

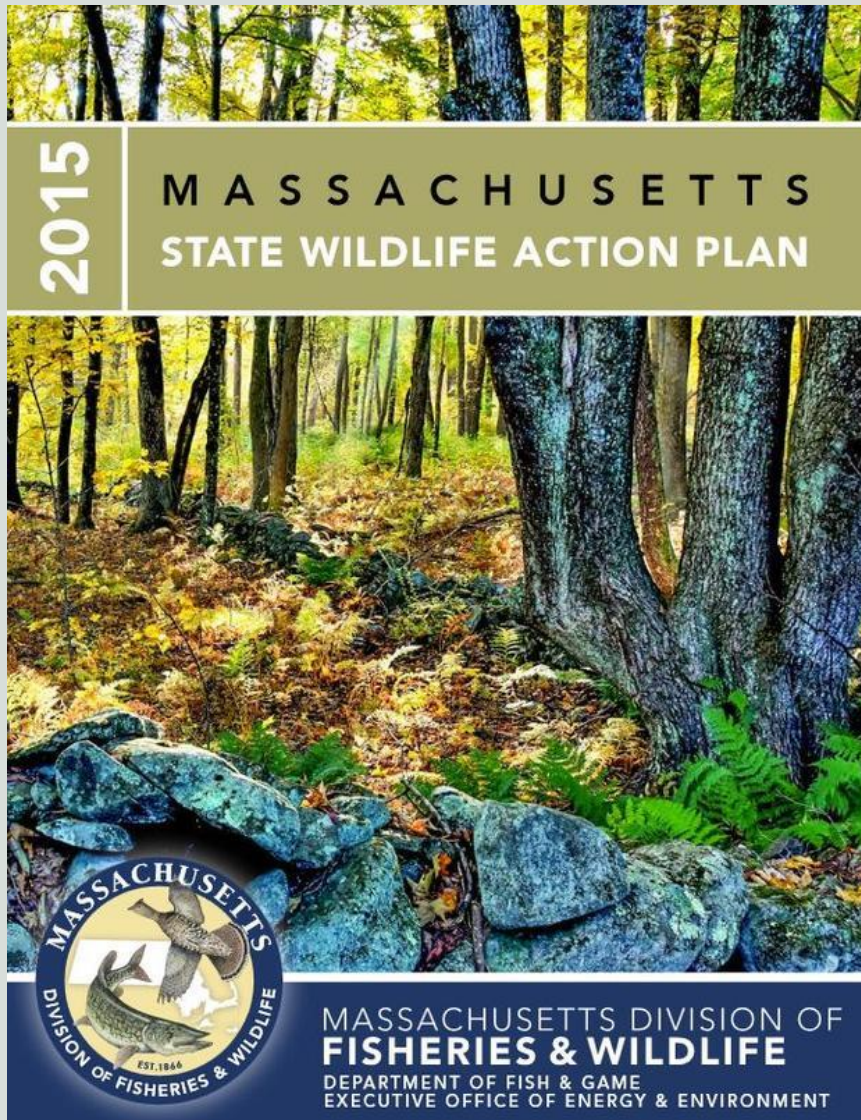


MASS**W**ILDLIFE

Dr. Everose Schlüter

Assistant Director

Natural Heritage and Endangered Species Program



Natural Heritage & Endangered Species Program (NHESP)

