

CHAPTER 5. GENERAL CONSERVATION STRATEGIES

A. General Strategies

Strategies to address declines in target species were determined during a series of public meetings held in the spring of 2005 (this process is described in Chapter 3). Strategies were either specific to a particular habitat type or were general, and therefore applicable to multiple habitats and ecoregions. Aquatic and terrestrial general strategies are listed below. A complete listing of all conservation strategies for terrestrial species is found in Appendix N. All aquatic and marine species conservation strategies appear in Appendix O.

1. Aquatic Summary

Working with LDEQ and other entities to continue to protect streams from sediment and nutrient input is important. Reservoirs are becoming more frequent and a number of new reservoir projects are proposed. LDWF will disseminate information about proposed reservoirs to interested organizations and continue to supply data on natural communities and species that will be affected by these projects. Strengthening and expanding LDWF's Natural and Scenic Streams program will provide stronger protection for streams in the program.

2. Terrestrial Summary

The terrestrial general strategies have been categorized below. However, they are highly interrelated and often overlap. For example, development of educational materials for habitats might involve several categories by engaging partners to create the materials and then providing them to private landowners.

Since so much of Louisiana is privately owned, industrial landowners (particularly forest products companies) and private citizens are vital to the conservation of our wildlife habitats. One frequently-mentioned strategy involved providing an incentive, such as a tax benefit, to landowners who protect and provide stewardship for a particular habitat type on their land. The existing Louisiana Natural Areas Registry Program could be expanded to include such a benefit. Acquiring sites with high-quality habitat by purchasing conservation easements or fee title from willing landowners is another important conservation tool. Many important areas for wildlife occur on WMAs, National Forests, NWRs, State Parks and other public lands.

Numerous federal and state agencies, private industry groups, NGOs and others share with LDWF the interest in protecting and managing Louisiana's wildlife. Developing partnerships with these agencies and groups will greatly advance implementation of the CWCS. These partnerships will allow for a more efficient use of resources including funding and staffing to successfully accomplish the strategy goals. In addition,

coordination of efforts among these groups will prevent unnecessary duplication of programs.

LDWF will provide education and outreach to governmental and non-governmental organizations, and to the general public. Providing information and training is an important first step in informing landowners and managers about conserving target wildlife species and habitats. Publications on such topics as waterbird nesting colonies, shorebird food/habitat requirements, natural communities of Louisiana, identification of rare species and habitats, etc., would be valuable to various groups. One novel education strategy involves promoting “master naturalist” programs through universities to provide more thorough training on Louisiana’s biological diversity and ecology.

Invasive species cause tremendous ecological and economic damage in Louisiana. Providing public education about their detrimental effects and supporting existing educational programs is important. Broadening the scope of the Invasive Species Task Force to include terrestrial species was suggested as a strategy. Wild hogs are particularly damaging to native habitats. LDWF will work with hunting clubs on hog eradication. LDWF will also promote use of FLEP and other state and federal cost share programs that offset costs for landowners to control invasive species.

LDWF will conduct a geographical analysis to determine where best to create new conservation areas in the state based on habitat protection needs. There are several gaps in our knowledge of some groups of animals. LDWF will support additional research on bats in Louisiana and on migratory patterns of birds across the state. There is little known about the diversity and ecology of butterflies and moths, aquatic insects, and other groups of invertebrates. Gaining a better understanding of these groups and how they relate to other species of wildlife and to the environment is necessary to maintain and restore ecosystem function and biological diversity.

B. Aquatic General Strategies:

- Coordinate with LDEQ to review permitted discharges for nitrates and ammonium in Louisiana waters, and to evaluate impacts of these levels near shore regarding hypoxia problems.
- Encourage legislation for a statewide water rights/use plan.
- Participate in state groundwater task force committee to express LDWF’s concerns regarding the impact of reservoir projects (contact: Gary Hansen).
- Partner with LDEQ and EPA to broaden public awareness concerning water quality and related issues.
- Disseminate information to interest groups/agencies about reservoir projects (include interstate cooperation).
- Provide information and data regarding species/natural communities of concern that will be affected by proposed reservoir projects.
- Expand and strengthen the LDWF Natural and Scenic River System and permit review programs.

- Utilize and encourage enforcement of existing regulations regarding streams (work with LDEQ on this).
- Work with DOTD, LDEQ, parish road maintenance crews, pipelines, private developers, etc. to combat sediment and erosion runoff into streams and other sensitive wetland habitats.

C. Terrestrial General Strategies

(The six categories are arranged in descending order of priority. However, each category of general strategies should be regarded as very important. The bullet lists within each category are not ordered by priority)

1. Working with Private Landowners:

- Participate in NRCS cost-share program subcommittee meetings to coordinate efforts and to provide incentives to landowners to maintain wildlife habitat.
- Provide information to landowners about incentive programs/cost share opportunities to control invasive species.
- Develop a plan for natural forests in Louisiana including alternatives for landowners interested in conservation.
- Promote landowner awareness of the LFA committee drafting BMPs.
- Provide conservation incentives for landowners (i.e., tax breaks, etc.).
- Identify interest groups (hunting clubs/landowners) and encourage their participation in public meetings and forums dealing with reservoir issues.
- Support and promote ecotourism by private landowners. Emphasize unique species (crawfish, etc.) (International Ecotourism Society – Martha Honey, Director).
- Expand Natural Areas Registry Program to include incentives such as tax breaks, conservation easements, management assistance, etc.
- Purchase conservation easements and leases from willing landowners to conserve high priority habitat types (possibly as part of Natural Areas Registry Program).
- Acquire important sites from willing landowners, especially those sites that are adjacent to existing conservation areas.

