

NATURAL HERITAGE HARMONIES



WINTER 2007

A publication of the Nongame and Natural Heritage Program

Vermont Fish & Wildlife Department
Agency of Natural Resources

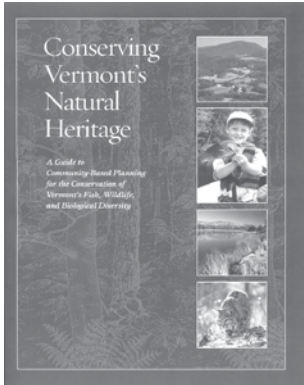
Conserving Vermont's fish, wildlife, and plants and their habitats for the people of Vermont.

Community Wildlife Program Helping Towns Plan for Wildlife

By Jens Hilke

At a local meeting of the Salisbury Conservation Commission the other night, a group of people got together to figure out how much was known about the town's natural resources. They sat around a large projection screen reviewing all manner of high-tech maps of the town. They

proceeded layer by layer, building the town up from the ground as if it were an enormous multi-layered cake, with each new map, becoming another layer in the cake.



The Community Wildlife Program provides the expertise to help towns effectively use this new conservation planning guide.

Bedrock geology, surficial geology, topography, soils, hydrology, wildlife

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New Program Helps Conserve Rare, Threatened and Endangered Plants, Animals and Natural Communities

By Jane Lazorchak



Vermont's Landowner Incentive Program will help conserve and restore significant natural communities like the Clayplain Forests of the Champlain Valley.

Landowners choose to conserve their land for a variety of reasons. Some want to ensure that our landscape remains forested and full of wildlife. Some want to share the beautiful places they have enjoyed with others. Some fear that estate taxes may prevent them from keeping land in their family, while others seek relief from rising property taxes. However, all of them share an abiding concern and love for the land. Vermont Fish & Wildlife Department's Landowner Incentive Program is designed to help Vermonter's choose what is right for them.

The Landowner Incentive Program (LIP) offers a variety of tools to landowners for the conservation and restoration of rare, threatened and endangered plants, animals and natural communities. Funded by the U.S. Fish and Wildlife Service and administered by Vermont's Fish & Wildlife Department, LIP is a voluntary and non-regulatory program that provides financial incentives to private landowners in return for long-term habitat protection or management. Any private landowner or land trust whose land contains a species or

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DEPARTMENT UPDATE

By Ron Regan, Director of Wildlife

Habitat is important to fish and wildlife conservation in Vermont. To put a finer point on it, our success at restoring and managing wildlife for future generations is directly related to the quality and distribution of functional habitats for species of focus or interest in our management programs. One outcome of our Strategic Plan is: Conserve, restore, and enhance habitats, natural plant and animal communities, and ecosystem integrity to maintain wildlife and ecological values in Vermont. We get it – habitat is the key!

Therefore, we have historically directed considerable operational resources to habitat conservation through a broad range of strategies, including: acquiring important habitats or conservation interests in them, managing habitats on department assets (e.g., Wildlife Management Areas), protecting critical habitats through regulatory processes, such as Act 250, and offering technical advice or educational materials to private landowners, land managers, local governments and other government agencies (e.g., VTrans) with an interest in wildlife.

Recently, as you will note in this issue of Harmonies, we have “ramped up” our direct engagement with private landowners and local community and regional conservation entities, all on a voluntary basis. This work is driven in large measure by new federal dollars (granted through the U. S. Fish and Wildlife Service) and designed to address species-at-risk on private lands (via the Landowner Incentive Program) and to deliver wildlife conservation planning assistance at the community level. Both initiatives complement our existing efforts to assist with implementation of the Wildlife Habitat Incentives Program of the USDA Natural Resource and Conservation Service.

