

Vermont's Wildlife Action Plan

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**formally the Comprehensive Wildlife Conservation Strategy (CWCS)*

1. Introduction

These are exciting times for wildlife conservation. All across the country, state fish and wildlife agencies are completing a Wildlife Action Plan. New funds and new initiatives are advancing a long history of conservation success.

Vermont is noted for its beautiful juxtaposition of woodlands and farms, streams and ponds—not to mention Lake Champlain and the Green Mountain chain. Fish and wildlife resources are an integral part of the Vermont experience and quality of life for Vermonters. Deer, moose, wild turkey, and geese are thriving and offer sustainable hunting and viewing opportunities. In recent years, loon, osprey, peregrine falcon populations have recovered allowing for their removal from the state threatened and endangered species list. And, many of our waters teem with outstanding fishing opportunities. The landscape and the wildlife attest to the state's meaningful conservation ethic. Vermont's Wildlife Action Plan offers an opportunity for measured engagement, by all Vermonters, in addressing new challenges, filling in knowledge gaps, and implementing management programs to keep common species common thus preventing future need to place species on threatened and endangered species lists.

Mandate, Mission and Strategic Focus

The Vermont Fish & Wildlife Department is specifically charged with promulgating rules, through the Fish & Wildlife Board, enforcing those rules and procedures, and conducting programs that implement the following policy statements.

"The inhabitants of this State shall have liberty in seasonable times, to hunt and fowl on the lands they hold, and on other lands not enclosed, and in like manner to fish in all boatable and other waters (not private property) under proper regulations. (Vermont Constitution, Chapter 2, Article 67)."

"It is the policy of the state that the protection, propagation, control, management and conservation of the fish, game, and furbearing animals in this state is in the interest of the public welfare, and that safeguarding of these valuable resources for the people of the state requires a constant and continual vigilance (10 V.S.A. Section 4081)."

The Department's mission is “the conservation of all species of fish, wildlife, and plants and their habitats for the people of Vermont.” The Department’s dedicated professionals enforce laws, manage Wildlife Management Areas, conduct species-specific research, restoration and management actions, issue licenses, grow fish, and provide educational and outreach services. Three of the Department’s planning goals are:

Conserve, enhance, and restore Vermont’s natural communities, habitats, and species and the ecological processes that sustain them.

Provide a diversity of fish- and wildlife-based activities and opportunities that allow the safe and ethical viewing, regulated harvesting, and utilization of fish, plant and wildlife resources consistent with the North American model of fish and wildlife conservation.

Maintain safe fish and wildlife based activities and limit harmful human encounters with fish and wildlife species and provide general public safety service incidental to primary fish and wildlife enforcement duties.

Throughout its 100-year history, many of the Department’s initiatives focused on game species, in part because of constituent interest, as well as the user-pay system of funding fish and wildlife conservation through license sales and excise taxes on hunting and fishing equipment. As our mission statement suggests, the scope of conservation challenges facing the Department extends beyond species which people choose to harvest.

Problem and Need

Historically, there have been dedicated funds available for game and sportfish species as well as Threatened and Endangered species. Unfortunately, there has not been a dedicated revenue stream supporting management for the vast majority of wild animals that do not fall within either category. For example, 269 species of birds are found in Vermont. However, only about 30 of these are hunted and only a handful (e.g., common loon, osprey, peregrine falcon) have had recovery funding.

The full status of many species is unknown in Vermont. There are many species for which very little population or distribution data exist including most reptiles, amphibians, small mammals, stream fish, and invertebrates, including insects and crustaceans. In 1985, the Nongame and Natural Heritage Program was established within the Fish and Wildlife Department. Both an income tax check-off and a conservation license plate have been important revenue mechanisms for addressing wildlife diversity management and species recovery planning generating approximately \$250,000 per year, but still not sufficient to adequately meet needs.

Vermonters Care about Wildlife

Wildlife is very important to the people of Vermont. Almost anyone you talk with has a story to tell about deer hunting, hummingbirds in the garden, or geese winging south.

