Making Habitat Happen: From Bunnies to Birds, Managing State Lands for Wildlife

By Chuck Fergus, Wildlife Management Institute Photos by Emma Carcagno, UNH Cooperative Extension

Out for a walk at Bellamy River Wildlife Management Area (WMA) in Dover, NH, I was alerted to the sounds of large machines advancing through fields, planting shrub seeds. I noticed log skidders piling newly cut trees at a landing and industrial-strength mowers chopping down old, past-their-prime shrubs so they'll grow back as thick cover. What's happening here? Conservationists are using all of these techniques and more to turn Bellamy River WMA into a habitat showcase while boosting the local New England cottontail population.

Bellamy River WMA, just west of the tidal river of the same name, is the site of the largest New England cottontail restoration project on state lands in New Hampshire. As an early step in transforming this area into prime New England cottontail habitat, loggers recently clear-cut 30 acres of low-quality old-field pines and hardwood trees on the 428-acre property.



The dense growth of young trees and shrubs a year after harvest. Here you can see how hardwoods sprout from their cut stumps, creating good, dense, vertical structure important for a variety of wildlife species.

Here's how clear-cutting helps rabbits. In the year following cutting, tree seedlings and saplings spring up from the root systems and stumps of the logged-off hardwood trees. Over the next several growing seasons, the clear-cut turns into a jungle of re-growing trees and shrubs. Rabbits find this kind of cover ideal for resting, feeding, and raising their young. At Bellamy River, habitat managers located the clear-cuts next to a patch of cover where cottontails already live, so that the rabbits will spread into the new shrublands and their numbers should increase.

"We estimate there are about 200 acres of potential New England cottontail habitat on the wildlife management area," says Jim Oehler, a biologist with the New Hampshire Fish and Game Department.

"Over time, we hope to keep 75% of that acreage in suitably-dense bunny habitat," a move that will increase the local population of threatened cottontails and also help scads of other wildlife such as brown thrashers, common yellowthroats, willow flycatchers, and white-throated sparrows, all of which need similar habitat.

Clear-cutting isn't the only way to create shrubland habitat. Another technique calls for a tractor to haul a seed-drill across old fields. The drill plants seeds of native shrubs such as dogwood, hazelnut, arrowwood, and rose. At Bellamy River, volunteers also hand-plant shrub seedlings in key areas. Every so often, managers apply herbicides to knock back the competing grass and weeds that otherwise would cast shade on the young shrubs and slow their growth. As shrub areas thicken, cottontails will find cover among the plants, and they'll feed on the shoots and fruits that the shrubs produce.



Conservationists discuss techniques used to create shrubland habitat for wildlife at a recent workshop. Behind them is a recently cut area of young aspen

Oehler and his fellow conservationists are also helping patches of aspen trees to spread out and expand. Aspens are fast-growing trees that, when cut during the winter, grow back as stands of dense sprouts. Native shrubs such as blackberry prosper in re-growing aspen stands. And wildlife are attracted to such areas.

Bellamy River WMA has several fields where clover grows among grasses, mustard, and ragweed. Mowing some of these fields twice a year - in early and late summer - keeps the clover dense and helps it spread. Clover is a high-quality summer food for New England cottontails, who venture out from nearby brushy hideaways to nibble on the succulent plants in early morning and late evening. Clover helps other wildlife too. Wild turkeys and ruffed grouse lead their young into mowed clover where they can catch and feed on high-protein insects.

Conservationists are planting other fields with millet, a grain-producing plant that provides important food for migrating ducks and geese. Nearby Great Bay is an important stopover during migration in both spring and fall, and supports nearly 80 percent of the waterfowl that overwinter in New Hampshire. And still other fields remain in grass, providing habitat for grassland-breeding birds like bobolink and meadowlark.

"Bellamy River WMA is a work in progress," notes Oehler. "Our goal is to provide a wide range of food and cover types to benefit an equally broad range of wildlife. We have the chance to really help New England cottontails in an area that's becoming increasingly developed, and where young forest is a hard-to-find and much-needed habitat."

What conservationists are doing at Bellamy River WMA has also spurred work that will benefit bunnies on neighboring properties. "Since New Hampshire Fish and Game has gotten the word out about what's going on at Bellamy, we've had a number of nearby landowners contact us to see how they can help, too," says Emma Carcagno, a wildlife specialist with the University of New Hampshire Cooperative Extension who advises people on how to improve their properties for wildlife. "It will take partnerships and cooperation such as this to help bring bunnies back from the brink."

How to Visit and Get Involved

Want to see what all this wildlife habitat management looks like? Bellamy River WMA has trails for hiking, cross-country skiing, and wildlife watching. Hunting and trapping are permitted (although not of New England cottontails, and trapping requires a special permit from New Hampshire Fish and Game). Click HERE for a map showing the main parking area at the Bellamy River WMA.

For more information and stories about New England cottontail restoration projects, please visit www.newenglandcottontail.org.

Landowners interested in managing their property for wildlife should contact Emma Carcagno, UNH Cooperative Extension, 603-862-2512, emma.carcagn@unh.edu.