Rabbit at Risk:  
Conserving the New England cottontail

Some find it hard to believe that a rabbit—emblematic for prolific breeding—could be at risk. But New England’s only native rabbit, the New England cottontail, faces threats that have reduced its range by 86 percent since the mid-20th century.

The New England cottontail is a candidate for protection under the Endangered Species Act and is listed as endangered in Maine and New Hampshire. Expanding populations of the non-native eastern cottontail compete with the native cottontail for resources. Additionally, suitable habitat has been lost to development, degraded by invasive plants, or matured into forested land, due to a lack of natural disturbances such as wildfire.

The U.S. Fish and Wildlife Service and its state, local and non-governmental partners are taking steps to develop a conservation plan to restore populations and increase cottontail habitat through conservation agreements, wildlife grants for conservation programs, management of Service-owned lands for the cottontail, and status reviews for updated species information.

The Service, state directors, the Natural Resources Conservation Service and Wildlife Management Institute have established New England cottontail executive and technical committees as part of the range-wide effort to share ideas, strategize, and implement conservation.

Management actions for this species will benefit other shrubland-dependent wildlife of conservation concern, including American woodcock, ruffed grouse, eastern towhee, yellow breasted chat and whip-poor-will.

What’s happening across the New England cottontail’s range?

Connecticut
- The Service and Connecticut Department of Environmental Protection are working closely to conduct surveys across the state to identify more populations, and are partnering with landowners to create and restore cottontail habitat.

Maine
- The Service, Environmental Defense Fund, Maine Department of Inland Fisheries and Wildlife, Natural Resources Conservation Service and the Wildlife Management Institute have partnered with the National Fish and Wildlife Foundation to fund a New England cottontail conservation coordinator to focus on habitat restoration, outreach and partnerships to promote young forest and shrublands. By spring 2011, more than 375 acres were under agreement to manage for cottontail.

Native shrub planting on Cutts Island, Maine
- The Service, University of New Hampshire, Maine Department of Inland Fisheries and Wildlife and other partners are investigating the relationships among landscape features, population fragmentation, and the structure and genetic diversity of remnant populations. This information will help identify the necessary actions for conservation.
The Service has prioritized areas for cottontail management, including Rachel Carson National Wildlife Refuge, and has four demonstration sites in Cape Elizabeth/Scarborough and Kittery. The refuge is actively managing lands to create additional shrubland and experimenting with artificial burrows for the cottontail.

### Massachusetts
- New England cottontails were confirmed on Mashpee National Wildlife Refuge on Cape Cod in 2006. The Service, the Mashpee Wampanoag Tribe and several other partners have expanded their efforts to include trapping and radio telemetry tracking of cottontails to guide habitat management. By spring 2011, 21 cottontails were trapped, genetically checked and radio collared in the Mashpee refuge vicinity.
- A 20-acre prescribed burn is scheduled for June 2011 on Mashpee National Wildlife Refuge to enhance and restore cottontail habitat. An additional 25 acres of cleared areas will help with prescribed fire implementation on the refuge.
- Cottontails bred in a captive breeding program at a zoo in Rhode Island may be released on Nomans Land Island National Wildlife Refuge near Martha’s Vineyard. The site will be evaluated in summer 2011 for its potential as a release site.
- The Massachusetts Military Reservation has implemented an active trapping and tracking project in conjunction with its prescribed fire program. This program promotes shrubland habitat suitable for the cottontail and other species and reintroduces fire to the landscape.
- The Wampanoag Tribe of Gay Head (Aquinnah) began survey efforts on tribal lands this year that included trapping and fecal pellet collection to determine if there are populations of cottontails. Survey efforts will continue next year.

### New Hampshire
- The Service and New Hampshire Fish and Game Department recently announced an agreement to conserve habitat for 50 years through partnerships with private landowners.
- The University of New Hampshire is working with the Service and many other partners across the cottontail’s range to facilitate monitoring for cottontails by exploring noninvasive genetic monitoring, specifically through pellet detection.
- The Service is working with partners to explore creating an outdoor captive rearing facility at Great Bay National Wildlife Refuge for the New Hampshire and Maine populations.

### New York
- The Service is partnering with New York Department of Environmental Conservation and Natural Resources Conservation Service to implement habitat conservation efforts in the Taconic region of the state.

### Rhode Island
- Carpentry students in Richmond’s Chariho High School built 50 traps that the Service will use next year. A Service biologist educated the students about the cottontail and led them on a field trip to observe trapping field work.
- The Service is working with multiple state wildlife agencies, the University of Rhode Island, the University of New Hampshire and Roger Williams Park Zoo in Providence to develop a pilot captive breeding program to produce cottontails for reintroduction to areas where the species has been extirpated or the population is dangerously low.
- Ninigret National Wildlife Refuge is constructing a pen for captive-bred cottontails. The pen will allow young rabbits to become acclimated to natural conditions in a predator-free environment. The refuge is designing an interpretive panel to educate visitors on cottontail conservation, habitat management and reintroduction efforts. Additionally, the refuge is exploring options for creating or enhancing habitat that benefits both the cottontail and migratory songbirds.
- The University of Rhode Island (URI) is conducting several cottontail-related research projects designed to provide science-based tools for high priority conservation efforts. Rhode Island and the Service have supported the engagement and training of URI students to search for sites where the species may still persist in Rhode Island.
- The Narragansett Tribe developed a Service tribal wildlife grant to survey for cottontails, conduct outreach activities and implement habitat management activities on tribal lands.
- Aquidneck Land Trust, Hopkinton Land Trust, Norman Bird Sanctuary, Audubon Society of Rhode Island, and The Nature Conservancy are planning conservation projects that will benefit the species.
- The Rhode Island Department of Environmental Management created demonstration sites at the Great Swamp Management Area to facilitate outreach with regard to habitat management for the cottontail.

The Partners for Fish and Wildlife Program and the Coastal Program are working with private landowners across the cottontail’s range to implement conservation on the ground. The National Wildlife Refuge System is also working with partners to manage and protect existing habitat, and is exploring the potential to expand refuges to protect important populations.

Each state in the cottontail’s range is working with the Service, U.S. Department of Agriculture-Natural Resources Conservation Service, and Wildlife Management Institute to develop several site-specific cottontail habitat management plans with willing landowners in high priority areas.

Conservation professionals continue to look for new avenues to preserve this species. Through the success of these efforts, the Service hopes to reverse the declining trend of cottontail populations and restore its range over New England and New York lands.

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![Image: Trapping rabbits at Aquidneck Land Trust, Rhode Island](image)