The 2001 National Survey of Fishing, Hunting, and Wildlife Associated Recreation conducted by the U. S. Fish and Wildlife Service documented that 67% of Vermonters went fishing, hunting, or wildlife watching. Vermont ranked second, only behind Alaska in participation (US Dept of Interior). This same survey estimates that \$386 million was spent on wildlife recreation in Vermont.

A 2000 public attitude survey of 1005 Vermonters determined that the protection of fish and wildlife resources, including habitats, as well as the opportunity to engage in wildlife-dependent recreation was important to 97 percent of respondents (Responsive Management 2000).

Congress Responds

In the early 1990's state fish and wildlife agencies partnered with a variety of non-government organizations and businesses to advocate for broader federal funding to address the needs of species that were not hunted or fished and to "keep common species common." However this was never implemented. The funding initiative was labeled Teaming with Wildlife. Initially, an excise tax on wildlife-related recreational equipment, such as binoculars and wildlife viewing guides, was identified as the best funding alternative. Over time, and with congressional encouragement, a different model was developed, one utilizing

offshore gas and oil receipts. The concomitant legislation was termed the Conservation and Reinvestment Act (CARA).

Congress responded with a new annual appropriation in Fiscal Year 2001 first called the Wildlife Conservation and Restoration Program and later the State Wildlife Grants Program. Since that time, the Vermont Fish and Wildlife Department has been eligible for more than 3 million dollars of federal funds. These dollars have vastly improved our ability to fund new research, inventory, and management initiatives for species such as bobcats, timber rattlesnakes, lake sturgeon, butterflies, and the Bicknell's thrush.

Wildlife Action Plan

The receipt of federal dollars has been predicated on individual state commitment to develop a plan. These documents must be submitted to the U. S. Fish and Wildlife Service for approval by October 1, 2005. Even though the Wildlife Action Plan is expected to address the full array of wildlife in a state or jurisdiction, the focus is on "species of greatest conservation need." The federal legislation prescribes eight elements for consideration in the ACTION PLAN, as per below:

- 1) Identify wildlife distribution and abundance: Provide information on the distribution and abundance of species of wildlife, including low and declining populations as the State fish and wildlife agency deems appropriate, that are indicative of the diversity and health of the State's wildlife.
- 2) Describe location and condition of key habitats: Describe the locations and relative condition of key habitats and community types essential to conservation of species identified in (1).
- 3) Describe key problems and research needs: Describe problems that may adversely affect species identified in (1) or their habitats, and priority research and survey efforts needed to identify factors which may assist in restoration and improved conservation of these species and habitats.
- 4) Describe and prioritize conservation actions: Describe conservation actions proposed to conserve the identified species and habitats and priorities for implementing such actions.
- 5) Monitor species, habitats and conservation actions: Describe plans to monitor species identified in (1) and their habitats; monitor the effectiveness of the conservation actions proposed in and, adapt these conservation actions to respond appropriately to new information or changing conditions.

- 6) Develop a plan review process: Describe procedures to review the Wildlife Action Plan at intervals not to exceed ten years.
- 7) Coordinate with other plans: Coordinate the development, implementation, review, and revision of the Action Plan with Federal, State, and local agencies and Indian tribes that manage significant land and water areas within the State or administer programs that significantly affect the conservation of identified species and habitats.
- 8) Include public participation: Describe public participation in the development, revision, and implementation of the Action Plan and projects and programs.

Plant conservation and education and law enforcement projects are not eligible for State Wildlife Grants funding. We expect that species, community and landscape level conservation will provide secondary benefits including addressing the needs of many plant Species of Greatest Conservation Need (SGCN). Furthermore, the Vermont Action Plan include some education and law enforcement-based conservation strategies under the assumption that the Action Plan will have planning and funding development beyond the requirements of the State Wildlife Grants program.

Though the secondary benefits to plants and other non-SGCN species noted above are expected to accrue from the implementation of the Action Plan, this Plan should not be viewed as a biological diversity (biodiversity) conservation plan. State Wildlife Grant funds will be targeted to conservation of SGCN. Just as historic and ongoing game management efforts benefit multiple non-target species of plants and wildlife, so to will the Wildlife Action Plan.