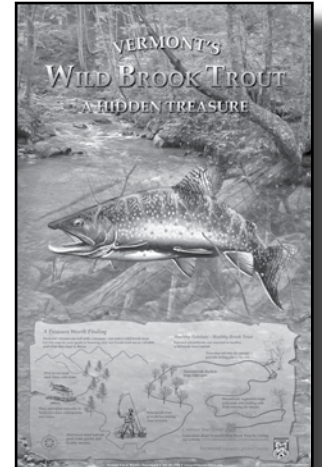


We know Vermonters care about wildlife. So, we are excited about the opportunities these programs offer, in terms of assisting Vermont landowners with thoughtful stewardship information and opportunities.

Posters Highlight Vermont's Lesser Known Wildlife

Fish and reptiles may not be the first species that come to mind for a wildlife poster, but the Vermont Fish & Wildlife Department and the Vermont Reptile and Amphibian Atlas hope to change that with three new posters.

Vermont's wild brook trout is the latest edition to the Vermont Fish & Wildlife Department's poster series. The brilliant colors of Vermont's native trout are captured in this poster with the beautiful watercolor by John T. Myers. A treasure map presents interesting facts about Vermont's wild brook trout and their habitat needs. The map invites the explorers to visit an interactive website, where they can learn more about Vermont's wild brook trout. The poster is free and measures 36" x 24". It is available at all Fish & Wildlife offices and fish culture stations. Be sure to visit the website www.vtfishandwildlife.com/brooktrout.cfm to learn more about our wild brook trout – Vermont's hidden treasure.



The Vermont Reptile and Amphibian Atlas has published two new posters featuring Vermont's native reptiles. One poster includes our snakes and lizards, and the other includes all Vermont turtles. Posters are printed on a durable, glossy, heavyweight paper with non-fading inks, and are approximately 23" x 16". They include the most up-to-date distribution maps based on records submitted to the Vermont Reptile and Amphibian Atlas.

The reptile posters are \$10.00 each (including Vermont state sales tax) and all proceeds from the sale of the posters will go to supporting the Vermont Reptile and Amphibian Atlas Project. Posters are available through the Vermont Reptile and



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Landowner Incentive Program *(continued from page 1)*

natural community of conservation concern can apply to LIP for project funding.

The department will implement LIP by providing technical and financial assistance to private landowners for projects that enhance, protect, or restore habitats that benefit at-risk-species on privately owned lands. Working in coordination with landowners and other partners, staff biologists can design each project to best suit the needs of individual landowners, their land, and the diversity of wildlife present. Both the purchase of conservation easements and reimbursement for land management activities over a period of time provide necessary financial assistance for landowners. Projects could include invasive species control, habitat management to benefit a particular species, or reforestation practices for natural communities.

While land throughout Vermont is eligible, land located in the Champlain Valley has been designated a geographical focus area because most of Vermont's rare plant and animal species are associated with the Champlain Valley. Targets in the Champlain Valley include all significant natural communities, as well as rare, threatened, and endangered plants and animals associated with Valley Clayplain Forest and Sandplain Forest—the two most threatened natural communities in the Valley.

Properties providing habitat for species at risk and that need conserving may be eligible for funding. LIP is a competitive grant program that reimburses landowners up to 75 percent of a project's cost. The remaining 25 percent can be in the form of in-kind services or funding from partner organizations or the landowner. Project funding is based on the scope and duration of each

Our Partners in 2006

The Vermont Fish & Wildlife Department's Nongame and Natural Heritage Program works cooperatively with many individuals, groups, companies, organizations, and agencies.

Agencies:

Green Mountain National Forest
Missisquoi National Wildlife Refuge
Silvio O. Conte National Fish & Wildlife Refuge
Société de la faune et des parcs du Québec
U.S. Environmental Protection Agency
U.S. Fish & Wildlife Service (Lake Champlain Office and N.H. Endangered Species Office)
U.S.D.A. Wildlife Services
U.S.D.A. Natural Resource Conservation Service
Vermont Agency of Transportation
Vermont Department of Environmental Conservation
Vermont Department of Forests, Parks & Recreation
Vermont Military Department

Contractors, Collaborators and Volunteers:

