Executive Summary

Tomorrow's Habitat for the Wild and Rare

An Action Plan for Minnesota Wildlife

*Tomorrow's Habitat for the Wild and Rare: An Action Plan for Minnesota Wildlif*e (referred to in this document as Minnesota's Comprehensive Wildlife Conservation Strategy or CWCS) is a strategic plan focused on managing populations of "species in greatest conservation need." Species in greatest conservation need (SGCN) are defined as animals whose populations are rare, declining, or vulnerable to decline and are below levels desirable to ensure their long-term health and stability. There are 292 species in Minnesota that meet this definition.

The 2005 CWCS is the product of a partnership of conservation organizations working together to ensure that these species populations are sustained for future generations. A tenet of this effort recognizes that success hinges upon the engagement of a wide range of conservation stakeholders. The CWCS partnership encourages interested conservation stakeholders to use the information presented in the CWCS as a menu for action, to adopt and adapt to their unique interests and capabilities.

The CWCS identifies habitat loss and degradation as the primary problem facing SGCN in Minnesota. The CWCS recommends a simple and direct approach to this problem: conserve key habitats used by Minnesota's SGCN in order to conserve the majority of Minnesota's wildlife. The CWCS partnership arrived at this approach over the course of an intense 30-month planning effort in consultation with a broad variety of conservation stakeholders. It is based on a series of analyses that examined the needs of all 292 SGCN and identified key habitats that benefit them.

How to Use the Plan

Minnesota's CWCS is a strategic framework designed to guide natural resource managers, working together with Minnesotans throughout the state, in their efforts to ensure a sustainable future for all wildlife. Achieving this extremely important outcome presents complex challenges that cannot be met by simple conservation prescriptions.

To meet these challenges, the CWCS delineates three goals:
- I. Stabilize and increase SGCN populations
- II. Improve knowledge about SGCN
- III. Enhance people's appreciation and enjoyment of SGCN

Under each goal, the CWCS presents management challenges, strategies, and priority conservation actions, to help focus individual and organizational effort.

What resource practitioners will find in the CWCS is a rich diversity of information on Minnesota's natural landscapes, key habitats, and wildlife resources. The plan's utility lies in its use as a conservation tool that can be applied at multiple scales: species, habitat, and ecological landscapes (Minnesota's Ecological Classification System's provinces and subsections; see Figure 5.1.) Resource managers are faced with challenges at all of these levels every day, from minimizing nesting failure of the state's only population of piping plovers on a small island, to ensuring that rock outcrops along miles of river bluff habitat provide essential microhabitat features for denning timber rattlesnakes, to managing a northern hardwoods forest complex, thousands of acres in size, that provides timber for the state's forest products industry and habitat for a multitude of forest-dependent species. There is no "one-size-fits-all" approach to any conservation problem, no matter how large or small.

The resource practitioners who helped develop the CWCS recognize that this plan will be most useful if it provides multiple entry points, ranging, for example, from a question about a particular SGCN to one about the significance of a particular habitat in one region of the state. The heart of the plan is the 25 Ecological Classification System (ECS) subsection profiles in chapter 5. In each subsection, these profiles identify SGCN presence and patterns of occurrence, key habitats, and priority conservation actions to help focus the work of the Department of Natural Resources and its conservation partners during the next 10 years. Each profile was developed to stand alone as reference information that natural resource managers in the CWCS partnership can use in their work with conservation organizations and agencies, industry, transportation planners, local government officials, and citizens. The ECS subsection landscapes are the cornerstone of Minnesota's approach to managing natural resources. They provide a logical gateway to assessing resource challenges that are facing SGCN and are at a fine enough scale to provide a rich abundance of resource information tailored to the species and key habitats present in a particular ecological subsection.

The subsection profiles identify the goals, challenges, strategies, and priority conservation actions necessary to successfully manage SGCN over the next ten years. The goals, challenges, and strategies are the same for each subsection. However, the priority conservation actions for goal one, stabilize and increase SGCN populations, are tailored to the key habitats that occur in each subsection. The conservation actions addressing the other two goals, to improve knowledge about SGCN and to enhance people's appreciation and enjoyment of SGCN, are broad in nature, but are intended to be applied in the key habitats.

These menus of priority conservation action provide direct guidance to the CWCS partnership about what work is most important to undertake in the diverse subsections. Members of the partnership can create projects that focus on managing, surveying, researching, monitoring, or promoting the subsection-specific key habitats and SGCN populations. They may seek support for their projects from the State Wildlife Grants Program, the Landowner Incentive Program, or other partnership funding available to support rare wildlife resource management in Minnesota.