Expected Results and Benefits of the Wildlife Action Plan

The Action Plan should provide the following benefits:

- Provide a science-based foundation for understanding the issues involved in addressing wildlife needs.
- Reduce the risk of further Threatened and Endangered Species listings that would impose additional regulatory requirements on Vermont businesses and communities.
- Provide a common conservation vision to guide state and federal agencies as well as sportsmen's and non-profit conservation organizations, in improving prospects for effective coordination and reducing conflicts.
- Put existing land and resource management and conservation needs into a broader context, providing recognition for the contributions that landowners and land managers are already making towards a long-term conservation strategy.
- Increase the effectiveness of limited conservation resources by identifying areas where conservation activities will provide the greatest benefit to cost ratio. Encourage conservation actions to be more proactive and less reactive and improve coordination between agencies and organizations to ensure cost-effective conservation.
- Allow use of existing programs to more effectively provide incentives or technical assistance to private landowners for voluntary actions to conserve natural resources on private lands.
- Identify the need for additional landowner incentive or technical assistance programs more easily.
- Demonstrate Vermont's commitment and capacity to conserve species and habitats. Vermont's reputation for a high quality of life and preservation of natural resources—one of the state's core strengths in attracting businesses—will be maintained.
- Build a reliable, science-based data set to provide a “big picture” view (biophysical region and statewide) of Vermont's wildlife resources to establish current condition and measure changes into the future. These data will allow state agencies to work with the public and private sector to more effectively.
- Conserving Vermont's wildlife will maintain and perhaps increase the numbers of Vermonters and visitors who interact with and recreate in the outdoors.
- Vermont's eligibility for future conservation funds from State Wildlife Grants will be maintained. These funds can be used for conservation activities that benefit the environment, economy and communities of the state.

Major Conservation Partners

At the outset, it is important to acknowledge that the Vermont Wildlife Action Plan is *not* only, or simply, a Department plan. Instead, it is a blueprint for wildlife conservation *in Vermont*. The distinction is important and one that presupposes potential participation in achieving conservation strategies by a wide variety of management, education, and research entities.

Vermont has an outstanding history of citizen participation in the management of its fish and wildlife resources. This should come as no surprise given the high level of interest Vermonters have in wildlife, as noted above.

Even though sportsmen and women were at the forefront of early funding and conservation initiatives, and remain committed unto those ends, the past thirty years or so has seen the emergence of other interests including birders and nature photographers, land and habitat conservation advocates, and hikers and paddlers, to name a few. The Vermont Wildlife Action Plan has benefited from the strong, helpful, and encouraging planning assistance of many individuals and organizations (table 1-1).

Table 1-1: Wildlife Action Plan Conservation Partners

The development of Vermont's Wildlife Action Plan has been a collaboration of dozens of agencies, organizations and businesses representing diverse interests who have joined forces to better conserve wildlife. As of August 1, 2005 the following entities have signed on as Conservation Partners

American Chestnut Foundation	US Fish & Wildlife Service, Lake Champlain Fish & Wildlife Resources Complex
Association of Vermont Conservation Commissions	US Fish & Wildlife Service, Missisquoi NWR
Audubon Vermont	US Fish & Wildlife Service, Nulhegan Basin Division
Burlington Electric Department	University of Vermont Rubenstein School of Environment and Natural Resources
Center for Woodlands Education	University of Vermont Botany Department
Connecticut River Watershed Council	Vermont Agency of Transportation
The Conservation Fund	Vermont Association of Snow Travelers
Consulting Foresters Association of Vermont	Vermont ATV Sportsman's Association, Inc
Ducks Unlimited	Vermont Cooperative Fish & Wildlife Research Unit
Echo	Vermont Coverts
Endangered Species Committee	Vermont Department of Environmental Conservation
Fairbanks Museum & Planetarium	Vermont Department of Forests, Parks & Recreation
Forest Watch	Vermont Department of Housing & Community Affairs
Green Mountain National Forest	Vermont Farm Bureau
Hunters, Anglers & Trappers Assoc of Vermont	Vermont Federation of Sportsmen's Clubs
International Association of Fish & Wildlife Agencies	Vermont Fish & Wildlife Board
Keeping Track, Inc	Vermont Forest Products Association
Lake Champlain Basin Program	Vermont Institute of Natural Sciences
Lake Champlain Committee	Vermont Land Trust
Lake Champlain International, Inc.	Vermont League of Cities and Towns
Lake Champlain Land Trust	Vermont Loggers Association
Lake Champlain Walleye Association	Vermont Natural Resources Council
Lewis Creek Association	Vermont Outdoor Guides Association
Marsh-Billings-Rockefeller NHP	Vermont Regional Planning Commissions
National Wild Turkey Federation	Vermont Ski Area Association
National Wildlife Federation	Vermont State Grange
Natural Resources Conservation Service	Vermont Trappers Association
The Nature Conservancy	Vermont Woodlands Association
New Haven River Anglers Association	Wildlands Project
North Country Environmental & Forestry	Wings Environmental
Northern Forest Alliance	Representative Steve Adams
NorthWoods Stewardship Center	Office of Congressman Sanders
Ruffed Grouse Society	Office of Senator Jeffords
Ryegate Power Station	Office of Senator Leahy
Sierra Club	
Society of American Foresters	
Smugglers Notch Resort	
Sportsmen Inc	
Trout Unlimited	