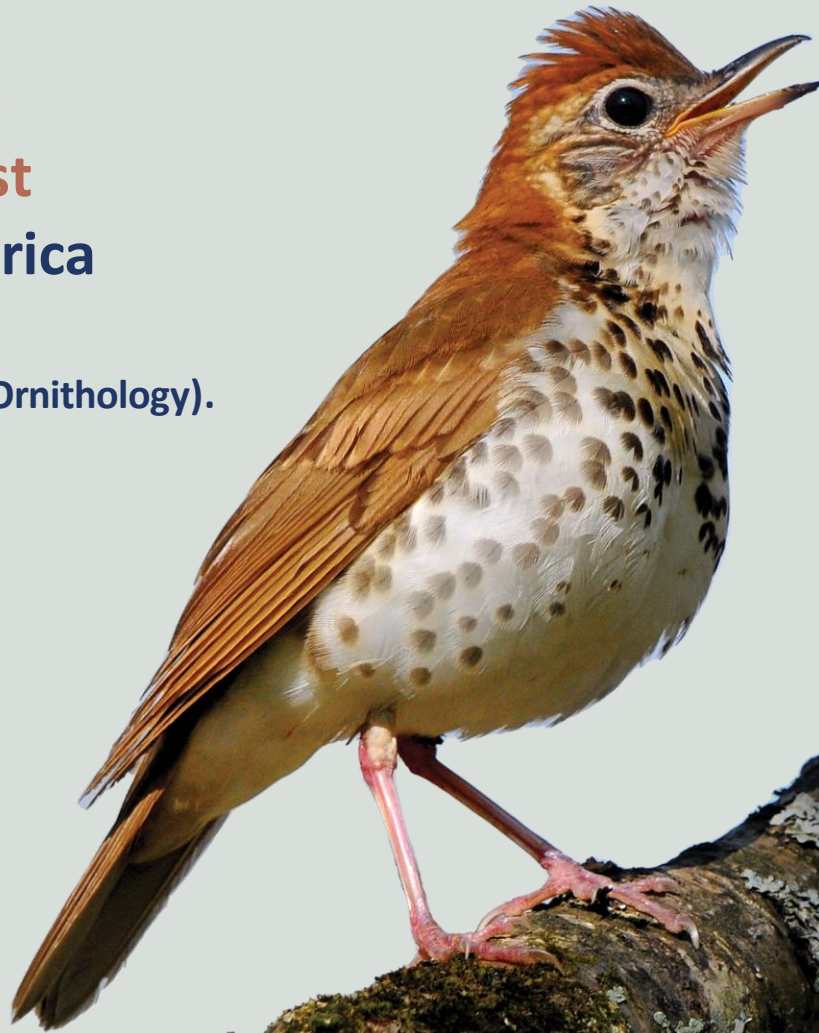
- Established 1978 - Part of MassWildlife since 1983
- Protection of the state's native biological diversity
- Highest priority: state-listed rare species

30 Staff

Information Management
Conservation Science
Regulatory Review

**3 billion birds
have been lost
in North America
since 1970.**

(The Cornell Lab of Ornithology).



**One third of species in
the U.S. are vulnerable
and one in five are at
high risk of extinction**

(National Wildlife Federation).

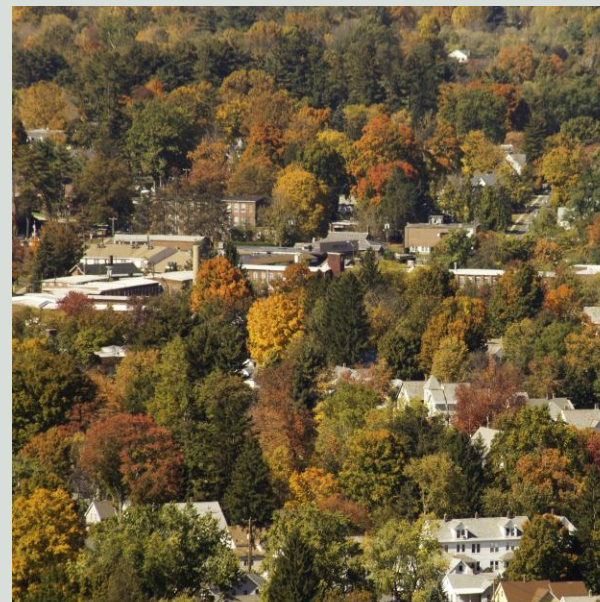
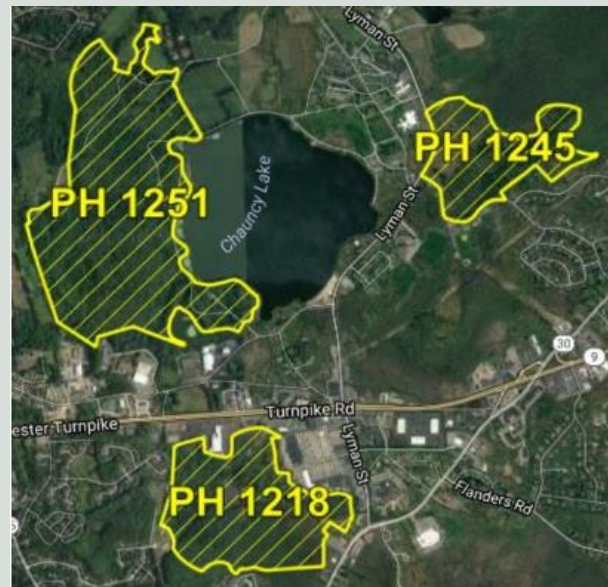