The CWCS project management team strived to develop a statewide strategic plan that also includes a relevant level of detail and operational focus. Maintaining the delicate balance between these often competing goals has been a challenge. The call for a more prescriptive approach was balanced with the recognition that most management decisions are embedded in unique circumstances that often require local perspectives and local dialogue prior to implementation. Indeed, conservation actions by different partners may be framed quite differently depending on their overall mission and goals. For the purpose of the strategic framework, therefore, the CWCS project management team decided to keep the strategic guidance at a broad level. Although we have honed some of these recommendations to be more specific, the priority conservation actions remain a framework, not a prescription. As partners begin implementation of the priority conservation actions, they will be able to develop action plans for more specific on-the-ground work.

The Structure of Minnesota's CWCS

Seven chapters make up Minnesota's CWCS. Although the subsection profiles in chapter 5 are the heart of Minnesota's CWCS, users of the plan can find a range of additional information in the other chapters that will inform their conservation work.

Chapter 1, "An Introduction to Minnesota's Comprehensive Wildlife Conservation Strategy," presents the CWCS as Minnesota's response to a U.S. congressional mandate to address the concerns of wildlife species in greatest conservation need, and articulates the CWCS planning philosophy.

Chapter 2, "Developing and Implementing the Comprehensive Wildlife Conservation Strategy," describes how the strategy was developed, who participated, and how implementation will take place.

Chapter 3, "Minnesota's Species in Greatest Conservation Need," describes the process for determining SGCN from all taxonomic groups. This chapter also illuminates some of the species occurrence patterns that occur at the state, ECS province, and ECS subsection levels. Figure 3.2 provides a statewide perspective on the ecological distribution of SGCN, clearly demonstrating the relationship between the loss of key habitats in the southern and western regions of the state and the relatively large number of SGCN in those areas compared to northeastern Minnesota, where extensive forest landscapes remain intact and the number of SGCN is relatively small. Figure 3.3 provides a set of maps that depict the ecological distribution of species by taxonomic group. (Appendix B provides a complete list of all 292 SGCN and a brief rationale for their inclusion in the set. Appendix E provides a detailed list of the distribution of each SGCN by ecological subsection, and Appendix F provides SGCN by ECS province.) Because of the very large number of SGCN, the CWCS does not provide detailed information about each species' life history, distribution, and management recommendations. Other sources contain this type of information, such as the Minnesota DNR's Rare Species Guide, which is currently being developed.

Chapter 4, "Framework: Goals, Challenges, Priority Conservation Actions," presents the CWCS planning logic for the strategic framework and describes how that logic links knowledge to action. It includes the SGCN problem assessment, Minnesota's key habitats by ECS subsection, the three goals of the CWCS, and related priority conservation actions focused on the key habitats.

Chapter 5, "An Ecological Assessment of Species in Greatest Conservation Need in Minnesota," is the largest and most important chapter in the CWCS. It presents an overview of the ecology of Minnesota at the state, province, and subsection levels. Each subsection profile includes a matrix of SGCN use for all habitats that occur in the subsection and a further assessment of which habitats are the most important to the greatest number of SGCN. Two maps in each subsection profile depict the distribution of SGCN occurrences and number of species by township, the key habitats, and public ownership.

Chapter 6, "Habitat Descriptions," provides information about 14 broad habitat types in Minnesota, including information about habitat composition as well as important habitat features for SGCN conservation. This chapter crosswalks the 14 CWCS key habitats described in the subsection profiles to the native plant community classifications.

Chapter 7, "Methods and Analyses," presents the technical assessments used to develop the CWCS. Both the SGCN problem assessment and the analyses used to identify key habitats are described.

Minnesota's 2005 CWCS is the state's first thorough technical assessment of wildlife conservation needs in Minnesota. Its special focus is on SGCN, those species that are rare, declining, and vulnerable for a variety of reasons. As such the CWCS complements both conservation work that has been under way since the 1970s on wildlife species that are not traditionally hunted or fished, and work that has been under way since the early 1900s on harvested species. All these conservation efforts have made tremendous strides for Minnesota's wildlife. Nevertheless, significant work remains in our quest to ensure a sustainable future for all species. The CWCS identifies the challenges before us and provides a framework to direct the work that lies ahead.