Robert Abell	Michael Lew-Smith
Dorothy Allard	Kent MacFarland
Jim Andrews	Bruce MacPherson
Joules Dybicki	Neal Martorelli
Brett Engstrom	Ted Murin
Steve Faccio	Nathan Masse
Doug Facey	Tim Masse
Margaret Fowle	Ethan Nedeau
Patrick Galois	Jared Nunery
Patti Greene-Swift	Christine O'Brien
Eric Hanson	Kristian Omland
Lisa Jablow	Michele Patenaude
Mark LaBarr	Bryan Pfeiffer
Marc Lapin	Reenie Rice
Wendy LaValley	Chris Rimmer
Eric Lazarus	Nat Shambaugh
Martin Léveillé	Steve Smith

Organizations:

Audubon Vermont
Central Vermont Public Service
ECHO – Leahy Center of Lake Champlain
Green Mountain Audubon Society
Green Mountain Power
Invasive Exotic Plant Committee
Invasive Plant Atlas of New England
Keeping Track, Inc.
Lake Champlain Land Trust
National Wildlife Federation
NatureServe
New England Plant Conservation Program Volunteers
New England Wildflower Society
Outreach for Earth Stewardship
The Nature Conservancy of Vermont
University of Vermont
Vermont Caver's Association
Vermont Coverts
Vermont Electric Power Company
Vermont Endangered Species Committee (ESC)
Vermont Entomological Society
Vermont ESC Scientific Advisory Groups
Vermont Family Forest
Vermont Institute of Natural Science
Vermont Land Trust
Winooski Valley Park District

Jean Stefanik
Erin Talmage
Elizabeth Thompson
William Wright
Jane Yagoda
Jon Zurit



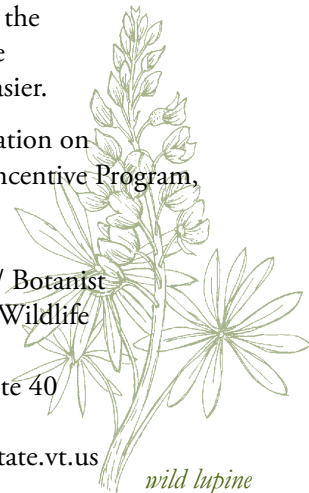
individual project. There is no funding cap on how much an applicant may receive.

Conservation easements are an important financial assistance tool in the LIP tool box. Easements permanently protect the desired condition of property by limiting the type and scope of development that can take place. The Fish & Wildlife Department will work with a landowner to tailor an easement that protects natural and cultural values while meeting other landowner needs. Easements allow landowners to keep their land in the family and can reduce property and estate taxes. They also help preserve important aspects of a community and contribute to the

region's quality of life.

Vermont's future depends on the choices landowners make today. The Vermont Fish & Wildlife Department's Landowner Incentive Program can provide you with the resources to make those decisions easier.

For more information on the Landowner Incentive Program, please contact:
Jane Lazorchak
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Vermont Fish & Wildlife Department
5 Perry Street Suite 40
Barre, VT 05641
jane.lazorchak@state.vt.us
(802) 479-4405.



Community Wildlife Program *(continued from page 1)*

habitat, conserved land, and rare and endangered species were all reviewed. Each layer was introduced as its own entity and then put in context of its interaction with other layers in the “cake.”

The guest speaker, from Vermont Fish & Wildlife Department’s Community Wildlife Program, explained the

science behind

each of the map layers, discussing what the data did and didn’t show. The maps came from a variety of sources, the regional

planning commission, town inventory, and the Fish & Wildlife Department. All were reviewed to give members a full sense of what was already known about the resources in their town as they prepared to prioritize these resources and make recommendations to their Planning Commission.

While this meeting is just one in a long history of department efforts to provide information to local governments and landowners, this one was different because it was part of a new department program designed specifically to help local and regional commissions with their conservation planning.

The Community Wildlife Program provides assistance and resources to organizations involved in land use and conservation planning in Vermont. It helps regional and municipal planning commissions, town conservation commissions, and non-governmental organizations in their efforts to consider wildlife habitat and other natural resources by providing them with the most up-to-date information on conservation science, and helping them implement their land use planning and conservation projects.