Proactive Conservation





Regulation





Outreach & Education



Species and Populations

Data, Data, Data!

- Tracking current & historic observations of state-listed species & watch-list species
- Maintaining information:
 - Natural communities
 - Certified vernal pools
- Database contains geographically-referenced records



MA Endangered Species Act (MESA)

M.G.L. c. 131A

Saltmarsh Sparrow
(*Ammodramus caudacutus*)



Eastern
Hognose
Snake
(*Heterodon
platirhinos*)

American
Chaffseed
(*Schwalbea
americana*)



American
Bumble Bee
(*Bombus
pennsylvanicus*)



Division of Fisheries and Wildlife Natural Heritage & Endangered Species Program

[STAFF LOGIN](#)

Welcome to MassWildlife's Heritage Hub!

Login or create an account to begin.

[LOGIN/REGISTER](#)

Overview of the Heritage Hub

MassWildlife's Heritage Hub is a reporting and filing system supporting the Natural Heritage & Endangered Species Program's (NHESP) core functions. The system allows citizen scientists, consultants, and researchers to report rare species, vernal pools, natural communities or survey efforts.

Coming Soon! The system will also provide an avenue to request species information or apply for MESA project reviews associated with development projects.

For more information, visit www.mass.gov/heritagehub

CONTACT

Heritage Hub Contact Information

Address

1 Rabbit Hill Road
Westborough, MA 01581

[directions](#)

