



# Landowner 101: Promoting Wildlife Around You

Joseph Roy—Private Lands Wildlife Biologist



Joseph Roy  
Maine Dept. of Inland Fisheries  
and Wildlife  
284 State Street  
41 State House Station  
Augusta, ME 04333  
207-592-3344  
[joseph.roy@maine.gov](mailto:joseph.roy@maine.gov)  
[www.beginningwithhabitat.gov](http://www.beginningwithhabitat.gov)



# The Maine Department of Inland Fisheries and Wildlife (MDIFW)



Conserve, protect and enhance fish and wildlife resources



Maine.gov Agencies | Online Services | Help | Search.Maine.gov

## MAINE DEPARTMENT OF Inland Fisheries & Wildlife

Select Language  
News | Forms | Contact Us | Sitemap  
Search MDIFW  
SEARCH

- About
- Hunting & Trapping
- Fishing & Boating
- ATV & Snowmobile
- Game Wardens
- Maine Wildlife Park
- Programs & Resources
- News & Events



- Municipalities
- Land Trusts
- Landowners
- About
- Maps
- Conservation Library
- Contact

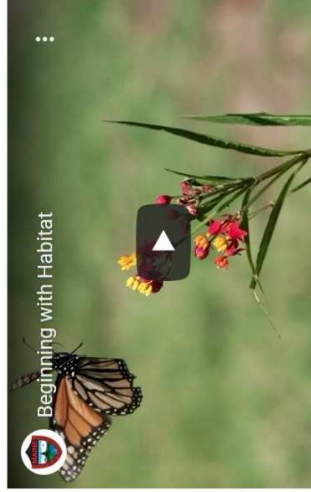
### It all Begins with Habitat.

Beginning with Habitat (BwH) helps Maine municipalities, landowners, and land trusts build habitat conservation into their long-term plans.

The program was created in 2000 to collect, connect, and consolidate the wealth of habitat information being produced by separate federal, state, and local agencies as well as non-governmental organizations.

From our office within the Maine Department of Inland Fisheries and Wildlife, we create comprehensive packages for each Maine municipality which include multi-layer maps, information about native habitats, and localized conservation strategies. We also provide technical assistance to help planners, land trusts, and private developers put the data to use.

Ultimately, this empowers decision-makers to guide growth in such a way that 50 years from now Maine's quality of place, including fishing, hunting, wildlife watching, and outdoor recreation – and all the economic activity it brings to our state – will endure.



- [Find a Map](#)
- [Learn about Maine's Wildlife Legacy](#)
- [Request a Presentation](#)





# What is wildlife?

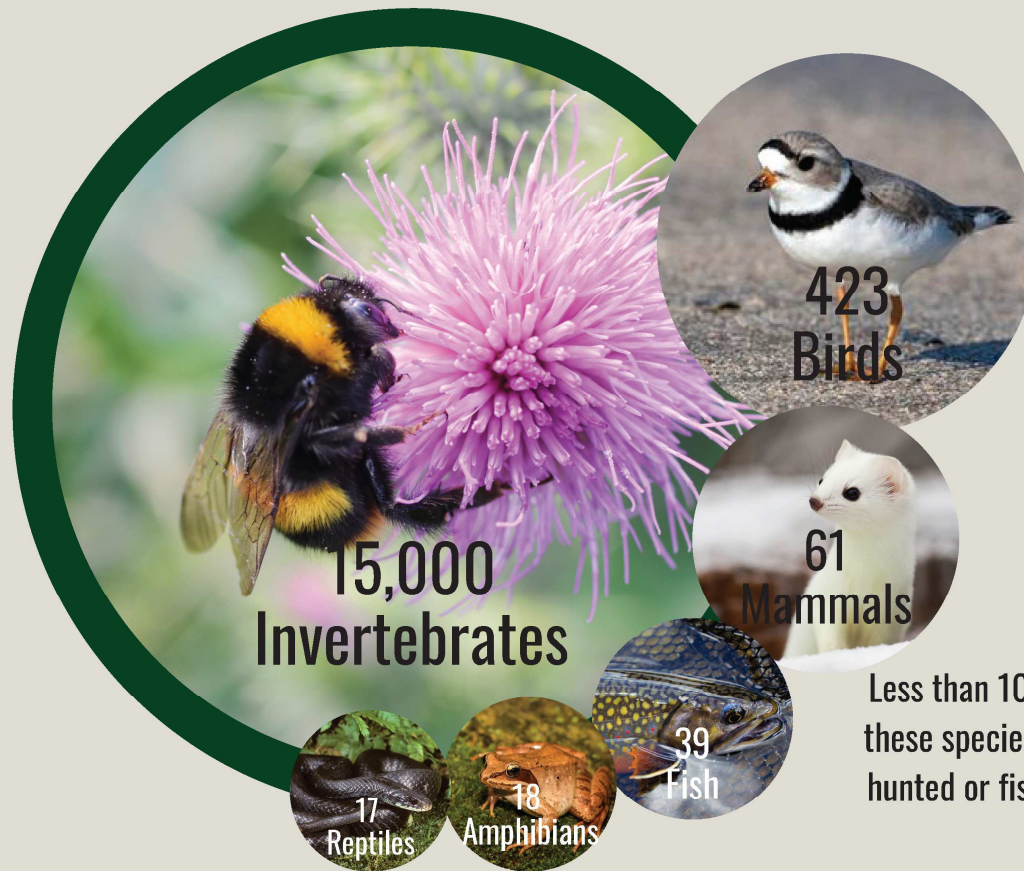
- The non-domesticated animal species that occur on the landscape
- Mammals
- Reptiles / Amphibians
- Birds
- Insects





