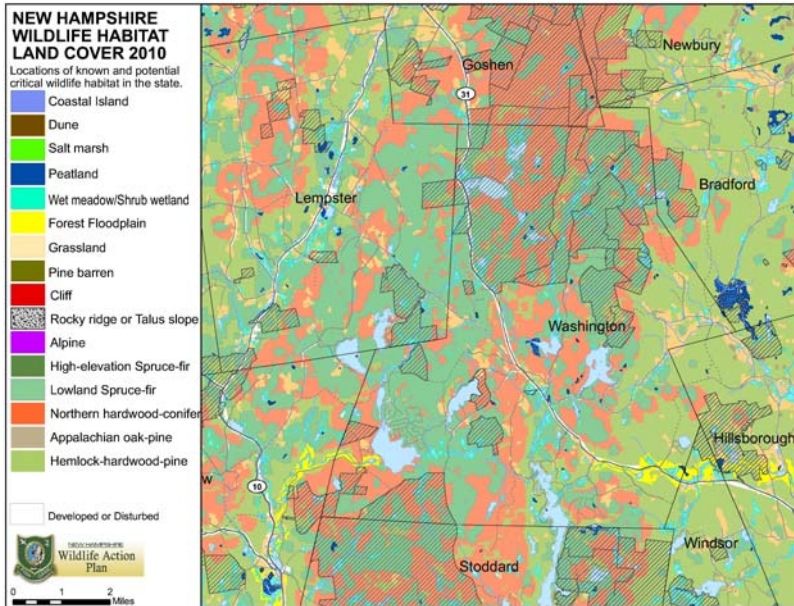
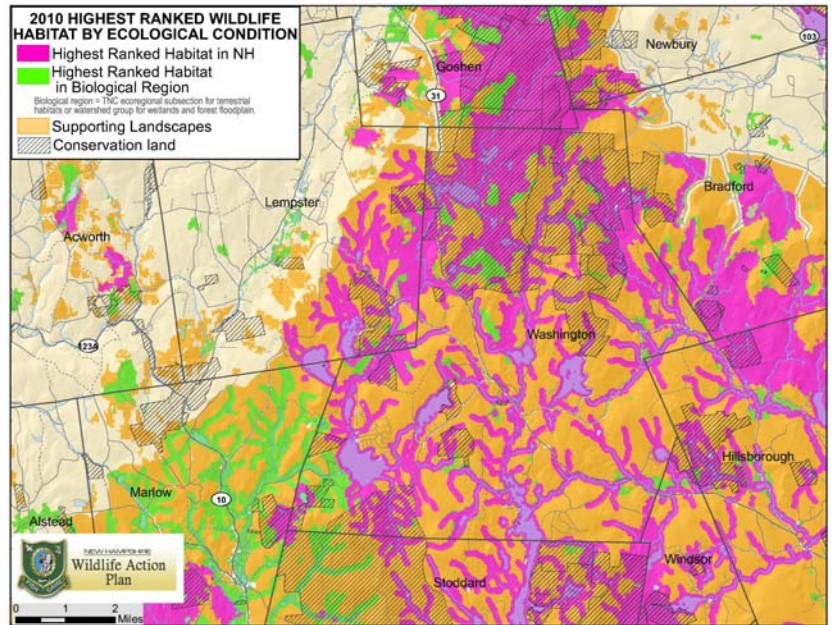


Wildlife Action Plan - Town Maps Available on Web!

We are pleased to announce that towns can now download small scale versions of the 2010 Wildlife Action Plan maps: the Wildlife Habitat Land Cover Map, and the Highest Ranked Wildlife Habitat.

The maps for each town are available in two sizes: 8.5 x 11 inches and 11 x 17 inches. Each map is available as a PDF file or as a JPEG image. Click here to visit the [Wildlife Action Plan Town Maps web page](#) on the NH Fish & Game web site. Every town in the state can access these maps.



Really Take Action - Volunteer for Wildlife!

