

CHAPTER 7: PRIORITIZATION, IMPLEMENTATION AND ADAPTIVE MANAGEMENT

Setting Priorities

In setting priorities for the plan, two separate, but equally important prioritization processes were conducted. It was necessary to determine which species in the state should be placed on the list of South Carolina's priority species and those species would need to be ranked based on existing data and expertise with those species. Additionally, the priority for implementation conservation actions to address challenges to priority species needed to be determined. The following identifies how SCDNR conducted prioritization of both species and conservation actions to address the needs of those species.

Species Prioritization

To accomplish priority species identification, each taxa leader worked with a committee to determine appropriate priority species. The methodologies used for this process differed by taxa and are presented in Chapter 2: South Carolina Priority Species.

Once the lists were complete, the taxa committees ranked the priority species into three categories: Highest Conservation Need, High Conservation Need and Moderate Conservation Need. The premise for these categories was to determine which species required immediate conservation action based solely on existing data and species expertise; this process was completed separately for each taxa. It is important to note that SCDNR did not develop a single priority species for the state; each taxa identified several species for each of the three categories.

Identification of priority rankings was accomplished by considering the data available for the criteria presented in Box 7-1.

BOX 7-1: EIGHT CRITERIA USED FOR DETERMINATION OF PRIORITY SPECIES

- State and federal protection status: endangered, threatened, rare or special concern
- South Carolina Natural Heritage Program state rank: S1 through S5
- Degree of exploitation/harvest: high, medium or low
- Availability of past or current funding to address species challenges
- Feasibility measure: the likelihood that conservation activities in South Carolina can make a difference for this species
- Knowledge of the species' population status: status mostly known, slightly known or unknown
- Knowledge of species' distribution in the state: distribution mostly known, slightly known or unknown
- Knowledge of limiting factors affecting the species: limiting factors mostly known, slightly known or unknown
- Population status (trend): population decreasing, stable or increasing

The species prioritization process was not conducted for marine fish, marine invertebrates or insects because most of the species in those taxa are included on South Carolina's Priority Species List due to the knowledge gaps that exist. Because many of these species have not been investigated in the past, necessary data is lacking to allow for complete development of conservation actions. Until the SCDNR can determine the exact challenges that each of these species faces, it will be difficult to develop specific conservation strategies to meet those challenges. Therefore, general conservation actions that will address challenges that typically affect these species are included in this plan.

Prioritized species lists are presented in Appendix 1.

Conservation Action Prioritization

Once species were prioritized, it was necessary to determine the priority of conservation actions that need to be implemented to conserve those species. The vast number of species in the CWCS and conservation actions necessary for each of those species is staggering. It is apparent that all of the species in the plan are important to the natural diversity of South Carolina and should be conserved. However, it is also apparent that it would be impossible to implement all the conservation actions developed for inclusion in the CWCS immediately. Therefore, it was necessary to take a realistic approach to prioritizing conservation action implementation.

As discussed in detail in Chapter 4: Statewide Conservation Strategies, major challenges to species and habitats are similar across taxonomic groups. Therefore, conservation strategies to address those challenges are also similar. Consequently, conservation actions were consolidated.

A steering committee was formed in order to accomplish conservation action prioritization. This committee consisted of senior personnel within the SCDNR. Members of the steering committee are identified in Box 7-2.

BOX 7-2: SC CWCS STEERING COMMITTEE

- John Frampton, Director
- Cary Chamblee, Assistant Director
- Robert Boyles, Deputy Director, Marine Resources Division
- Breck Carmichael, Deputy Director, Wildlife and Freshwater Fisheries Division
- Carole Collins, Deputy Director, Operations and Support Services Division
- Col. Alvin Taylor, Deputy Director, Law Enforcement Division
- Alfred Vang, Deputy Director, Land, Water and Conservation Division

As stated above, it was necessary to use a realistic approach to determine which conservation actions would be implemented first; that is, which actions would receive the highest priority in South Carolina. SCDNR's goal was to identify conservation actions that would be most likely to allow for conservation of priority species. The members of this committee were asked to consider the six criteria when ranking conservation actions, which are presented in Box 7-3.

Based on the prioritization process, SCDNR identified the manner in which conservation actions will be implemented for South Carolina's priority species over the next five years. Further, SCDNR decided to develop annual work plans that include these prioritized conservation actions. Ultimately, the CWCS will be updated to include these work plans.

BOX 7-3: SIX CRITERIA USED FOR DETERMINATION OF PRIORITY CONSERVATION ACTIONS

- **Feasibility:** Challenges can be mitigated, solutions are apparent. SCDNR can feasibly staff and implement the action and the results will be beneficial.
- **Opportunity:** SCDNR is able to implement the conservation action (i.e., opportunities exist; SCDNR has the authority to carry out the action).
- **Benefit:** Implementation of the action will result in benefits to the natural diversity of South Carolina. Benefits are considered in terms of unit of effort to achieve those benefits; that is, implementation results in multiple benefits to a given species or multiple species are benefited by a single action.
- **Proactive:** Implementation will result in proactive changes to address challenges; actions are more than a reactive response to ongoing challenges.
- **Partnerships:** Partnership opportunities exist for implementation, which provides the ability to leverage other resources.
- **Funding:** Implementation is eligible for SWG funding and/or matching funds exist.

Although the Strategy will be updated every five years, changing opportunities and challenges in the state lead SCDNR to the decision to prepare initial annual work plans for three years only (FY2006, FY2007 and FY2008). By providing annual work plans three years in advance, SCDNR can allow for public distribution of priorities, which will in turn allow for additional partnership development and funding opportunities.