Phone

(508) 389-6300

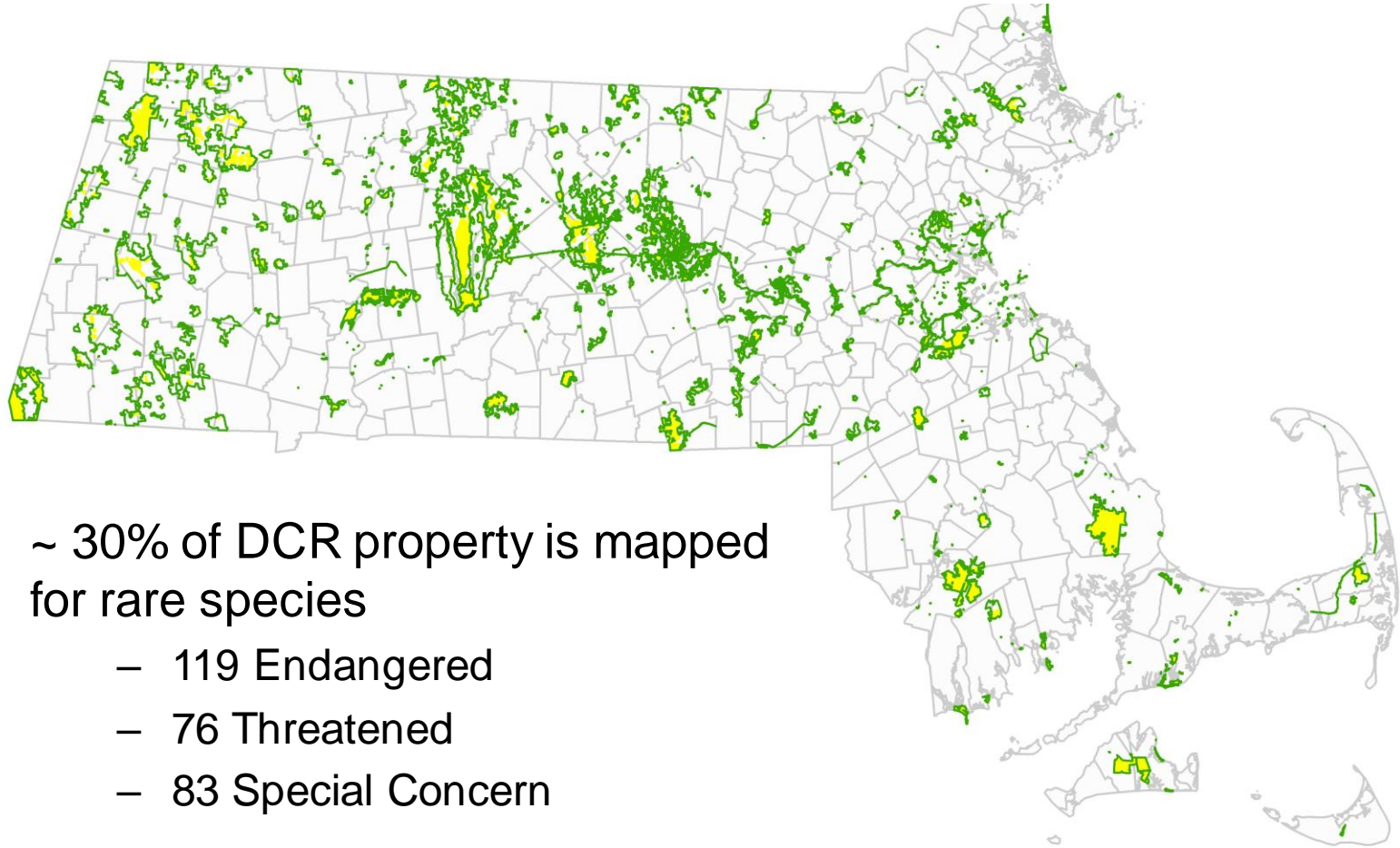
Online

HeritageHub@mass.gov

Species Monitoring and Population Assessments



Rare Species on DCR Properties



~ 30% of DCR property is mapped for rare species

- 119 Endangered
- 76 Threatened
- 83 Special Concern



DCR Properties NHESP Priority Habitats

0 12.5 25 50 Miles



Land Protection



Protecting our Investment in Public Land: Diverse Needs



Federally-listed Plant Restoration
Crane WMA, Falmouth



Prescribed Burn, Plymouth



Roseate Tern Habitat Restoration



Invasive Plant Control
Berkshires



Habitat Management on DCR properties

Working with Partners on the Ground



Regulation

Review projects & activities for impacts to rare species



- MA Endangered Species Act (MESA)
- MA Wetlands Protection Act (WPA)
- MA Environmental Policy Act (MEPA)
- MA Forest Cutting Practices Regulations

MA Endangered Species Act (MESA)

