to increase awareness of natural areas throughout the region, through an integrated effort centered around the designation of 12 spectacular yet accessible preserves. The elements of the campaign included both broad-based and targeted communications. At the core was the nature walks program, a year-long series of 29 guided walks. Led by skilled interpreters from the collaborating partners, the walks involved more than 500 people over the course of the campaign.

Materials produced for the campaign included the Natural Wonders preserve guide, (6,000 distributed), poster (4,000) and 1999 calendar (5,000). Designed to introduce biodiversity issues beyond the traditional conservation audiences, the materials featured spectacular vistas, colorful plants and animals, and clear messages about biodiversity and habitat restoration. Media coverage provided not only continued awareness, but also encouraged a sense of community pride for those designated locations (more than forty print and electronic features were garnered). Another element of the campaign was the Media Workshop in December 1998, where journalists were introduced to a multitude of biodiversity issues. Direct outreach to 15 community groups surrounding the preserves included slide presentations and participation in events that reached more than 450 people. In addition, the Chicagoland Environmental Network launched a database of people responding to the campaign for notice of future events and volunteer opportunities. Combined with additional sources, this provides Chicago Wilderness with nearly 4,000 individuals as a base for building greater awareness and involvement.

The formal evaluation of the campaign (Forester, 1999) included mail and phone surveys with the various groups reached through the campaign. This data revealed:

From Nature Walk Participants:

- Nearly 40% of survey respondents have returned to the Natural Wonder preserve they visited since their walk.
- As a result of reading the Natural Wonders brochure, 32% of respondents have visited other Natural Wonders described there. Another 66% plan to visit another site, while only 2% were unsure they would.
- The majority of nature walk respondents heard about the walks through media coverage.
- The most noted positive aspect of their walk was the walk leader’s knowledge (each walk had a theme relating to restoration and management).

From Outreach Audiences:

- While a majority of the participants were non-Hispanic white (88%) the percentage of other racial and ethnic groups was higher here than that of the nature walks respondents.
- Most participants heard about the presentations and other outreach activities through friends or other people.
- The overwhelming majority felt that the programs increased their knowledge about “biodiversity in the Chicago region” (98%) and “habitat restoration in the Chicago region” (96%).
- 20% of respondents reported they would be interested in volunteering to conserve natural areas.

From Media Workshop Participants and Non-attending Media Who Requested Workshop Packets:

- 90% of survey respondents have since used information learned in the workshop.
- 100% of respondents are interested in attending future media workshops.
- 80% felt that media coverage of conservation issues was inadequate, although half thought such coverage has been increasing.

- *Chicago Tribune* Educational Services supplement, “Chicagoland Ecosystem”
- Chicago Wilderness Atlas Education Package

For Individuals, Agencies, Organizations:

- *Chicago Wilderness: An Atlas of Biodiversity*
- *Chicago WILDERNESS Magazine*
- Chicago Wilderness “Portable Resources” (video, slide show, display)
- Chicagoland Environmental Network (CEN)
- Chicago Wilderness Web Site at www.chiwild.org

A preliminary assessment of the effectiveness of these tools reveals varied awareness of the materials and a wide-range of implementation strategies. Specific needs and solutions are addressed in sections 10.1.6 and 10.2.

10.1.6 Biodiversity education needs in the Chicago Wilderness region

Since its inception, the Chicago Wilderness Education and Communication Team has used a matrix to determine specific needs for education about biodiversity in the Chicago Wilderness region. The matrix plots audiences versus the five essential components of education (knowledge, skills, awareness, attitude and participation). Existing environmental education programs appear in the matrix cells according to the objectives they meet. Several conclusions about programming, which parallel research findings in environmental education, have been drawn from the matrix:

- Although there are many programs aimed at school-age children, the approach is by no means comprehensive and many students are not being reached.
- Most programs or resources available for biodiversity education for school-age children lack at least one of the components of attitude, skill and participation essential to quality education.
- Biodiversity topics pertaining to the Chicago region do not appear to be emphasized at local colleges and universities.
- Although tools exist for biodiversity education, they are not being used effectively for community-based education and are not reaching diverse audiences.