2. Creating Partnerships:

- Partner with LDEQ and EPA to broaden public awareness concerning water-related issues.
- Maintain and create new partnerships with forest industry and other private landowners to obtain access to lands for habitat surveys.
- Continue to work with LDEQ to investigate oil spills and other similar complaints.
- Encourage master planning at the parish level, especially in areas where residential expansions is occurring.
- Integrate CWCS target species with coastal initiatives such as those of LCA, TNC, LDNR, etc.

- Work with LDAF, LFA, etc. to address prescribed burning issues (i.e., liability problems and insurance, lack of providers, costs, etc.).
- Work with local parish planning commissions and LDNR to change zoning and redirect development sites in areas with target species.
- Work with state and local parks and nature centers to provide information on species/habitats of concern and their management.
- Partner with LFA to develop tools for working with private landowners in conserving and maintaining habitat types of concern.
- Work with USFS, DOTD, DOD to design bat friendly bridges or use bat attachments when old bridges are replaced.
- Work with DOTD on a project basis when species of concern are identified.

3. Education/Outreach:

- Provide educational information on Louisiana's habitats to landowners/land managers including web based educational resources.
- Provide public education regarding waterbird nesting colonies, shorebird feeding areas and the effects of recreational and other uses on these areas.
- Develop training materials for LFA workshops regarding conservation of native habitats.
- Develop web-based training programs for continuing education of teachers, wildlife professionals, foresters, etc.
- Educate land managers/hunting clubs/extension agents, etc to discourage food plot location in sensitive habitats.
- Conduct outreach to local sheriff's offices to encourage enforcement of ATV regulations and educate sheriffs about ATV issues in sensitive habitats.
- Include information on target species in LDWF's responses to proposed projects.
- Provide local and parish planning boards with information regarding sensitive habitats and species in their areas, and work to redirect the development of these areas.
- Develop educational information, including BMPs, regarding ephemeral ponds (include management techniques) and related species of concern, and make this information available to landowners/land managers.
- Utilize existing educational programs such as those in use by NRCS, Ag Extension, LA Sea Grant, USFS, USFWS, etc, regarding CWCS targets.
- Work with universities that provide training to urban planners to educate future planning board members on the conservation of habitats and species of concern.
- Educate policy makers about the problems associated with mercury methylation in streams considered for reservoirs and emphasize the potential affects on species of concern.
- Develop a publication on the Natural Communities of Louisiana.
- Encourage university curricula to incorporate sensitive natural areas into student studies (especially landscape architecture and courses for planners).

- Complete an identification guides for plant and animal species (ranked S1, S2, or S3) in Louisiana.
- Develop an identification key to potential areas for all S1 and S2 natural communities for LFA to use and disseminate.
- Produce a set of BMPs for improving wildlife habitat in utility ROW.
- Develop a comprehensive management plan for use of dredge materials to create new habitat for target species.
- Provide fact sheets on LDWF web site for all species of concern, and update them regularly.
- Promote native plant use by the public and growers/landscapers.
- Provide information to developers on ecosystem values and functions which benefit species of concern, and encourage the integration of ecosystem functions into developments.
- Encourage the development of a “master naturalist” program, through the Cooperative Extension Service and/or universities, which would train students on the wildlife and plant resources of Louisiana, their diversity, importance, and conservation.

4. Invasive Species:

- Develop and disseminate educational materials on the detrimental effects of invasive exotic species.
- Promote utilization of state and federal cost share programs (FLEP and NRCS programs) to address invasive species problems.
- Partner with local hunting clubs through DMAP to support wild hog eradication.
- Encourage broadening the scope of the Invasive Species Task Force to include terrestrial invasive species such as wild hogs, Chinese tallow tree, and cogon grass.
- Work with the Invasive Species Task Force and others to develop a noxious plant species list, and educate the public regarding this information.
- Work with utility ROW contractors in order to prevent the spread of invasive species through their construction and maintenance activities.
- Provide public education and support existing efforts/programs regarding invasive species. Coordinate these efforts with Louisiana Ag Extension, NRCS, LA Sea Grant (rapid assessment projects).
- Develop a program to promote invasive eradication/prevention following timber harvesting, and provide this information to landowners.

5. Working with Legislators:

- Legislate tax break incentives for landowners in order to encourage the conservation of native habitat types, possibly as an expansion of the Natural Areas Registry Program.
- Encourage legislation for a statewide water use plan.

- Encourage legislation for a statewide water rights plan.
- Encourage legislation to prevent the further introduction and translocation of hogs.

6. Research Strategies:

- Support research on bats in Louisiana.
- Support research on migratory bird patterns across the state.
- Continue to support research to fill data gaps that focus on declines in waterfowl in coastal marshes.
- Continue to support rookery surveys to update database for these species.
- Conduct geographical analysis to identify gaps where managed areas are lacking in the state, relative to protection needs of Tier 1 habitats and important focal areas discussed in the habitat accounts in Chapter 4. Produce a map showing these areas where land acquisition and the establishment of conservation areas would be the most valuable.
- Support research on the diversity and ecology of the lesser-known groups of invertebrates such as butterflies and moths, aquatic insects, zooplankton, snails, arachnids, beetles, etc.