

Chapter 11: Distributing Biodiversity Information to the Public

Many people are unaware of Oklahoma's rich biodiversity and do not understand what biodiversity means to them and future generations. Because an understanding or knowledge about a subject is required before a person can truly appreciate that subject, the following goals should be achieved to implement this plan and have a significant impact on the conservation of our state's rich biodiversity:

1. *Inform the public about biodiversity and the Oklahoma's Biodiversity Project.* The education committee should work with existing educational programs to disseminate biodiversity information to the public. Media outlets, such as newspapers, radio and television, are valuable tools for providing education about biodiversity. Educational programs like Project WILD, Project Learning Tree and Project WET could include biodiversity information and ways to incorporate its concepts into various school curricula. University programs in appropriate fields could include biodiversity recommendations in their courses. Educational centers, including museums and parks, could create biodiversity displays to demonstrate Oklahoma's diverse ecoregions and biological resources.

2. *Educate the public about how they can enhance biodiversity and reduce harmful actions.* A vital step in achieving implementation of this document's recommendations is to teach people how they can help conserve or restore biodiversity. Getting the public involved in biodiversity conservation will increase their appreciation of our rich natural resources. Many people are unaware not only of how they can enhance biodiversity, but also of how they might be damaging our biological heritage. Education efforts should reveal the effects of common, but harmful, practices that most people believe have no impact.

Educational Actions

Specific actions or topics were identified by the education committee as necessary to educate the public about biodiversity and provide them with enough information to allow them to take action toward enhancing Oklahoma's biodiversity. Although it is easier to reach children because they attend a variety of structured educational institutions, most land management decisions are made by adults. Therefore, adult education will receive highest priority. Most of the educational products and efforts initially will concentrate on adult education to begin implementation of biodiversity conservation recommendations quickly.

The actions discussed below are not in a prioritized order.

Define and Describe Oklahoma's Biodiversity

The term "biodiversity" and the factors that influence it must be explained before people will recognize its importance and initiate appropriate conservation actions. Educational curricula and informational materials should emphasize explanations of the concepts of biodiversity conservation and descriptions of Oklahoma's biodiversity. Examples of how various actions affect Oklahoma's biodiversity will further help the public understand this topic.

Descriptions of Oklahoma's diverse natural communities will help develop a respect for and interest in conserving this resource. Describing the state's natural communities and highlighting important or unique species also will demonstrate our rich biological heritage. Above all, adult audiences should be

provided with the concept that humans are an integral part of our state's biological world and are responsible for the future health and productivity of our land. Providing specific examples of how biodiversity is important to various interests will allow individuals to realize its importance to them.

Dispel Myths About Biodiversity

A major factor that influences biodiversity is myths or misinformation about its various elements. Some of these deal with individual groups of species, such as bats and snakes, while others are associated with the concept of biodiversity conservation. Many of these myths are widespread, deeply rooted and difficult to discredit. These false beliefs about biodiversity limit the amount of concern and support for conservation of the misunderstood resources.

Emphasize Proactive Benefits

The Biodiversity Project is an attempt to enhance biodiversity in a proactive manner to avoid severe losses in natural communities. If Oklahomans will implement measures that will stop declines in habitat and species, they will maintain or enhance our wealth of biodiversity. Beginning biodiversity management now will avoid losing segments of the state's natural resources that might never be recovered. Also, addressing this issue now on a voluntary basis will lessen the need for regulations or statutes requiring specific actions to protect rapidly declining species and habitats.

Explain How Biodiversity Benefits Individuals

Biodiversity is beneficial to society as a whole because it ensures a healthy environment in which to live and abundant natural resources upon which to build a thriving economy. However, societal benefits usually generate little action by individuals, and not all individuals can equally contribute to maintaining those societal needs. Therefore, to create the interest and concern necessary to result in action, people must realize that biodiversity is important to their own well-being. Whether individual values are generated due to ethics, economics, recreational opportunities, aesthetics or a number of other reasons, the individual must

recognize the personal benefits involved in order to support efforts to conserve biodiversity.

Explain the Biodiversity Project and Plan

The structure, goals and operation of the Biodiversity Project should be explained so people realize that many interests contributed to its development. Rather than being the product of a few governmental agencies, many agencies and private organizations worked together to develop a plan that all could support.

Develop Tools Targeting Specific Audiences

Although educational products featuring general biodiversity information are needed, products emphasizing specific interests or audiences also are needed. These products should demonstrate how biodiversity is important to that particular interest group and how individuals or companies can become involved in its conservation. Different tools and methods may be required to reach each audience or age level and should be tailored to best meet their needs.



Biodiversity information should be tailored to a variety of interests.

Prioritized Audiences

Eight audiences were identified by the education committee for dissemination of biodiversity information. The first three include the majority of Oklahomans, so they were given highest priority as having the greatest potential for enhancing biodiversity in Oklahoma. The remaining five overlap significantly with these three. After sufficient efforts have been directed toward these high-priority audiences, or as special opportunities arise, other audiences will be addressed. Following are the audiences that were identified along with prioritized topics for each of the three highest priority audiences.

