

# Vermont Wildlife Action Plan

## What is a wildlife action plan?

Congress asked each state to develop a wildlife action plan, known technically as a comprehensive wildlife conservation strategy. These proactive plans examine the health of wildlife and prescribe actions to conserve wildlife and vital habitat before they become more rare and more costly to protect.

## Vermont snapshot

**Landscape:** Vermont's landscape is a tapestry of mountains, valleys, woods and wetlands. It is Vermont's natural landscape that enriches the lives of those who live and visit here. It is this same landscape that provides Vermonters with clean air, clean water, and habitat for thousands of species of plants and animals.

### People and Wildlife:

While less than 15 percent of the land base is in public ownership, 97 percent of Vermont residents surveyed in a 2001 U.S. Fish and Wildlife Service public opinion survey indicated that it is important to them that ecologically important habitats and lands in Vermont are protected. Furthermore, 95 percent indicated that knowing that Vermont's native fish and wildlife populations are healthy is very important.

That same survey ranked Vermont first in the nation in percentage of residents that actively observed wildlife (60%). But the problems impacting wildlife have changed and increased in intensity in the past few decades. Vermont's Wildlife Action Plan was developed to harness the Vermont conservation ethic to

effectively address these new problems and to engage new constituencies with a goal of proactively conserving all wildlife species.

## Vermont's planning approach

Vermont's Wildlife Action Plan is a state-wide, all-species conservation strategy. It provides a science-based foundation for understanding the issues involved in addressing wildlife needs, and it serves as a common conservation vision to guide local, state and federal agencies, sportsmen's and non-profit conservation organizations and the general public in wildlife conservation. Strategies identified in the plan are primarily voluntary and incentive-based.

Species Assessment Reports form the base of the action plan. These are detailed reviews of 144 vertebrates (from brook trout and peregrine falcon, to bobcat and wood turtle) and 191 invertebrates (from the tawny emperor butterfly and cobblestone tiger beetle, to the fragile papershell mussel) identified as Species of Greatest Conservation Need. The action plan also describes the habitats and landscapes



American marten/USFWS

*"The Comprehensive Wildlife Conservation Strategy [Wildlife Action Plan] marks the start of a new era in wildlife conservation, one where we can keep common species common."*

*—Vermont Governor  
James Douglas*

*"We are tremendously impressed with the overall quality of Vermont's Wildlife Action Plan and the extensive partnerships employed to develop it."*

*—Marvin Moriarty  
Northeast Regional Director  
U.S. Fish and Wildlife Service*



used by these species within Habitat/Landscape Summary Reports.

The action plan further identifies the specific problems facing both Species of Greatest Conservation Need and the habitats and landscapes upon which they depend. Conservation strategies are identified for each Species of Greatest Conservation Need, as well as for their habitats and surrounding landscapes. By addressing both species-specific and habitat/landscape needs, Vermont can target conservation resources at the appropriate level to strategically conserve all of the state's wildlife.



Culvert assessment/C. Alexander

### Primary challenges to conserving wildlife in Vermont

Vermont's Wildlife Action Plan identified 22 major categories of problems adversely affecting Species

of Greatest Conservation Need or their habitats. The most common, widespread and serious problems identified in the action plan include loss of habitat (due to conversion, degradation, fragmentation and lack of needed successional stages), the impacts of roads, pollution and sedimentation, invasive species, climate

change, and data gaps and information needs.

**Habitat Loss:** Though many agencies and organizations work diligently to conserve important wildlife habitats, Vermont continues to lose approximately 525 acres of significant habitat each year to regulated development alone. Regulated development in Vermont constitutes approximately one-third of the total development that occurs on an annual basis. Significant habitats include deer winter range, wetlands with significant wildlife functions, habitat for rare, threatened and endangered species and several types of habitat necessary for the survival of black bears. These habitats represent only a few of the many habitats that are affected by loss due to development.

**Impacts of Roads:** In the last quarter of the 20th century, Vermont expanded its road system by an average of 26 miles per year to a total of about 14,000 miles. The number of vehicle miles traveled by Vermont residents is growing at seven times the rate of population growth. Transportation systems can cause numerous problems for wildlife, including: vehicle-wildlife collisions; reducing animal and fish passage, thus limiting habitat availability and isolating populations; vehicle emissions of pollutants such as ozone and greenhouse gases; and facilitating the spread of an exotic, invasive species into otherwise healthy areas.

Wildlife	Total number of species**	Species of Greatest Conservation Need*	Threatened/endangered listed species
Invertebrates	15,000-36,000	191	2
Fish	94	33	0
Amphibians	21	7	0
Reptiles	19	12	0
Birds	269	57	1
Mammals	23	61	3
<b>Totals</b>		<b>323</b>	<b>9</b>

\* Each state is using its own criteria for this category. Vermont focused on species with declining populations, species threatened or potentially threatened; and, species that are so little known in the state that experts cannot yet ascertain status.