Malin Ely Clyde, UNH Cooperative Extension
and Lindsay Webb, NH Fish & Game

Now that spring is here, there are lots of ways to get outside, lend a hand, and get directly involved in helping wildlife and the environment around you. Dragonfly surveys, Karner Blue Captive Rearing Project, Piping plovers monitoring, Coverts Volunteers, Reptile and Amphibian volunteers, and more! Also check with local land trusts, nature centers, and conservation groups for more opportunities! Click here for more information about these programs.



[NH Dragonfly Survey](#) Scientists need your help surveying for dragonflies and damselflies! Volunteer trainings are planned for May 28 (Concord), June 5 (Haverhill), and June 18 (Lancaster).

[NH Coverts Project: Volunteers Working for Wildlife](#) Landowners, conservation commissioners, and others interested in conservation are encouraged to apply for this opportunity to learn about wildlife and natural resources. The 3 ½-day overnight workshop is planned for Sept. 22-25, 2010.

[Natural Resource Stewards - New Classes begin Fall 2010](#) A 12-week training course for volunteers interested in a broad range of natural resource topics. Classes are on Fridays beginning September 3, 2010 in Portsmouth.

[Reptile & Amphibian-Watching Volunteers Needed](#) NH Fish & Game biologists need your help locating and monitoring reptiles and amphibians statewide.

[NH Audubon Sanctuary Stewardship Help](#) NH Audubon is looking for volunteers to be the “eyes and ears” on its wildlife sanctuaries. Duties include periodic visits, trail work, and looking out for illegal hunting, cutting, and storm damage to trails.

[Karner Blue Butterfly Captive Rearing and Monitoring](#) Volunteers are needed to assist in raising State and Federally endangered Karner blue butterflies in captivity. Concord-based workday is planned for June 5th.

[Pine Barrens Habitat Restoration](#) Help clear brush, plant native nectar plants including wild blue lupine and to collect wild seeds. Concord-based workday is planned for May 22nd.

[Piping Plover Monitoring - \[click here to inquire about the program \\(email\\)\]\(#\)](#)
Volunteers are needed to monitor adult piping plovers and their chicks between April and August at Seabrook Beach and Hampton Beach State Park.

[Ashuelot Valley Environmental Observatory \(AVEO\)](#) For those in the Monadnock Region, AVEO offers great opportunities to work with scientists to gather ecological data. Projects include salamander crossing brigades, documenting vernal pools, monitoring nighthawks, inventories of Pisgah State Park, monitoring water quality, and more.

[Land Stewards at the Forest Society](#) Do you live near a reservation owned by the Society for the Protection of NH Forests? The Forest Society has a land steward program where you can serve as a caretaker of a nearby reservation, maintaining trails, removing litter, posting signs, etc

Your Fields as Habitat for Wildlife

Matt Tarr, UNH Cooperative Extension



Photo Credit: Amanda Stone

Fields, pastures, and abandoned fields and pastures that contain shrubs support unique collections of wildlife species that don't occur in the forested habitats that dominate much of New Hampshire. Over the last 60 years, the amount of agricultural land in New Hampshire has decreased significantly as fields have reverted naturally to forest, and development has permanently converted hayfields, pastures and natural shrublands, such as pine barrens, into residential and commercial developments. Today, wildlife species that require fields, pastures, and shrubby "old fields" as their habitat are among the species in greatest need of conservation – many of these species could be lost from the NH landscape if landowners don't take an active role in the maintaining, enhancing, or even creating these habitats when they have the opportunity to do so on their land. Do you have fields

or old fields on your land? If so, here are some things to consider if you are interested in improving their habitat value to wildlife:

A small group of birds require large fields as their breeding habitat - they nest on the ground within the fields and they won't breed in fields smaller than a certain minimum size. For example, bobolinks require fields at least 5 acres in size and meadowlarks require fields at least 25 acres in size. These birds prefer to nest in tall, lush hayfields and they tend to nest toward the center of the fields, as far away from the field edges as they can (probably to avoid predators such as foxes that hunt field edges). The young of these birds don't leave the nest until mid-July or early August so mowing prior to this time can destroy eggs, nests or young birds. Managing nesting habitat for these species generally involves leaving the largest area possible - in the center of large fields - unmowed until at least early August.