1. Residential

An increasing proportion of Oklahoma's population resides in urban or suburban communities. Because these people have fewer direct contacts with much of Oklahoma's natural communities, it is more difficult for them to appreciate our rich diversity of plants and animals and understand the processes that maintain these communities. Urban populations form the greatest percentage of the state's population. These audiences need to be aware of biodiversity concerns because of their importance in building support for conservation of biological resources.

As residences cover increasing amounts of land in the state, their importance for biodiversity conservation will require more attention. Homeowners can feature local natural communities to help conserve biodiversity by providing habitat and reducing water and chemical demands. Invasive exotic species should be avoided, even in urban situations, to prevent the spread of these species into surrounding areas. Rural homeowners can provide greater benefits in their yards because they are closer to large tracts of natural communities. Therefore, landscaping their yards to blend into surrounding environments minimizes the impact of their yard on biodiversity.

The residential audience was divided into two segments, urban and rural, and the following actions were identified as necessary for teaching these audiences about biodiversity.

Urban

- C Define and Describe Oklahoma's Biodiversity
- C Explain How Biodiversity Benefits Individuals
- C Dispel Myths About Biodiversity
- C Develop Tools Targeting Specific Audiences

Rural

- C Define and Describe Oklahoma's Biodiversity
- C Dispel Myths About Biodiversity
- C Emphasize Proactive Benefits
- C Explain How Biodiversity Benefits Individuals
- C Develop Tools Targeting Specific Audiences

2. Agriculture

Agricultural production (e.g., forestry, livestock and grains) is one of the largest industries in Oklahoma and occupies the largest amount of land. In many cases, agricultural lands are valuable harbors of biodiversity. As the largest collective landowners in the state, agricultural operators are key to biodiversity conservation.

The following actions, in prioritized order, were identified as the best strategy for presenting the concept of biodiversity to this audience.

- C Dispel Myths About Biodiversity
- C Explain How Biodiversity Benefits Individuals
- C Define and Describe Oklahoma's Biodiversity
- C Emphasize Proactive Benefits
- C Explain the Biodiversity Project and Plan
- C Develop Tools Targeting Specific Audiences

3. Business and Industry

Businesses or corporations own or control significant amounts of land in the state. Building complexes include extensive yard areas that often are intensively landscaped; other types of business own large tracts of rural land. These properties could provide benefits to biodiversity through both education and habitat management. Office building yards could serve as demonstration areas for landscaping for biodiversity and could include interpretive trails for employees and the public. Businesses with rural properties could incorporate biodiversity conservation into their management to provide direct benefits.

The following five actions would educate businesses about biodiversity.

- C Define and Describe Oklahoma's Biodiversity
- C Emphasize Proactive Benefits
- C Explain How Biodiversity Benefits Individuals
- C Dispel Myths About Biodiversity
- C Explain the Biodiversity Project and Plan

4. Educators

One of the most efficient ways to distribute information is to provide it to educators. By informing educators in Oklahoma about biodiversity and measures to conserve it, they will be able to incorporate biodiversity into their programs, school curricula, fact sheets and personal contacts.

Educational institutions also manage land that could be enhanced for biodiversity. Schools could create outdoor classrooms to assist with science education and provide biodiversity benefits. Colleges and universities could include biodiversity in their landscaping to serve as demonstration areas for their students and the public. Land-grant universities also own large tracts of land that are used for research. These areas should demonstrate ways that biodiversity conservation can be incorporated into land management practices.

5. Social Organizations

Many citizens are members of a variety of organizations that focus on specific activities or interests. Outdoor sportsmen clubs, environmental groups, Boy and Girl Scouts, civic groups, garden clubs and others are excellent audiences to inform about biodiversity conservation. Many of these already are concerned about conservation issues and would be good supporters of biodiversity conservation initiatives.

6. Public Land Managers

State and federal lands are important areas for biodiversity in Oklahoma. Although public land comprises only a small percentage of the state's land area, many tracts are large and contiguous and hold great potential for managing biodiversity. Many of these lands already include biodiversity needs in their



Outdoor classrooms provide habitat and allow children to have direct contact with biodiversity.

management. Agencies that manage public lands in Oklahoma include Oklahoma Department of Wildlife Conservation, Oklahoma Commissioners of the Land Office, Oklahoma Tourism and Recreation Department, U.S. Fish and Wildlife Service, U.S. Forest Service, Bureau of Land Management, U.S. Army Corps of Engineers and city governments. Tribal land managers also are included in this audience.

7. Mass Media

Mass media are important tools for disseminating information to each of the target audiences and will be used extensively in all efforts. These information media include newspapers, radio, television and the Internet.

8. Elected Officials

Because governmental policies significantly influence decisions that impact biodiversity, elected officials at all levels will be a target audience for biodiversity information. If these people are well-informed about biodiversity they will be able to make better decisions when making decisions that affect our biological resources.