We’re confident this new program will help towns with conservation planning that will protect the wildlife and natural resources of Vermont for everyone’s use and enjoyment well into the future.

The program offers a variety of specific services. It helps towns identify important wildlife habitat by providing data for developing useful maps as well as instruction in using field information. It helps translate the conservation goals that each community develops into narrative for the Town Plan. It offers suggestions

on numerous non-regulatory as well as some regulatory approaches for turning these town conservation goals into reality. The program also

connects towns with other assistance organizations and resources to help meet the town goals, such as the Wildlife Habitat Incentive Program and the Landowner Incentive Program.

We’re confident this new program will help towns with conservation planning that will protect the wildlife and natural resources of Vermont for everyone’s use and enjoyment well into the future. If you want help with this sort of work, feel free to contact Jens Hilke, Conservation Planning Biologist, (802) 476-0126 or jens.hilke@state.vt.us.

New Wildlife Posters *(continued from page 2)*

Amphibian website <http://community.middlebury.edu/~herpatlas/> or by writing: Vermont Reptile and Amphibian Atlas, Sunderland Hall 114, Middlebury College, Middlebury, VT 05462.

The Atlas Project is also planning to release two more posters highlighting Vermont’s native amphibians—frogs and salamanders. These posters should be available this summer.

“We hope these posters raise awareness and appreciation for some of Vermont’s less recognized species,” said Jim Andrews of the Vermont Reptile and Amphibian Atlas Project. “The posters are a terrific resource for students, educators, or conservationists, and make an excellent gift.”

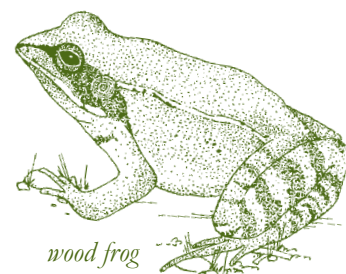


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wood frog

State Wildlife Grants: Keeping Wildlife from Becoming Endangered

Damsels and Dragons

Pound for pound, or in this case gram for gram, Vermont's larger wildlife predators—fisher, coyote, black bear and muskellunge—have nothing on the diminutive dragonfly and damselfly. These voracious insects (order: Odonata) gobble up prey by the bucketful, including, thankfully, mosquitoes and blackflies.

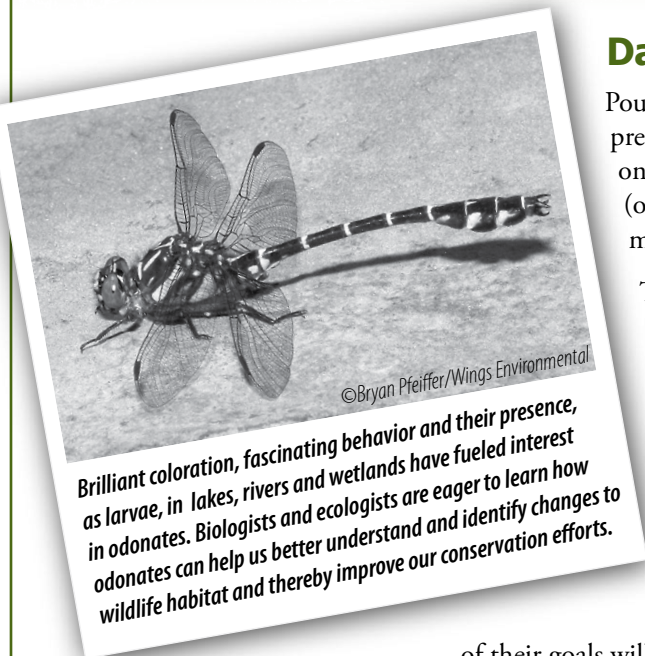
The Air Force studies these masterful fliers to understand how dragonflies achieve flight speeds of 30-60 mph *and* can stop or turn instantaneously. And, according to Mark Ferguson, a zoologist with Vermont Fish & Wildlife Department, "wildlife biologists and ecologists are now learning how odonates can help us better understand changes to wildlife habitat, particularly wetlands and rivers, and therefore improve our conservation efforts."