# How Many 'Inland' Fish and Wildlife Species are in Maine?

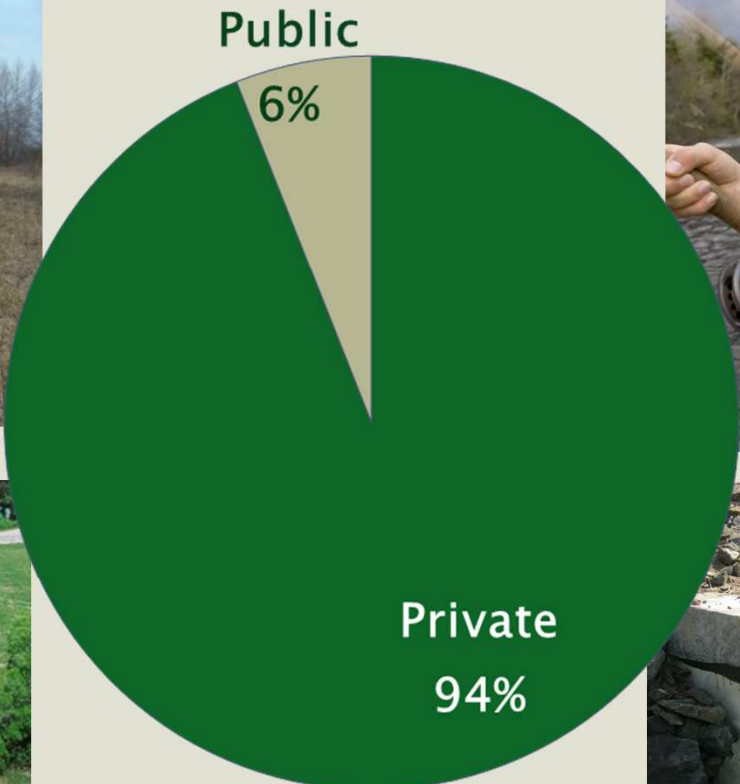
How Many 'Inland' Fish and Wildlife Species are in Maine?



Less than 100 of these species are hunted or fished.



# Wildlife Belongs to Everyone







# What is Habitat?

- An area that provides an organisms with all the necessary requirements to survive