Statewide Themes for Action

In the course of reading or evaluating this Action Plan, it becomes apparent that there is a great deal of commonality, or unifying themes, between taxonomic groupings of species of greatest conservation need. For example, habitat conservation, improved knowledge of distribution and abundance, and education are obviously foundational, given their redundancy. Concomitantly, it is possible to make some strategy groupings that would appear to be pivotal in achieving conservation success. Before doing so, it would be helpful to make four observations.

First, in 2002, the International Association of Fish and Wildlife Agencies (IAFWA) adopted a position paper entitled "The Value of the North American Model of Fish and Wildlife Conservation" (Prukop and Regan 2005). The Vermont Fish and Wildlife Department is a member of IAFWA and has incorporated the Model into its strategic planning. Several recommendations for, or to, state agencies are instructive for thinking about wildlife conservation in the context of the Action Plan, including the need to maintain wildlife as a public trust (i.e., not owned by anyone), the need to use science to make management decisions, and the importance of regulating trade and possession of wildlife.

Second, conserving Vermont's Species of Greatest Conservation Need requires that we address problems at the appropriate scale. Recommended strategies address problems at the species level (e.g., the illegal harvest of wood turtles through education and law enforcement), the habitat level (e.g., the lack of early successional habitat through forestry), the landscape level (e.g., maintaining and restoring connectivity of riparian areas) *and* the regional/national and international levels (e.g., habitat loss along migration routes).

Third, collaborative efforts to address habitat concerns related to development, including assessment of direct and indirect impacts, avoidance and minimization of impacts and appropriate mitigation *early* in a project's planning processes can not only protect habitat from alteration, degradation, conversion and fragmentation, but can speed the project more successfully through the permit review process.

Fourth, Vermont wildlife has already benefited from a strong environmental ethic, deeply rooted connections to the land, based on traditional forestry and agricultural economies, and a very high percentage of Vermonters who engage in recreational activities that are dependent on wildlife. In other words, there are compelling and inherent reasons for optimism about the future of wildlife conservation in the Green Mountain State.

All that being said, there are state, regional, national, and international factors that are a cause for concern regarding habitat viability, clean water and air, international trade in wildlife, and a diminution of understanding about wildlife and its management, in part because of complex social factors. Each of the four sets of presuppositions above forms the backdrop for the conservation strategies presented below and throughout this document.

Habitat Themes

- 1) Through education, legislation, and policy improvements address issues such as sprawl, poorly planned development, and global warming that drive habitat conversion, degradation and fragmentation (The Wildlife Society¹). Possible tools include:
 - Maintain and expand incentives for private landowners such as the Wildlife Habitat Incentives Program (WHIP), Landowner Incentive Program (LIP), and the Current Use Program (officially the Agricultural and Managed Forests Land Use Value Program) and other appropriate management agreements. Consider amending tax policies and providing tax abatement and/or other tax relief to reduce the pressures on property owners to subdivide and sell property (parcelization). Create incentives for rural landowners to enhance their land as working forests or farms. Strengthen the Current Use program to include management of land for the benefit of wildlife as a conforming use. Increase funding for the Vermont Housing and Conservation Trust fund.
 - Continue to utilize permitting processes such as Act 250 to address critical habitat considerations where appropriate.
 - Promote and enhance programs designed to manage retention of open space including forestland and agricultural land. Assist local and regional land-use planning organizations such as towns and regional planning commissions. Support plans that identify natural resources and wildlife values and take steps to conserve habitat such as the designation of growth centers that focus development in existing centralized communities. Consider restoring existing village or urban facilities and infrastructure. Increase funding for Rural Community Assistance programs.
 - Acquire critical habitats in fee title or easement. Follow Vermont Agency of Natural Resources land acquisition policies and procedures (VANR 1999) for parcels and rights therein that will be owned by the State.