Fields smaller than 5 acres are unlikely to support bobolinks, meadowlarks, or savannah sparrows, but they are used by large number of other birds, mammals, reptiles and amphibians. All these other species will get the most benefit from fields that contain a combination of grasses and wildflowers that are managed at a variety of heights and densities that are most easily attained through carefully planned mowing:

- Fields mowed multiple times each year will contain more grasses and clovers than wildflowers and often provide succulent forage for deer and turkeys. The short vegetation immediately following mowing provides preferred feeding habitat for robins, doves, northern flickers, chipping sparrows, killdeer, kestrels, and red-tailed hawks.
- Fields that are mowed only once each year (ideally after early September) contain a greater combination of grasses and wildflowers. As the diversity of wildflowers in your fields increase, so too will the diversity of pollinating insects including bees, butterflies and moths. These insects provide food for countless birds, mammals, reptiles and amphibians, and some landowners just like knowing they are helping native pollinators. Further, allowing fields to go unmowed until early fall provides cover for nesting turkeys and for deer fawns.
- Fields mowed only once every few years will often become invaded with some woody plants - these fields often support the greatest diversity of wildlife species as a result of the diverse mixture of grasses, wildflowers, shrubs, and small trees that provide many different cover and feeding opportunities to wildlife.

If you have more than one field, you can increase the habitat value of those fields by mowing them at slight different times and frequencies. For example, a large field that might support bobolinks or meadowlarks might be mowed only once each year in the fall to allow these birds to nest. Another field that is too small to support these birds could be mowed more frequently to harvest hay or to maintain short grass habitat for wildlife. Another field where the grass growth isn't the best could be allowed to get shrubby by mowing only once every few years. This approach would allow a landowner to accomplish multiple objectives and benefit a wide range of wildlife on their land.

There is an almost limitless number of ways to manage fields to benefit wildlife. Other objectives such as hay production or pasturing animals can often be compatible with objectives to provide wildlife habitat. Contact Matt Tarr (matt.tarr@unh.edu) or Emma Carcagno (emma.carcagno@unh.edu) for a free site visit to discuss your options for managing your fields to benefit wildlife.

Marsh and Shrub Wetland Habitats

What Makes Them So Special?

Malin Ely Clyde, UNH Cooperative Extension Forestry & Wildlife Program

Most people in New Hampshire recognize that wetlands are important. Wildlife viewers, hunters, boaters, and birders will tell you that New Hampshire has a wealth of beautiful wetlands. But as human development encroaches to the edges of wetlands, the plants and wildlife living in these areas are at risk. Analysis done for the [NH Wildlife Action Plan](#) outlines a variety of threats to marsh and shrub wetlands. And because wetlands support such a rich diversity of rare and common wildlife, these habitats are high on the list of habitats in need of conservation attention.



Photo Credit: Eric Aldrich

Did you know that wetlands differ, based on what kinds of plants (and animals) live there? Wet meadows are filled with sedges and grasses, often the result of abandoned and drained beaver dams. These are important habitats for rare wildlife such as [ribbon snake](#), [spotted turtle](#) and [northern harrier](#).

Marshes contain plants that grow out of the water, but whose roots are wet, such as cattails, pickerelweed, and water lilies. [Blanding's turtles](#), [American black duck](#) and red-winged blackbirds rely on marsh habitat for their feeding and lifecycles.

Shrub wetlands are thickets of shrubs growing out of wet soils, often flooded in the spring. [Spotted turtles](#), Canada warbler, [New England cottontail](#), and [American woodcock](#) all use shrub wetlands for food, cover, or breeding habitat. Wetlands may also contain trees, but these forested wetlands were covered previously in the [Fall 2008 issue](#) of this newsletter.

But why are [marsh and shrub wetlands](#) so important? They are rich habitats for wildlife, but they also provide important functions for people such as flood control, pollutant filtration, and erosion control. Marshes are important for fish and amphibian breeding and for waterfowl, and they connect people to habitat through hunting, fishing, tourism and recreation. Shrub wetlands may seem inhospitable to people, but their dense thickets provide reliable cover from predators for species such as the reclusive [New England cottontail](#), a rabbit recently listed as a state endangered species.