10.2

Goals and actions for biodiversity education and communication

10.2.1 Introduction

The overall goals for biodiversity education for Chicago Wilderness are to improve the knowledge, awareness, attitudes, skills, and participation of diverse stakeholders in the recovery process. This effort requires actions that carry audiences through each level, culminating in active participation. The target audiences are diverse, so actions tailored to each are required.

Some recommendations for biodiversity recovery, however, cannot wait until educational goals are met. Significant current challenges require immediate strategies to increase public awareness and understanding. The perception of ecological restoration, in particular, requires urgent attention. While most local citizens agree with the idea of restoration, there is a lack of understanding of the techniques required (Barro and Bright 1998). Communication strategies need to address these perceptions—and misperceptions—about restoration techniques.

Agencies and organizations must, therefore, complement their long-term approaches to environmental education with actions aimed at achieving more focused, short-term communication goals. The following sections outline both long-term education goals and short-term communication goals.

10.2.2 Long-term education goals

- **Goal 1: Ensure that every student graduating from a school system in the Chicago Wilderness region is “biodiversity-literate.”**

The most efficient way to educate the next generation about biodiversity issues is to fully integrate the subject into the existing public and private school systems.

Recommendations

- ✓ Develop a commonly held definition of “biodiversity literacy”—what knowledge, skills, attitudes, and experience are essential to help people make informed decisions and participate in biodiversity protection.

- ✓ Increase the visibility of biodiversity concepts and issues in state education standards to encourage teachers to integrate biodiversity content into other programs.
- ✓ Give school staff the incentive to devote precious instructional time to biodiversity topics by demonstrating to teachers how using biodiversity as a unifying theme could improve test scores.
- ✓ Support state plans that integrate environmental education into schools. In particular, work to support the passage of the Environmental Education Literacy of Illinois Master Plan.
- ✓ Develop “best practices” for teacher training, such as the package being produced for the Mighty Acorns youth stewardship education program.

- **Goal 2: Expand the scope of existing and future programs in biodiversity education to include components for attitudes, skills, and participation in curricular design.**

One of the greatest challenges in biodiversity education is getting students involved in the process of conservation. To achieve this, programs need to include components for attitude, skills, and participation.

Recommendations

- ✓ Determine the effectiveness of existing biodiversity education programs for achieving “biodiversity literacy,” and use successful programs as models.
- ✓ Foster professional development for organizations inaugurating biodiversity education, and increase the number of pre-service and in-service opportunities for teachers to strengthen their qualifications to teach biodiversity.

- **Goal 3: Make biodiversity in Chicago Wilderness a component of the degree programs of local colleges and universities.**

Although students at many local institutions of higher education are peripherally exposed to the biodiversity of the region through courses that visit natural sites, there are few efforts to make the region’s unique resources a focus of study. Because of this, we are losing an excellent opportunity to inform our most educated citizens.

Recommendations

- ✓ Survey existing course selections at local universities. Identify courses that effectively and thoroughly communicate key information about local biodiversity and work to increase their visibility.

- ✓ Develop a degree program in restoration ecology at a local university with an accompanying field station.
- ✓ Promote practicum opportunities by linking universities with professional land managers in the region.

- **Goal 4: Expand and improve the use of existing tools for biodiversity education, and create new tools as needed.**

A number of recent formal studies and informal surveys have highlighted the need for better ways of developing and disseminating tools for biodiversity education. Steps to address this challenge are listed below.

Recommendations

- ✓ Work toward the better distribution of existing tools by forming a distribution center and investing in publicity about the center.
- ✓ Assess the effectiveness of tools for reaching their target audiences.
- ✓ Create new tools for groups starting community-based, non-school projects in biodiversity education. For example, create a biodiversity program primer with a list of potential partners.