¹ The Wildlife Society, the North America Section of the Society of Conservation Biology and the U.S. Society for Ecological Economics have all taken similar positions on the need to address the negative impacts of economic growth on wildlife. The American Fisheries Society and the Ecological Society of America are currently considering similar positions.

- 2) Through education, incentives, legislation, and policy efforts address global warming and pollutants such as mercury and acid deposition.
 - Support the recommendations of the *Climate Change Action Plan* developed by the Conference of New England Governors and Eastern Canadian Premiers (2001) and local and regional initiatives such as the Alliance for Climate Action to reverse the growth of greenhouse gas emissions in Vermont.
 - Work with state and federal agencies and legislators to ensure adequacy of and compliance with interstate emissions standards for greenhouse gases, mercury, and sulfur dioxide and nitrogen oxides that cause acid deposition.
- 3) Develop a collaborative, statewide and regional wildlife monitoring and adaptive management program to develop SGCN baselines, measure progress toward desired outcomes for SGCN, and to evaluate and improve the effectiveness of the conservation strategies proposed here and throughout this document. Such a program will:
 - Identify key protocols and systems for data collection and sharing.
 - Identify goals and objectives for SGCN conservation.
 - Determine SGCN distribution and abundance, identify indicators and trends, and assess habitats, natural communities and other appropriate land classification categories to provide data at scales relevant to a variety of users in order to more effectively conserve SGCN.
 - Identify conservation opportunity areas where the likelihood of successful conservation is strongest and the conservation needs of wildlife and their habitats would be best met.

Population Level Themes

- 4) Through policy and education support the enforcement of existing laws that protect species of greatest conservation need. For example:
 - Prevent the importation or movement of invasive, non-native species.
 - Regulate the illegal taking, trade, sale and collection of species of greatest conservation need.

Technical Assistance & Outreach Themes

- 5) Work to develop and implement landowner incentives, technical assistance and education for sustainable management of species of greatest conservation need, including:
 - Develop and enhance partnerships between local, state and federal agencies, non-governmental organizations, industry and private individuals to increase the focus on species of greatest conservation need and conservation of associated habitats.

- Provide outreach materials and technical assistance to encourage sound land management and compatible recreation practices (e.g., VFWD's habitat planning manual *Conserving Vermont's Natural Heritage*). Demonstrate management goals and practices on public lands, especially Wildlife Management Areas.
- Proactively collaborate with transportation planners and engineers regarding the location and design of new and expanded roadways.
- Look for opportunities to implement Action Plan strategies through existing federal cost-share programs (e.g., USDA's Conservation Reserve Enhancement Program, the USFS Forest Legacy Program and the USFWS Landowners Incentive Program).
- Disseminate ecologically sound information through appropriate media, e.g., develop a web site with information on all species of greatest conservation need in Vermont. Include information on identification, natural history, conservation, management suggestions, reporting, and contacts.
- Promote increased cooperation and communication among all agencies and groups concerned with conservation education and resource management.
- Showcase the success of the Action Plan through regular outreach to partners.
- Develop outreach and education programs that promote the conservation of SGCN and the habitats that they depend on, and increase awareness of the importance of maintaining or restoring these species.

Regional Coordination Themes

- 6) Provide regional coordination for conservation and management of species of greatest conservation need.
 - Look for opportunities for collaborative management between jurisdictions (e.g., Lake Champlain, Atlantic Coast Joint Venture, the Connecticut River Joint Commission, the Conte National Wildlife Refuge, and the Northern Forest Lands Council).

References

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