The work of beavers and their dams give shape to a number of our larger wetlands in the state. Conservation efforts need to protect large areas around present-day wetlands, making allowances for future beaver dams to be built. Protecting only present-day dams while allowing development and road-building near abandoned dams forever precludes the natural succession of those abandoned beaver ponds - from newly flooded sites, to stagnant ponds, to open meadows, and back to reforested landscapes. For example, in the wetlands around Great Bay in Durham, beaver ponds flooded 50 years ago are now losing the standing dead trees used for nesting by [osprey](#) and [great blue heron](#). Biologists are looking at the larger landscape,

wondering if there are any places left for new dams, which could create new flooded wetlands and new snags for herons and osprey. But dense development in the region offers few options for the beaver or for new heron rookeries.

Landowners and conservation efforts can do a lot to protect wetlands and the wildlife they support. Along with maintaining beaver dams, landowners can promote the growth of aspen and other hardwoods in patches along streams and rivers to enhance the food supply for beavers. Mallards and black ducks will also benefit, as they nest on open ground around wetlands. Keep on the lookout for rare reptiles and amphibians, many of whom live around wetlands, and report sightings to [NH Fish & Game \(RAARP\)](#). Protect standing dead trees and overhanging vegetation around wetlands to provide cover for wildlife and keep downed logs as basking sites for turtles. For other stewardship guidelines, visit the [Marsh & Shrub Wetlands Habitats](#) webpage.

Check out these links to learn more about wetlands:

- [NH Department of Environmental Services Wetlands Bureau](#)
- [UNH Cooperative Extension - Habitats Information](#)
- [NH Fish & Wildlife Service - National Wetlands Inventory for NH](#)
- [NH Reptiles & Amphibians - NH Fish & Game Dept.](#)

Blanding's Turtle - A New Hampshire Endangered Species:

Brendan Clifford, NH Fish & Game Department



Blanding's Turtle

Photo Credit: Mike Marchand

The Blanding's turtle is a species of regional concern and was recently added to the New Hampshire Endangered Species list. In the Northeast, Blanding's turtles are restricted to southern Maine, southern New Hampshire, eastern Massachusetts, and a few isolated populations in New York and Pennsylvania. In NH, Blanding's turtles are patchily distributed across the southeastern part of the state with fewer records north and west of Concord.

Blanding's turtles inhabit a variety of wetland types, but typically prefer wetlands with shallow water and dense vegetation. Vernal pools may serve as important staging and spring feeding areas during long-distance migrations between wetlands.

Individuals may move several kilometers between wetlands or to nesting grounds highlighting the importance of large wetland complexes and intact surrounding uplands for this species.

Like most wildlife, the biggest threat to Blanding's turtles is the loss or degradation of their habitat. Their geographic range in southeastern New Hampshire coincides with the most populated part of the state where land is often rapidly developed. Small, shallow wetlands can be easily drained or filled or critical upland habitats surrounding these wetlands become degraded or disappear altogether. Additionally, high-traffic roads may isolate populations and often result in direct mortality of individual turtles during crossing attempts. And because females are not sexually mature until 14-20 years old, small annual losses on roads may lead to extirpation of local populations.

Biologists at NHFG are currently evaluating the top ranked Blanding's turtle sites that were identified in a Regional Status Assessment for the species in 2007. Additionally, several Blanding's turtle reports are annually submitted by volunteers through the Reptile and Amphibian Monitoring Program (RAARP). After a verification process the reports are incorporated into the New Hampshire Natural Heritage Bureau's Rare Species Database to map population locations.