- **Goal 5: Increase the number of communities being reached with non-school-based programs in biodiversity education.**

As described in Section 10.1.4, it is imperative that we provide services for biodiversity education to cultures and communities throughout the Chicago Wilderness region. Reaching this wide range of people requires the variety of actions listed below.

Recommendations

- ✓ Foster neighborhood-based programs aimed at improving the environment and biodiversity locally to unify different cultural groups for concerted community action.
- ✓ Identify specific leaders in cultural and ethnic communities who can inform educators and communicators and serve as partners for collaborative programs.
- ✓ Create a diverse base of spokespeople, including professionals and volunteers, who can serve as “ambassadors” for biodiversity to a wider variety of communities.

- ✓ Develop collaborations between Chicago Wilderness member organizations and cultural, ethnic, and arts and humanities organizations to foster the exploration of nature through cultural avenues.
 - ✓ Improve the infrastructure within conservation agencies and organizations to better support community-based biodiversity projects.
 - ✓ Develop links between school-based biodiversity programs and community projects.
 - ✓ Find new ways of providing urban populations with opportunities to become aware of and explore the region's natural communities (for example, a "biodiversity bus" to bring urban residents to outlying natural areas).
 - ✓ Devote more effort to recruiting citizen scientists from more diverse communities. Build effective tools to track the success of recruiting techniques, and use the effective techniques to expand the reach of volunteer-recruitment programs.
- **Goal 6: Measure local citizens' understanding of biodiversity by developing appropriate gauges for long-term effectiveness of education programs.**

The only way to assess success in reaching Goals 1–5 is to measure the target audiences' understanding of biodiversity issues. To accomplish this, resources should be dedicated to creating appropriate measures and systematically collecting data.

Recommendations

- ✓ Create appropriate gauges and gather baseline data on targeted communities.
- ✓ Gather data at set intervals to measure long-term change.
- ✓ Disseminate findings to agencies and organizations involved in biodiversity education.

10.2.3 Short-term communications goals

- **Goal 1: Gain a better understanding of the views of a broader segment of the Chicago-area population on biodiversity issues such as ecological restoration.**
The current concerns and viewpoints of different population segments must be understood before communication can be effective. While national market research is valuable to decision-makers and conservation communicators, unique circumstances (such as county forest preserve systems) exist in the Chicago

region, and they may affect our citizens' values and views. More local research on issues related to biodiversity protection is needed, including ecological restoration and knowledge of or access to avenues of public involvement.

Recommendations

- ✓ Compile existing local market research, including that gathered through land-acquisition bond campaigns, to determine gaps in the understanding of public values and perceptions.
 - ✓ Commission professional market research locally to better inform communications strategies and messages.
 - ✓ Disseminate research findings to decision-makers and conservation agencies and organizations.
- **Goal 2: Increase the public's understanding of the role of management in natural areas.**
Many people believe nature should be left alone. In the Chicago Wilderness region, however, only aggressive land management can restore the natural processes that allow an ecosystem to "take care of itself." Communication strategies must emphasize the human role in nature as healer and must show that management is necessary to alleviate the pressures placed on ecosystems in a large metropolitan area. Understanding these messages can lead to endorsement of ecological restoration, even though its methods (such as prescribed fire) may appear damaging in their early stages.

Recommendations

- ✓ Craft a common lexicon that describes restoration efforts, and create methods to evaluate and adapt the messages to grow in effectiveness.
 - ✓ Foster the delivery of essential message points not only through conservation agencies and organizations, but also through a broader range of institutions and channels.
 - ✓ Engage and educate those who interpret conservation issues for the public, including community leaders, media, and elected officials.
- **Goal 3: Improve communication with those immediately affected by management decisions.**
Neighbors and users of forest preserves and other natural areas should be aware of management decisions and understand their necessity. In the early stages, habitat restoration is typically not aesthetically pleasing. Whether conducting demonstration burns or

distributing brochures house-to-house, staff of land-management agencies and stewards need to let people know what's going to happen and why. They should also work with user groups (such as birders, hikers, and canoeists) on issues of common concern.