M.G.L. c. 131A

MESA Regulations - 321 CMR 10.00

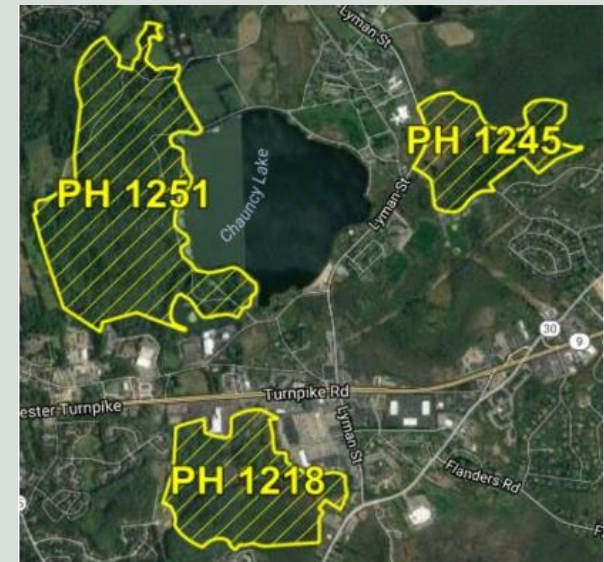
- **Prohibits “take”** - “means to ...harm, ... **kill**,...disrupt the nesting, breeding, feeding or migratory activity
Disruption of nesting, breeding, feeding or migratory activity may result from, but is not limited to, the modification, degradation or **destruction of Habitat.**”
- Defines “Priority Habitat” and Outlines Delineation Process

Wood Turtle
(*Glyptemys insculpta*)
Special Concern



What does it mean if a property is in Priority Habitat?

- Priority Habitat is a “screening tool”
- Unless otherwise exempt, projects and activities need to be reviewed by NHESP
- Average of 1800 project reviews per year
- Most projects do not result in “take”



NHESP Review & Consultation

DCR Management Plans

- Resource Management Plans (RMPs)
- Trails and Biodiversity Conservation
- Facility Operation & Maintenance Plans
 - Beaches, campgrounds and parks
- Habitat Management Plans
 - Invasive management, turtle nesting creation, field maintenance, prescribed fire

Recreational Trail Maintenance and Biodiversity Conservation: 2022 Update



Trail in Miles Standish State Forest, photo by Michael W. Nelson, NHESP

Prepared by
**Natural Heritage
& Endangered Species
Program**
Massachusetts Division of Fisheries & Wildlife