Products and Outlets for Biodiversity Information

In-house Communication

Conveying information within a group or interest is an important avenue of communicating biodiversity information. People interested in biodiversity should attempt to educate others within their profession or neighborhood and get them involved in conservation efforts. Sharing information about successful methods of enhancing biodiversity within a given interest group is an effective way to get others interested in considering biodiversity in their activities.

Workshops or Conferences

Workshops or conferences provide opportunities for people interested in biodiversity to share their experiences and learn about ways to improve biodiversity management. Conferences with a general audience focus will draw people from a variety of fields and allow them to interact and share different viewpoints. Those targeting a specific audience, such as forestry or mining, would provide an opportunity for professionals in this field to work together to find ways to improve their operations for biodiversity. Biodiversity information also could be presented at meetings or conferences that are not devoted solely to this subject.

Audiovisual Materials

Because of the visual and aural beauty of biodiversity, audiovisual products are well suited for displaying biodiversity information. Slide shows with recorded scripts and videotapes could be developed. Biodiversity displays featuring photos and other objects could be developed and set up in public areas.

Large displays, similar to the aquarium in Muskogee's Arrowhead Mall, could be created in malls or other public buildings to show local biodiversity and could become attractions for customers. Smaller displays of photographs and text could be established in other public buildings.

Computer programs could be developed and distributed on compact discs. Some of these could contain general information about Oklahoma's

biodiversity. Others could be interactive to allow users to experiment with processes that affect biodiversity.

Board games also could be designed to teach various principles of biodiversity conservation.

Another powerful tool for distributing information about biodiversity is the Internet. The Oklahoma Natural Heritage Inventory has some valuable information on the World Wide Web. A home page could be developed specifically for information on Oklahoma's biodiversity and agencies and organizations could include information about how biodiversity is important to their activities on their web sites.

Media Information

Products for mass-media outlets would be useful for reaching large groups of people. Public-service announcements could target different audiences with information relating to their interests. Packets of biodiversity information could be distributed to media outlets for use in articles or programs. Billboards could be used to generate interest in biodiversity or present specific messages.

Printed Materials

A variety of printed materials, such as brochures, booklets and posters, could be designed to disseminate biodiversity information. Magazines about Oklahoma could include articles about our biodiversity and the variety of ways to enjoy it. A book describing the state's natural communities, with directions to places to view them, would be useful to people wishing to learn more detailed information about our biodiversity.

Biodiversity information could be incorporated into printed materials about Oklahoma that are widely distributed. For example, road maps could show Oklahoma's ecoregions with tourist information and listings of natural communities that may be seen.

Educational Centers

Information should be placed into traditional educational centers. Posters or small displays could be sent to public libraries or conservation district offices and other places people go for information. Zoos, museums and nature centers could develop

displays to illustrate Oklahoma's rich biodiversity.

Miscellaneous

Mobile biodiversity display. A mobile display about Oklahoma's biodiversity, housed in a recreational trailer, similar to Moore School District's environmental education trailer, would be an effective tool to explain the concept of biodiversity to the public and introduce people to the vast diversity present in Oklahoma. This display could be taken to schools, libraries, malls, Scout camps, festivals and other locations where the public gathers. It would reach children and adults and inform them about Oklahoma's rich biodiversity and ways they can conserve it.

Contests. Biodiversity could be included as a topic in educational competitions, including science fairs, 4-H, FFA, and other contests. This would encourage students to explore Oklahoma's biodiversity and test new ways of conserving it within a variety of fields.



Printed materials and other products should target specific audiences with biodiversity information.

Biodiversity tours. Tours could be offered to showcase Oklahoma's different natural communities or areas of special importance. Knowledgeable guides

could lead field trips and explain what the guests are observing. These tours could be offered as rewards to winners of the contests mentioned above or to other audiences by governmental agencies and private organizations. These would allow the public to experience biodiversity first-hand and learn about it in an enjoyable manner.

Educational kits or trunks. Project WILD, Project Wet and Project Learning Tree maintain a series of educational trunks that contain information on different conservation topics. These trunks may be borrowed by educators for use in their classes. A trunk on Oklahoma's biodiversity could be created and include materials, such as videos, posters, brochures and books, that would help teachers educate their students about this topic.

The Oklahoma Museum of Natural History has created a number of displays that may be set up in schools. These illustrate various aspects of Oklahoma's biodiversity and allow children to see featured species up close.

Watchable Wildlife Month. Biodiversity information could be included in activities conducted during the state's Watchable Wildlife Month (April) when state parks and other public areas hold special programs to encourage the public to become involved in wildlife-related activities. Natural communities and their functions could be a part of the activities that are hosted during these weekend events.

Opportunities abound for spreading the word to our citizens about the rich natural heritage we enjoy in Oklahoma, and how we can conserve and enhance it for future generations. Above all, we need to instill an understanding of the importance of this thing we call biodiversity to every person as an individual and to our collective future as a great state.