

Captive Breeding of the New England cottontail



Integrating policy, conservation planning and implementation to
conserve the New England Cottontail.

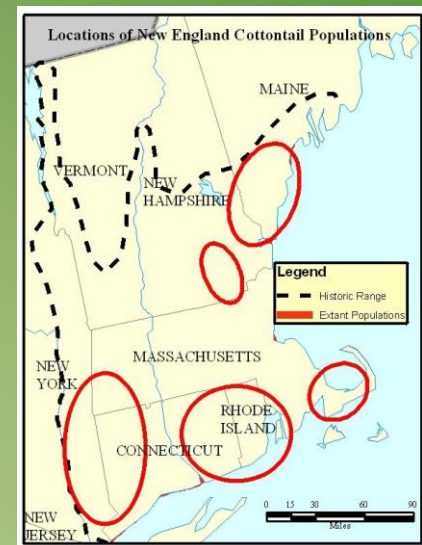
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Overview

- ✓ Justification for captive breeding.
- ✓ Value of working with American Zoological Association certified facility.
- ✓ Release methodology.
- ✓ Evaluating effectiveness.

Justification for Captive Breeding

- ✓ Habitat loss resulting in range contraction and fragmentation.
- ✓ Presence of vacant habitats, with no colonization potential.
- ✓ Critically low effective population size (e.g., NH and ME) in need of augmentation to combat demographic and genetic stochasticity (Fenderson *et al.* 2014).
- ✓ Translocation is not viable, because of a lack of robust source populations.



US Fish and Wildlife Service Policy and American Zoo and Aquarium Association (AZA)

Controlled Propagation Policy of the Fish and Wildlife Service
65 FR 56916

DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric
Administration
RIN 1018-AG25
Policy Regarding Controlled
Propagation of Species Listed Under
the Endangered Species Act
AGENCIES: Fish and Wildlife Service,
Interior; National Marine Fisheries
Service, Commerce.
ACTION: Notice of policy.

“This final policy encourages the Services, and others, to follow as may be practical, the protocols and standards of the AZA, and other appropriate organizations, for the **controlled propagation** of animal species.”

Step 1: Establish captive colony.

- ✓ Obtain animals.
- ✓ Perform physiological exam.
- ✓ Conduct genetic analysis to confirm species id. and gender.



Step 2: Conduct husbandry.

- ✓ Obtain animals.
- ✓ Perform physiological exam.
- ✓ Conduct genetic analysis to confirm species id. and gender.
- ✓ To mix populations or not?



Step 3: Conduct conservation planning.

- ✓ Identify suitable release sites.
- ✓ Establish source populations for translocation?
- ✓ Establish release protocols.



Two Release Sites

Seacoast NH- population augmentation.
Patience Island, Rhode Island –
reintroduction.

Step 4: Acclimate captive born animals prior to release.

- ✓ Transfer to acclimation pen.

Two Pens

- Great Bay NWR- Seacoast NH
- Ninigret NWR- Rhode Island



Step 4: Release.

- ✓ Transport to release sites.



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Step 4: Monitor response.

- ✓ Survival- through 2013, 100% in NH (n=8) and 40% for Patience Is. (n=25).
- ✓ Dispersal- most are staying put.
- ✓ Reproduction- samples collect, awaiting results.



More Information



**New England
Cottontail.org**

**Conservation Strategy
for the
New England Cottontail
(*Sylvilagus transitionalis*)**

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and
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with input from the

New England Cottontail Technical Committee

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Partners

Roger Williams Park Zoo

New Hampshire Fish and Game

Rhode Island Department Environmental
Management

Connecticut Department of Energy and
Environmental Protection

Maine Department of Inland Fisheries and Wildlife

Massachusetts Division of Fisheries and Wildlife

University of Rhode Island

University of New Hampshire

The Wildlife Management Institute

US Fish and Wildlife Service