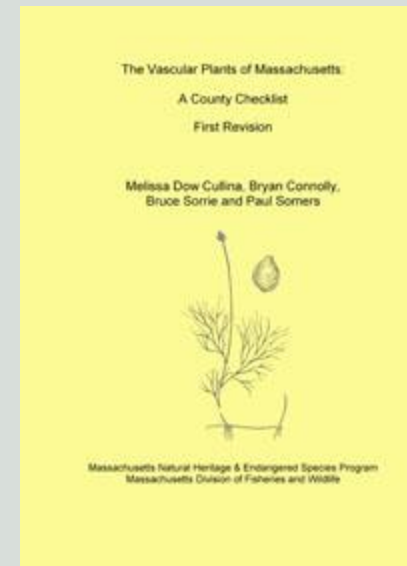
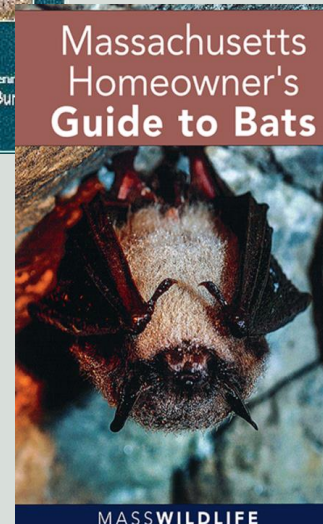
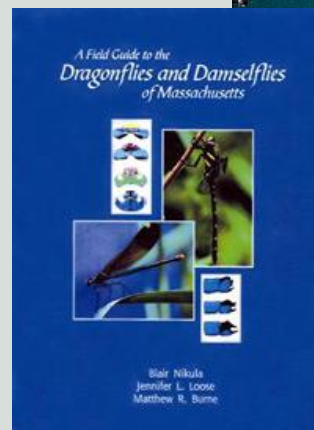
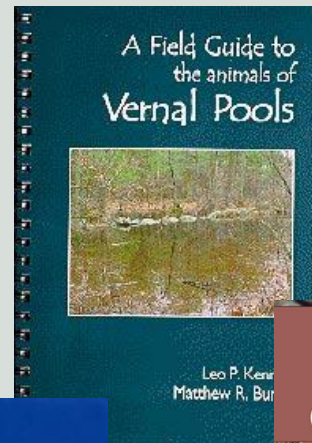
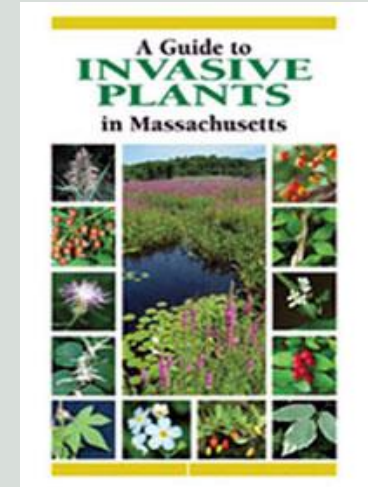
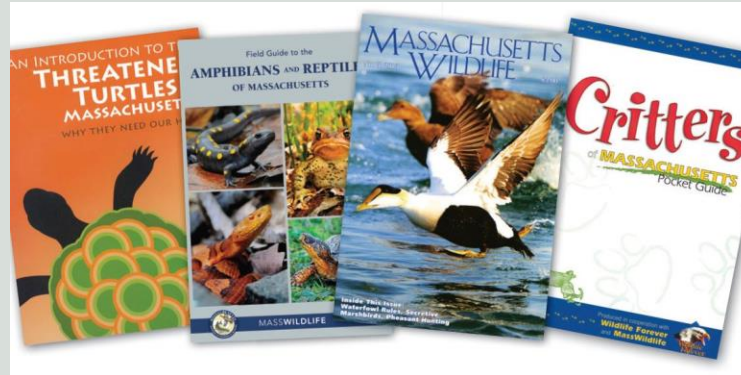
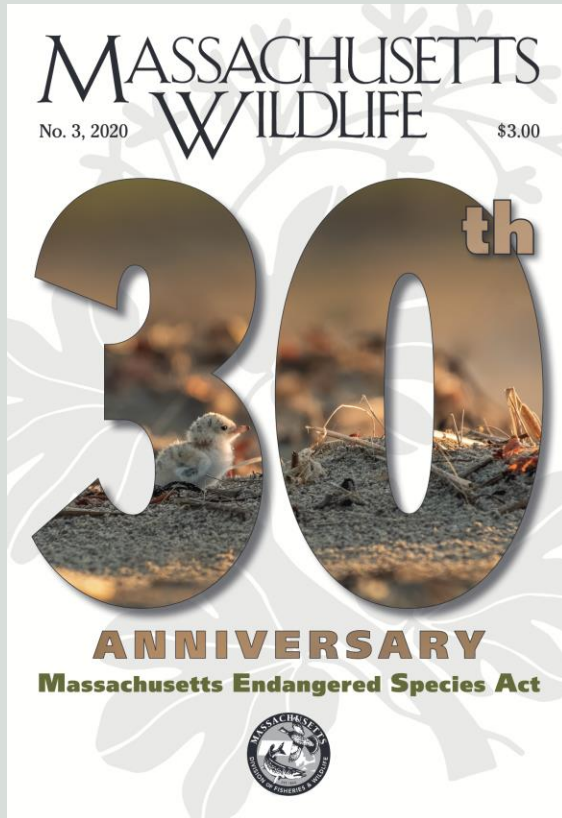
for
Massachusetts Department of Conservation and
Recreation

July 8, 2022

Information contained in this report is intended for use by Massachusetts state agencies within the Executive Office of Energy and Environmental Affairs. Due to the sensitivity of rare species locality information, this report is **not intended for broader distribution**.