You can help by reporting observations of Blanding's turtles to RAARP at raarp@wildlife.nh.gov or NHFG, 11 Hazen Drive, Concord, NH 03301. Be on the lookout when driving near wetland areas between May and July as there are likely to be nesting females trying to cross roads. Remember, when moving turtles across the road, always move them in the direction they are traveling - even if it is away from the wetland. Moving them back in the direction they came from will only force them to make a second crossing attempt. Click here for more information about RAARP

http://www.wildlife.state.nh.us/Newsroom/News_2010/News_2010_Q1/RAARP_2010.html

Whitenose Syndrome Update

Emily Brunkhurst, NH Fish & Game Department



Unhealthy bat in NH mine

Photo Credit: Susi von Oettingen

White Nose Syndrome (WNS) is having a significant effect on four of the five hibernating bats in NH. The winter surveys showed serious declines in most hibernacula with the overall hibernating bat population decline of about 65%. Four new hibernacula were discovered. Two were in old WWII bunkers and did not show signs of WNS. The other two have WNS. One of these is somewhere near or on Mt. Washington, and is likely our largest hibernacula, with several thousand bats. Skiers started seeing bats flying this winter in early March, and they saw them almost every day. Several dead bats were collected and were confirmed by the Wildlife Health Lab as positive for WNS. This hibernacula will be extremely difficult to find, given

the rough terrain. We are working closely with US Forest Service biologists to determine the best methods to find it.

We are working on our summer planning we could use your help! If you have a colony in your house or barn and are willing to count them, you can participate in a statewide colony monitoring effort. Check out our website at <http://wildlife.state.nh.us/Wildlife/Nongame/bats.html>. for details and the survey forms. You'll also find updated information on white-nose syndrome, bat biology and information for homeowners.

Juliana and Mark Phillips: Carrying on the Tradition, Caring for Family Lands

Frank Mitchell, UNH
Cooperative Extension

Mark and Juliana Phillips' home in Webster is part of 700 acres that has been in Mark's family for generations. It's where Mark was "surrounded by nature" as a boy. The land has seen changes since then - pastures grew in and habitats changed. "It was a classic, New England abandoned farm," Mark says. The result was "less wildlife" than when the land was a mix of farm and forest cover. Juliana's experience in nature early in life led to her



Photo Credit: Juliana & Mark Phillips

Phillips' property in Webster

attitudes about land today. "I grew up in a very rural part of New Jersey, where we spent most of the time outdoors. Now the area is one of the most densely developed areas in the northeast. I've seen so much natural land disappear."

When they decided to settle in Webster, Juliana and Mark sought learning opportunities. Juliana took a landscaping course at Harvard and in 2009, recommended by a friend, she and Mark completed training for the [New Hampshire Coverts Project](#), a wildlife-focused volunteer program. The Phillips view managing their land, Mark says, as "Thinking in legacy terms. "When the land is in the hands of future owners, how can we influence that it will remain intact and vibrant?"

Juliana and Mark have already made progress on caring for habitats on their property "We're planting apple trees and restoring fields", Juliana says. The plan to hire a professional forester to prepare a management plan for the whole 700 acres of family lands.

The Phillips recently created two small patch cuts ("wildlife openings") in their woods, paid for in part by pine timber cut from the site. They left a considerable woody material (branches, etc.) on the ground as habitat structure, to benefit species that live at or near ground level. They "hope to see more ruffed grouse" as a result of this activity, Juliana says. They also delay mowing on some fields to benefit grassland nesting birds and other animals.

When starting out, Mark and Juliana got guidance from UNH Cooperative Extension's Merrimack County Forester Tim Fleury and Wildlife Specialist Matt Tarr, who visited the property and suggested options for action based on the Phillips' goals and the land's qualities.

Juliana and Mark appreciate the results of their work caring for habitats on their land. They've seen bears, moose, owls, hawks, snakes and countless other wildlife. "We've seen some amazing things", says Juliana, "it's like taking in a movie."

"We haven't done anything dramatic, but the results are dramatic", says Mark.

Satisfied with their efforts, the Phillips plan to continue with other actions to care for their land and learning more in the process. Referring to the complexity of life, Juliana says, "We learned that what looks like chaos is where everything is lurking." Mark and Juliana Phillips plan to do their best to support life on their land, keeping it "intact and vibrant" into the future.