

Quick Glance at Management Recommendations

Biological Recommendations

- Use natural communities and native species whenever possible to meet human needs.
- Lower dependence upon pesticides and fertilizers.
- Maintain the integrity of rivers and in-stream flows.
- Support environmental education efforts.
- Use native plants in naturalistic landscapes around buildings to make urban areas more valuable for wildlife.
- Identify and protect areas that are especially sensitive to disturbance.

Recommendations for Conservation and Recreational Organizations

- Manage property for biodiversity benefits.
- Perform volunteer activities to assist with management of public areas to benefit biodiversity.
- Conduct or fund research to supply information needed to improve biodiversity conservation.
- Assist with environmental education programs by producing educational materials or giving programs.
- Coordinate with other organizations to achieve common goals for conservation.
- Promote establishment of a stable funding source for biodiversity conservation.
- Conduct inventories and monitoring of various elements of biodiversity.
- Work to dispel myths about various wildlife species and change public perceptions that influence actions that negatively impact biodiversity.

Recommendations for Forestry and Agricultural Management

- Use rotational grazing in livestock operations to simulate historical bison grazing and enhance the health of the rangeland and increase weight gains.
- Restrict livestock access to ponds and streams by fencing and install water troughs to protect aquatic communities.
- Control invasion of prairies by eastern red cedar and ashe juniper with prescribed burns, chemicals or mechanical removal.
- Take advantage of various governmental services that assist landowners in managing biodiversity.
- Promote use of natural communities and native species in governmental services.
- Use demonstration farms, research foundations and other outlets to disseminate information about incorporating biodiversity values with forestry and agricultural operations.
- Explore alternative methods for disposing of animal wastes from confined animal feeding operations, such as using artificial wetlands.
- Promote use of diverse communities and native species for conservation practices.

- Use prescribed burns to mimic the historical role of fire to maintain the health of natural communities.
- Manage natural shortleaf pine stands for timber production rather than loblolly pine plantations whenever possible.
- Retain dead wood, in the form of snags or downed logs and slash, in stands for wildlife that require these special features.
- Implement minimum or no-till practices in grain farming.
- Identify special features, such as wetlands, springs, caves and glades, that require special management or protection.

Recommendations for Heavily Used Areas

- Address biodiversity concerns during the planning phase of projects and identify ways to resolve negative impacts rather than attempting to mitigate impacts after they occur.
- Use native plants for urban landscaping and providing habitat for desirable wildlife. These plants not only provide wildlife benefits but also reduce dependence upon chemicals and water. Feature suitable natural communities in landscaping rather than highly manicured grass lawns that require high inputs of chemicals and water and provide little value to wildlife.
- Increase the commercial availability of native tree, shrub and wildflower species that are suitable for landscaping.
- Use greenbelt areas to serve as small nature parks or conservation areas. These areas could include walking trails and interpretive signs for residents.
- Develop outdoor classrooms in school yards by creating natural communities for use by science classes to allow students to have direct contact with natural systems.
- Reduce mowing frequency along roads and other areas. Mowing ordinances restrict homeowner options for creating wildflower and prairie gardens in their yards. Planting lawn areas in buffalo grass also reduces the need for frequent mowing since this species does not grow very tall.
- Minimize use of chemicals and water through use of native plants, composting and promoting natural predators of insects.
- Include wildlife habitats or nature parks in urban park systems to provide areas for wildlife and opportunities for urban residents to view natural communities.

Recommendations for the Minerals Industry

- Identifying sensitive natural communities to avoid or give special treatment during the project planning can avert many negative impacts to biodiversity.
- Include complete details of reclamation with the initial planning of mineral extraction.
- Plant a variety of native plants during reclamation efforts to re-establish a diverse community.
- Educate individuals living near pipelines and drill sites about contacts to notify of any leaks or spills. Rewards for quick notification often encourage individuals to notify the company as soon as a spill is detected.
- Place netting over saltwater pits or open tanks to prevent wildlife from entering them and being killed.
- Support conservation efforts through funding or donation of surplus lands or discarded materials, such as pipe,

that can be used.

- Policies regulating mining reclamation should encourage companies to use native species during reclamation and should not penalize them because these species require more time to become established.
- Implement a variety of best management practices to prevent soil erosion on roads and activity sites.
- Minimize road construction by using existing roads.

Recommendations for Water Managers

- Maintain healthy native vegetation along streams and rivers to trap sediment and reduce erosion.
- Use stilling pools below dredge or fill operations to trap sediment.
- Promote alternate landscaping methods—for example using buffalo grass and other native species—that reduce dependency upon lawn chemicals and water.
- Monitor saltwater and hazardous waste disposal sites to detect leakage.
- Install devices to aerate water released from dams and reduce releases gradually to prevent stranding of fish.
- Create an “Adopt-A-Stream” program to encourage recreationalists to remove litter from streams.
- Experiment with constructing wetlands to protect downstream areas from flooding.
- Attempt to mimic “natural” flow patterns with releases by creating controlled flood events during seasons in which floods would normally occur.
- Encourage meaningful solutions to localized flooding rather than using stream channelization to treat a symptom and only shift the problem farther downstream.
- Research ways to use manmade wetlands to perform functions useful to humans, such as wastewater treatment, that may be more cost-effective and safer than mechanical or chemical methods.
- Educate the public that every person’s actions, such as lawn maintenance or waste disposal, have significant impacts on water quality and quantity.

Recommendations for Educational Efforts

- Define and describe Oklahoma’s biodiversity.
- Dispel myths that cause people to undervalue or destroy wildlife species.
- Emphasize the benefits of proactively managing biodiversity.
- Explain ways biodiversity management can benefit individuals of various interests.
- Explain the Biodiversity Plan and activities of Oklahoma’s Biodiversity Project.
- Develop educational products that target specific audiences with information about how biodiversity is important to that interest and ways individuals can conserve biodiversity.