*** Responsibilities of State
Agencies
321 CMR 10.05**

Outreach & Education



BIOMAP

The Future of Conservation in Massachusetts



[Mass.gov/biomap](https://mass.gov/biomap)

Outreach & Collaboration with DCR



The Dynamic Forest

Manuel F. Correllus State Forest



The forest around you is always changing. These changes include natural disturbances, human-made disturbances, and forest succession which is the natural life cycle of a forest. What changes do you think you will see at this forest over time?

Invaders Threaten Forest Health

The forest changes after invasive insect infestations. Invasive spruce bark beetles have killed many trees in this forest. Tree diseases just like you. Tree diseases have wiped out species like the American chestnut.

Invasive plants overtake the forest, pushing out native species and damaging wildlife habitats. Clean your shoes, pets, and bikes to prevent spreading seeds from one area to the next.

Restoring Natural Ecosystems

Wildfires occurred here regularly, killing vegetation and exposing sandy soil. Today, prescribed burns have the same ecological effects.

Forest management includes manual cutting of trees. In the past plantations of timber species were planted here, eliminating biodiversity. Cutting back the plantations allows native species to flourish.

Fire breaks reduce the risk of catastrophic wildfires. Regular cutting and mowing along the fire breaks help maintain the fire breaks and provides edge habitat, vital to rare species. Please use designated trails to protect these species.

Nature's Fury Changes the Forest

The island's forests are especially susceptible to wind damage from Nor'easters, fierce storms that can happen any time of year.

Forests are affected by climate change. Increased carbon dioxide levels, rising temperatures, and changes in precipitation affect many species.

Conservation and Recreation: A Balancing Act

You may encounter newly closed or open trails due to active trail management. Please stay on approved trails.

Regular mowing helps retain fields and edge habitat important to pollinators like bees and butterflies.

Image of spruce bark beetle killing spruce courtesy of USDA Forest Service.

Shorebird Protection Program

Please help us protect a very special bird

The fences you may find on the beach have been set up to protect one of America's most threatened shorebird species—the Piping Plover. Along the Atlantic coast, from Canada to North Carolina, these small, hard-to-spot birds are nesting and raising their families during peak beach season.

Por favor ayudanos a proteger a ave muy especial

Las cercas que puede encontrar en la playa se han establecido para proteger a una de las especies de aves más amenazadas de Estados Unidos: el Piping Plover.

A lo largo de la costa atlántica, desde Canadá hasta Carolina del Norte, estas aves pequeñas y difíciles de observar están anidando y criando a sus familias durante la temporada alta de playa.

It's your beach too

Plovers will be on the beach from the time they arrive in the spring until their chicks take flight in the summer. Scientists will remove the fences when the young birds are ready to fly.

Es tu playa tambien

Los chorlitos estarán en la playa desde el momento en que llegan en la primavera hasta que los polluelos vuelan en el verano. Los científicos eliminarán las vallas cuando las aves jóvenes estén listas para volar.

Where are they?

You may not see them—they match the color of the sand and are quite hard to spot—but they are here.

¿Dónde están?

Los chorlitos estarán en la playa desde el momento en que llegan en la primavera hasta que sus polluelos vuelan en el verano. Los científicos eliminarán las vallas cuando las aves jóvenes estén listas para volar.



The Piping Plover
Breeding adult

You can help!

- Give them space.
- Monitor children and pets.
- Note that trash attracts predators, and please don't feed the birds.
- Federal and state laws make it illegal to harm or harass these very special birds.

¡Puedes ayudar!

- Dale espacio.
- Vigila a los niños y mascotas.
- Tenga en cuenta que la basura atrae a los depredadores y no alimente a las gaviotas.
- Las leyes federales y estatales hacen que sea ilegal dañar o acosar a estas aves muy especiales.



Birds pair up in the spring.



The eggs (usually four) are laid in a depression in the sand.



It takes about 30 days before the chicks are ready to fly.



2 to 3 inches long





Questions?