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Importance of forbs and shrubs

An open structure at ground level also enables the seedbank (seed in the top few inches of soil) to germinate. Arising from the seedbank are plants such as ragweed, blackberry, partridge pea, beggar's-lice, pokeweed, native lespedezas and annual sunflowers. Forb cover is critical in making a field of nwsgr most attractive to wildlife. These plants provide an excellent canopy of brood-rearing cover for quail and wild turkeys; quality forage for deer, rabbits and groundhogs; and later produce seed and soft mast that is an important source of energy through summer and into fall and winter for many wildlife species. Scattered brush and small trees also can make a field of nwsgr and associated forbs more attractive to wildlife, particularly bobwhites and several species of songbirds. Bobwhites often use brushy cover as a "covey headquarters" during fall and winter. Indigo buntings, dickcissels, yellow-breasted chats, cardinals, prairie warblers, white-eyed vireos, eastern kingbirds and others use scattered clumps of shrubs and small trees for perching and nesting. Many of these shrubs and small trees also offer a valuable food source for many birds and mammals. Examples include American crabapple, wild plum, hawthorn, sumac, wild cherry, persimmon, elderberry, hazelnut, witchhazel, dogwoods, Carolina buckthorn, viburnums and devil's walkingstick.

Winter cover

Nwsgr provide quality cover during winter if the grasses are not previously bushhogged or otherwise destroyed. Fields of nwsgr are often magnets for rabbits, over-wintering songbirds and deer. This can be especially critical for small wildlife at a time when quality cover is at a premium. Tall nwsgr, such as big bluestem, indiangrass and switchgrass, are especially valuable as their stems "lodge" (remain somewhat upright, leaning against each other), continuing to provide cover even after winter rains, snow and wind. Deer seek out nwsgr fields on cold, clear days because they can remain hidden in the tall grasses, yet are able to absorb the sun's warm rays. In low-lying bottomlands that periodically flood in winter, fields of switchgrass (especially the Kanlow variety) can attract large numbers of ducks when shallowly flooded.

Courtesy of the University of Tennessee

More about fauna: The New England Cottontail is threatened by eastern cousin

'Sylvilagus Transitionalis'

Our island deer population is only exceeded by our rabbit population, but what is hopping across the road at dusk or eating our lettuce?

The New England cottontail, *sylvilagus transitionalis*, a look-alike that has crossed the border? The New England cottontail is in trouble, and part of the problem is his look-alike with better eyesight, the Eastern cottontail.

Disappearing rabbit trick

Why would a rabbit, the epitome of prolific breeding, be considered for protection under the Endangered Species Act? The New England cottontail is in just this predicament. Its population numbers are declining. As recently as 1960, New England cottontails were found east of the Hudson River in New York, across all of Connecticut, Rhode Island and Massachusetts, north to southern Vermont and New Hampshire, and into southern Maine. Today, this rabbit's range has shrunk by more than 75 percent. Its numbers are so greatly diminished that it can no longer be found in Vermont and has been reduced to only five smaller populations throughout its historic range.

Where the bunnies are

The New England cottontail prefers early successional forests, often called thickets, with thick and tangled vegetation. These young forests are generally less than 25 years old. Once large trees grow in a stand, the shrub layer tends to thin, creating habitat that the New England cottontail no longer finds suitable.

Active at dawn and at dusk or night, the New England cottontail feeds on grasses and plant leaves in spring and summer and eats bark and twigs in winter. Home ranges vary from one-half to 8 acres, with adult males having larger home ranges than females. Research has shown that New England cottontails on patches of habitat larger than 12 acres are healthier than those on patches less than 7 acres. Presumably, rabbits on small patches of habitat deplete their food supply sooner and have to eat lower quality food, or may need to search for food in areas where there is more risk of being killed by a predator.

Why are their numbers declining?

Biologists believe the reduced extent of thicket habitat is the primary reason for the decline in numbers and range of New England cottontails. Prior to European settlement, New England cottontails were probably found along river valleys where floods and beavers created the disturbances needed to generate its preferred habitat. Forest insect outbreaks, large storms like hurricanes and ice storms, and wild fire also cre-

ated disturbances in the forest that promoted thicket growth. During colonial times, much of the New England forest was cleared for agriculture and then subsequently abandoned during the early 1900s. This abandoned farmland allowed for a great deal of early successional habitats to develop.

Today, these habitats are aging while others have been developed and are no longer suitable for the New England cottontail. The introduction of exotic invasive species, such as multiflora rose, honeysuckle bush and autumn olive, in the last century has changed the type of habitat available to New England cottontails. These plants form the major component of many patches where cottontails can be found. It may be that stands dominated by non-native species do not provide rabbits with the food resources that native plant species do.

Today white-tailed deer are found in extremely high densities throughout the range of New England cottontails. Deer not only eat many of the same plants but also affect the structure and density of many understory plants that provide thicket for New England cottontails.



Introduced competitor

In the 1920s and 1930s, hunting clubs introduced another species of rabbit, the eastern cottontail, into New England. Eastern cottontails appear able to thrive in a greater variety of habitats than New

England cottontails through its ability to detect predators sooner. This helps Eastern cottontails forage more safely in relatively open cover, while New England cottontails risk predation whenever they leave the security of their dense thicket habitats. The slightly better ability to avoid predators enables Eastern cottontails to live in more diverse habitats, such as fields, farms and forest edges and they are gradually replacing New England cottontails in many habitat patches.

Identity is more than skin deep

It is nearly impossible to distinguish a New England cottontail from an eastern cottontail by looking at them. The minor differences of ear length, body mass, and presence or absence of a black spot between the ears and a black line on the front of each ear are subtle enough to be missed and are not 100 percent accurate. Scientists used to rely on examining the rabbits' skulls for positive identification, but can now use DNA analysis of fecal pellets. Since rabbits drop fecal material all around their territory, the extracted DNA from pellets collected throughout the region can provide a picture of where the New England cottontail is found.

Hopefully, the WHIP funded warm-season grass restoration program at the Parker farm will represent a first effort at creating a habitat supportive of our New England cottontail.

Courtesy of U.S. Fish and Wildlife

Long Family to Landscape Parker Property Parking Area

The Ronald E. Long Family has volunteered to create a new look for the public parking area at the Parker property.

According to Quentin Anthony, president of the Land Trust, the parking area on the west side of East Shore Road will be improved with an attractive cedar fence and plantings of mature native rhododendrons from the Kinney gardens in West Kingston. Working in conjunction with the Longs, Nick DiGiando of Atlantic Landscaping has volunteered to plant the specimens.

"The fence should go up this summer and the landscaping will be done in the fall when the success of transplanting is higher. The Longs' plan is a significant contribution to our efforts to improve the property and make it more accessible to the public," said Anthony.

Owen Long, who resides in the neighborhood of the Parker property, said "Our families have been giving thought to how we could provide additional support to the Land Trust. As we watched the clearing of the fields unfold this spring, we developed the plan to enhance the parking area to complement the Land Trust's effort. We hope the redesigned entrance will serve as an invitation to visit and enjoy this wonderful community asset."



Learn more at
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