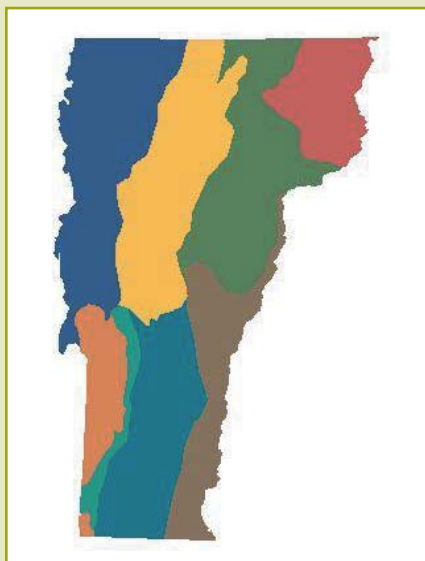
\*\* Includes migratory species which may not breed in Vermont

### Wildlife highlights

Highlight habitats	Wildlife (examples)	Issue (examples)	Action (examples)
<ul style="list-style-type: none"> <li>• Floodplain forests</li> <li>• Aquatic/riparian areas</li> </ul> <p><b>Ownership: primarily private lands.</b></p>	41 SGCN/SGCN groups use these habitats including: cerulean warbler, wood turtle, common mudpuppy, silver-haired bat, river otter, freshwater mussels & snails, blacknose shiner, & lake sturgeon.	<ul style="list-style-type: none"> <li>• Habitat conversion, inadequate disturbance regime, invasive exotic species.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide technical assistance to private landowners to maintain and enhance SGCN habitat in floodplain forests and riparian areas.</li> <li>• Identify areas within the state with the largest matrix of floodplain forest for inclusion in a conservation opportunity area.</li> <li>• Work with the Agency of Transportation, towns, and private landowners to maintain (or restore) aquatic/riparian habitat connectivity and provide access to critical habitats for fish and other Species of Greatest Conservation Need.</li> </ul>
<p><b>Landscape forests</b></p> <p><b>Ownership: A mix of public and private lands.</b></p>	American marten, lynx, red-shouldered hawk, northern goshawk, bobcat, black bear.	<ul style="list-style-type: none"> <li>• Forest conversion, degradation and fragmentation resulting from poorly planned development.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and prioritize for conservation existing contiguous forest blocks linked together by habitat corridors in order to provide a network of interconnected habitats.</li> </ul> <p>Reduce pressures on landowners to subdivide and parcelize properties.</p>
<p><b>Vernal Pools</b></p> <p><b>Ownership: primarily private lands.</b></p>	Whippoorwill, American woodcock, Jefferson's salamander, Fowler's toad, & vernal pool dragonflies.	<ul style="list-style-type: none"> <li>• Direct loss of pools due to hydrologic manipulation, filling, draining.</li> <li>• Loss of associated upland habitat due to development or conversion.</li> <li>• Stormwater directed into pools carrying sediments and contaminants.</li> </ul>	<ul style="list-style-type: none"> <li>• Educate foresters, landowners, developers, and municipalities about the value of vernal pools and seeps and support efforts that conserves wildlife dependent on these features and the necessary surrounding habitat.</li> <li>• Develop and distribute forestry guidelines for the protection and management of vernal pools and seeps</li> </ul>

**Recommended actions to conserve Vermont's wildlife**

**Invasive Exotic Species:** The introduction and spread of nuisance exotic species may lead to the elimination of native wildlife populations, threaten long-term stability of habitats and even lead to extirpation by out-competing a native species, displacing its food source or altering a key process or function of a habitat. Invasive exotic species in Vermont include Eurasian watermilfoil, purple loosestrife, common buckthorn, Japanese knotweed, Morrow's honeysuckle, goutweed, black swallowwort, alewife and zebra mussels.



Map of Vermont's Biophysical Regions/VFWD

*“The Wildlife Action Plan, a blueprint for the conservation of all of Vermont’s wildlife, is the largest planning effort of its kind in Vermont’s history. It was created by pooling the knowledge of the people who know Vermont’s wildlife best—the representatives of more than 60 local, state and national agencies, sportsmen and conservation groups, academics, land managers and other wildlife experts.”*

—Wayne A. Laroche  
Commissioner, Vermont Fish & Wildlife Department

## Working together for Vermont’s wildlife

Vermont’s Wildlife Action Plan was developed over the course of two years with extensive public involvement throughout. Numerous stakeholders from local, state and federal agencies, non-governmental organizations, sportsmen groups, and the public at large were involved in every phase of development. These Conservation Partners took part in Action Plan development through service on technical, review and guidance committees. Partners helped select Species of Greatest Conservation Need (SGCN), identified problems impacting wildlife, developed conservation strategies and influenced the organization of the Action Plan. The general public was kept abreast of plan

development through public meetings and presentations to stakeholder groups, media outreach and through Fish & Wildlife Department publications and a website.

*“Pro-active conservation like the Wildlife Action Plan makes real sense for the bottom line. If we invest in conserving wildlife and wildlife habitat now, drastic and expensive measures won’t be required later. As a science-based organization, Audubon supports the research driven process that created the plan. Personally, as a taxpayer, I like that it has cost-effective recommendations for getting the work done. And as a parent I like knowing that my children and future generations will enjoy wildlife too.”*

— Jim Shallow, Director of Conservation, Audubon Vermont.

South American Pond/J. Binhammer



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