With funding from Vermont's State Wildlife Grants program, entomologist Bryan Pfeiffer and a crew of volunteers will soon be studying the distribution and abundance of rare odonate species. One

of their goals will be to identify currently unknown populations and establish baseline

information for trend monitoring. Birders, naturalists who simply like to pursue flying things, and even

PhD biologists are welcome to participate. For more information contact Bryan at bryan@wingsenvironmental.com.



©Bryan Pfeiffer/Wings Environmental
Brilliant coloration, fascinating behavior and their presence, as larvae, in lakes, rivers and wetlands have fueled interest in odonates. Biologists and ecologists are eager to learn how odonates can help us better understand and identify changes to wildlife habitat and thereby improve our conservation efforts.

State Wildlife Grants Are For The Birds

The Vermont Breeding Bird Atlas is the most comprehensive review of Vermont's wild birds. First published in 1985, it will be paired with the second Breeding Bird Atlas, a volume expected to fledge by this time next year. It's a feat comparable to the Greek myth of Atlas holding up the heavens, except Vermont applied a "many hands make the work light" approach.

From 2003 to 2006, volunteers surveyed all the habitats Vermont offers. From forests and fields to valleys and mountains, one-sixth of Vermont's total land base has been explored. Hundreds of volunteers—all skilled birders—logged more than 23,500 hours so far, and this year's final field season waits in the wings.

Vermont Institute of Natural Science handles project coordination with help from Audubon Vermont and chapters, UVM, the National Wildlife Federation and the Vermont Fish & Wildlife Department, which also provided close to \$160,000 in State Wildlife Grants (SWG) funding.

Good news won't be hard to find. The new Atlas will certainly reflect increases in peregrine falcon, common loon and osprey since 1985. The Atlas also will confirm bald eagle nesting in Vermont after a 60-year hiatus.

However, the Atlas will identify the many bird species whose populations are not doing as well now as in 1985. Development pressures, acid rain, mercury deposition, habitat change and other problems increased significantly since the first Atlas. Still, the completed Atlas will help all birders, biologists, the sporting community and conservationists pinpoint the species and places where conservation efforts to maintain or enhance Vermont's bird populations will be most effective. And, the State Wildlife Grants program will be ready to help then as well. For more information about the Atlas project go to www.uvm.edu/~vbba/.

For more SWG information see SWG and Vermont's Wildlife Action Plan at: www.vtfishandwildlife.com/swg_home.cfm



The completed Atlas will help pinpoint the species and places where conservation efforts to maintain or enhance Vermont's bird populations will be most effective.



Nongame and Natural Heritage Program

Vermont Fish & Wildlife Department
Vermont Agency of Natural Resources
103 South Main Street, 10 South
Waterbury, VT 05671-0501



Your Support Makes a Difference!

Please donate to the Nongame Wildlife Fund on your Vermont income tax form. Look for the loon icon.

Donating to the Nongame Wildlife Fund is a Smart Investment.

Your tax-deductible contribution pays big dividends by helping us:

- Conserve wildlife before they become more rare and more costly to protect.
- Protect clean water and air—making both wildlife and people healthier.
- Conserve wildlife and the places they live for our children and grandchildren.

It's Easy to Donate:

1. **Line 29A on the Vermont income tax return**
2. **Section 4 on hunting/fishing license application**
3. **Direct donations** - *Send your donation, payable to the Nongame Wildlife Fund, to:*

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Vermont Fish & Wildlife Department
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Waterbury, VT 05671-0501*

Or support the Nongame Wildlife Fund by purchasing a Conservation License Plate

Nongame Wildlife Fund Bringing back the call of the wild.



The call of a common loon is much more common thanks to contributions to the Nongame Wildlife Fund.

When you donate to the Nongame Wildlife Fund on line 29A of your Vermont income tax you are helping to protect and restore Vermont's threatened and endangered wildlife, like bald eagles and black terns.

Look for the loon on line 29A of your Vermont income tax return and please remember to donate.