Recommendations

- ✓ Ensure that restoration efforts include funds for accompanying communication plans.
- ✓ Create a communication guide that restoration agencies can use to help develop these plans, including resources that already exist and successful examples from other agencies.
- ✓ Conduct direct outreach to organizations in the local communities, such as block clubs and religious groups, that are interested in environmental work.
- ✓ Engage advocacy organizations that work on environmental issues (such as air and water quality or sprawl) and educate them about biodiversity loss.
- ✓ Seek opportunities to inform journalists and increase media coverage of restoration and land management.
- ✓ Review current mechanisms for public involvement in land-management decisions and make improvements, using models that are successful in other arenas.
- ✓ Create a structure for collaborating partners not only to react quickly but also to anticipate issues that arise in public forums.

- **Goal 4: Communicate documented benefits of local restoration efforts, especially those of most value to humans.**

To accept restoration techniques as necessary, people need to know that these efforts are producing the desired results, that habitats are being restored. Restoration efforts also need to be connected with tangible benefits—showing that biodiversity is a necessity, not a luxury.

Recommendations

- ✓ Gather data on the results of restoration efforts, translating the data into easily understood benefits.
- ✓ Create communications tools that connect restoration results to core values: the beauty and wonder of nature, our responsibility to future generations, and the desire for a healthy environment.
- ✓ Include illustrations of restoration results in programs, nature walks, signs, and other communication vehicles.

- ✓ Develop innovative campaigns and programs that position habitat restoration in mainstream culture (such as museum exhibits, ad campaigns, and retail promotions).

- **Goal 5: Improve the credibility and public perception of the people involved in restoration efforts.**

The perception exists in some communities that restoration is the folly of misguided volunteers or outsiders. Better explanations are needed of the role of the professionals and volunteers in restoration projects, as well as of the volunteers' experience and training of and their value to land management agencies.

Recommendations

- ✓ Seek trusted local spokespeople who represent the sound, scientific thinking behind restoration and/or exemplify the role of the local volunteer.
- ✓ Provide support for volunteers who interact with the public, and offer training in public speaking, interpretation, etc.
- ✓ Emphasize the public service provided by volunteers and the leverage of public funds through donated time.
- ✓ Ensure that decision-makers are aware of the value of conservation volunteers.

- **Goal 6: Improve communication about biodiversity with key decision-makers such as elected officials and their staff, land managers, and planners.**

These key decision-makers need information about local biodiversity before issues arise in order to make informed decisions. They also need quick access to new information as issues are being considered. Communication programs and tools need to address their needs.

Recommendations

- ✓ Assess current tools and programs to inform key decision-makers for content, availability, and effectiveness in increasing understanding of the importance of local biodiversity.
- ✓ Survey, as necessary, to assess key decision-makers' knowledge, attitudes, and information needs.
- ✓ Develop vehicles to keep decision-makers regularly informed, such as tours, literature, up-to-date scientific information, and contacts for further information.

10.3

Conclusion

While the challenges to conservation educators and communicators are many, they *can* engage the public on biodiversity by working together, understanding their audiences, devoting more resources, and adopting innovative approaches. While the American public is relatively unaware of the loss of biodiversity, we in the Chicago region have the tangible demonstration to motivate positive change right before our eyes—no citizen in the metropolitan area is more than twenty minutes from a natural area. Communicators can build on the public’s affinity for our parks and forest preserves and the unique opportunities they provide. While Chicago and urban centers worldwide struggle with issues such as quality of life, over-development, pollution, and traffic congestion, Chicago Wilderness also has the potential to create a new model of a metropolitan citizenry that is aware, appreciates its natural ecosystems, and takes action on their behalf.