Implementation of the CWCS

The primary focus of South Carolina's CWCS is continued, efficient and effective conservation and management of wildlife diversity. Through implementation of the Strategy, coordination of diverse conservation efforts and forging of effective partnerships, the CWCS will meet its mandate. Coordination efforts will bring together expertise and funding sources from various partners and apply them to needs identified in the CWCS. The initial congressional intent for the State Wildlife Grant Conservation Strategies was to identify and focus on the species in greatest conservation need and yet "address the full array of wildlife and wildlife related issues." At this nexus, the CWCS provides focus and guidance for SCDNR priorities when allocating personnel and financial resources for research and management.

First steps

As the SCDNR begins the process of putting the CWCS to the test, departmental decisions about funding, timing and cooperators will continue to be directed by the prioritization steering committee. Work plans will be developed annually based on the strategies defined by the CWCS and priorities identified by the steering committee as describe above. Funding will be allocated

according to budget cycles and request-for-proposal (RFP) processes associated with State Wildlife Grants and other funding sources.

Already, partnerships bolstered during the creation of the CWCS are offering potential resources for meeting the objectives and strategies described in this Strategy. Many potential CWCS partners have also identified the CWCS as an excellent resource to forge additional support for conservation. By compiling state fish and wildlife conservation issues in a single document for the first time, it will now be possible to develop a coordinated approach ranging from individual species' concerns up to regional habitat-level concerns. This plan is more than an outline for specific conservation actions; it can also serve as a framework for expanding partnerships and collaboration in support of these actions. An important first step will be to identify these additional individuals, land managers and organizations that can contribute to and use CWCS information in a timely way.

Two main concerns have been identified in association with implementation planning. The first, identified in the public input process undertaken in the early stages of plan development, involves the need to communicate with constituents more effectively about the goals and vision of the SCDNR and the CWCS. Such communication would increase public support, ownership and partnership development. The second concern deals with the potential expense of time and funding for the collection, analysis and reporting of extensive data needs as identified by SCDNR biologists. These needs include those associated with the development of the South Carolina Comprehensive Monitoring Program. These challenges must and will be met as the evaluation of this plan in future revisions depends on public support and effective monitoring for dynamic management.

Request for Proposals and Project Selection within the CWCS

Rigorous review and selection procedures will ensure that sponsored projects are effective and efficient in meeting the goals and objectives of the CWCS. There will be two levels of review. Initially, the CWCS planning team will review all proposals to determine if projects clearly focus on South Carolina priority species and their associated actions recommended within the CWCS. The steering committee will then be tasked with reviewing approved applications for inclusion in annual work plans.

The SCDNR will seek to fund innovative, interdisciplinary projects that attempt to address the needs of priority species and undertake practical application of CWCS goals. Proposals selected will:

- Contribute to applied problem-solving for an immediate and specific issue that is directly related to wildlife conservation;
- Build capacity for collaborative statewide wildlife conservation; and
- Incorporate strategies to apply and communicate outcomes for the improvement of policies and/or management practices.

The urgent need to achieve environmental sustainability and protect South Carolina ecosystems challenges applicants to develop new ways to engage organizations in problem solving.

Adaptive Management, Maintenance and Communication Plan

Implementation will be a dynamic process through time, involving monitoring process management, performance assessment, adaptation as new information dictates and refocusing to new tasks and projects as appropriate. As described in Chapter 5: South Carolina Comprehensive Monitoring Program, a major component of the CWCS coordination and review will be dependant on successful monitoring of conservation projects and actions: effectiveness monitoring. In the long-term, effective review and revision of the CWCS will depend on the proposed effectiveness monitoring protocols and procedures. Conservation actions will have to be evaluated based on their ability to further the goals and objectives of the Strategy. As an agency, SCDNR sets project objectives and identifies measures of success for management actions. As CWCS projects are evaluated, similar indicators of success will be defined at the strategy level.

With the information gathered in this program, project leaders will be required to produce annual progress reports for review by the steering committee and CWCS coordination team. These reports will be evaluated for insight into adaptive management needs and reassessments of the CWCS. These annual reviews of projects will be conducted electronically within the Natural Resources Database (see Chapter 5 for more information) infrastructure and will be collected for future revisions of the CWCS. Continued monitoring and evaluation of management actions will create an active implementation of the “living” CWCS document. Project leaders will also be involved in periodic communication efforts focused on increasing public awareness of CWCS implementation. Annual reports will be created for distribution to partners to supplement other coordination efforts. Maintaining these communication links with the public and broader conservation community will be critical to the success of the CWCS.

Review and Revision: Considering Lessons Learned

The CWCS program will be reviewed on a 5-year cycle to ensure the program and the CWCS remain relevant and current with evolving landscapes and developing conservation efforts. The 5-year cycle will include the previously described plans for monitoring, maintenance, adaptive management, review and revision. Within the 5-year time period, it is expected that certain issues will trigger an early revision of the CWCS or submission of addendums for the plan. The identification of new information on species priorities gained through surveys, research and monitoring or reprioritization of projects and actions following goal achievement will be recognized as adaptive management efforts requiring plan reassessment. However, planning improvements such as identification and elimination of flaws in the program or CWCS implementation process, identification of more efficient or valid approaches to internal supporting processes such as species prioritization and threat assessment, and/or expansion of those taxa groups treated only cursorily in this initial CWCS development would be viewed as lessons learned contributing to the next iteration of the CWCS in 2010. For example, production

of the 2010 CWCS will be streamlined due to the development of CWCS reports from the planned Comprehensive Natural Resources Database (Chapter 5).

With the maiden voyage of the South Carolina CWCS 2005 occurring alongside the strategies of 55 other states and protectorates, it will also prove useful to maintain connections forged between states. Lessons learned will be many and varied for all states and the South Carolina CWCS coordination team can only reap benefits from remaining watchful in this inaugural implementation process.