## 4 principals of habitat

- Space
- Food
- Cover/shelter
- Water



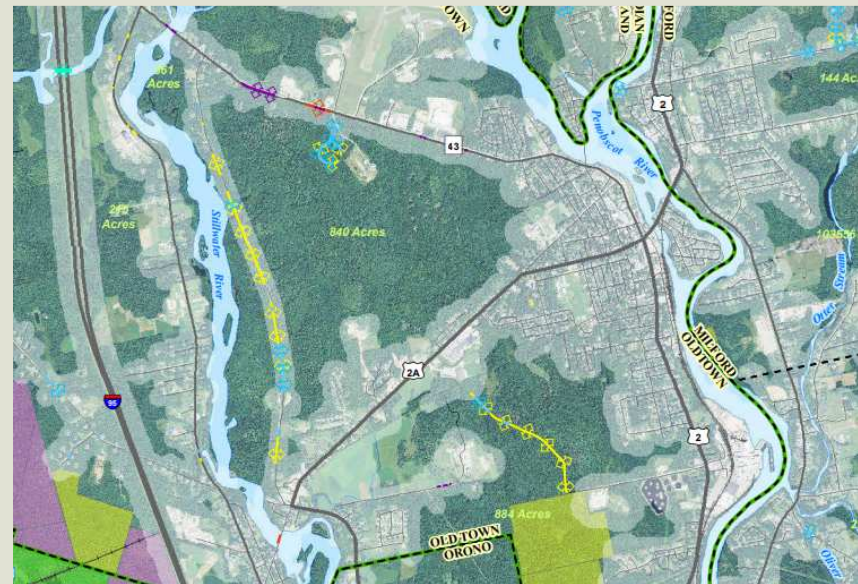
# Space





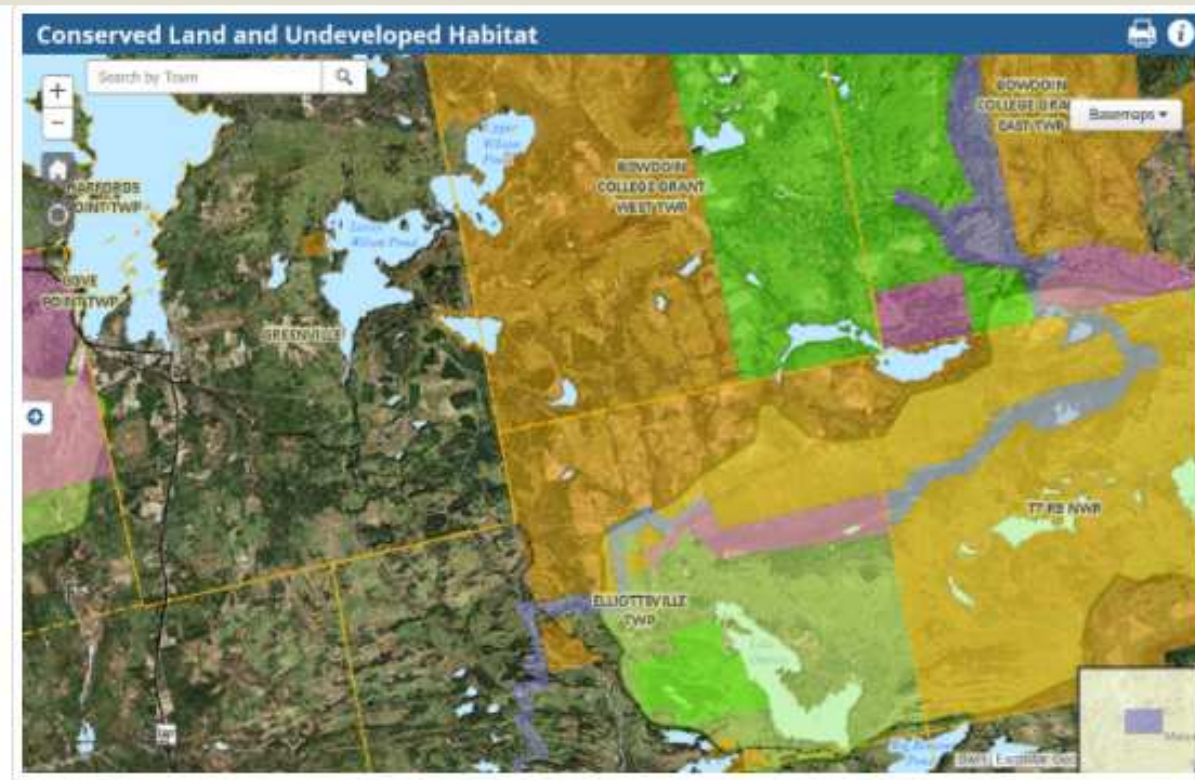
# What can you do?

- Determine the amount of space you have
- Consider partnering with neighbors
- Determine the special needs of the species you desire
- Determine what species home range fits within your manageable space
- Utilize beginning with habitat tools to view maps





# Beginning with habitat undeveloped habitat maps



Map 3- Conserved Land and Undeveloped Habitat

Beginning with Habitat Map 3 depicts the State of Maine's conserved lands database including lands in federal, state, and nonprofit ownership.

[Open Viewer](#)

# Habitat Block Size Requirements for Wildlife in Maine: UNDEVELOPED

RACCOON

HARE

COYOTE

SMALL RODENT

PORCUPINE

BOBCAT

COTTONTAIL

BEAVER

BLACK BEAR

SQUIRREL

WEASEL

MINK

FISHER

WOODCHUCK

DEER

MUSKRAT

MOOSE

RED FOX

SONGBIRDS

SHARP-SHINNED HAWK

BALD EAGLE

SKUNK

COOPER'S HAWK

HARRIER

BROAD-WINGED HAWK

GOSHAWK

KESTREL

RED-TAIL HAWK

HORNED OWL

RAVEN

BARRED OWL

OSPREY

TURKEY VULTURE

TURKEY

MOST REPTILES

GARTER SNAKE

RING-NECK SNAKE

MOST AMPHIBIANS

WOOD FROG



# Habitat Block Size Requirements for Wildlife in Maine: 100 –499 ACRES

RACCOON

HARE

SMALL RODENT

PORCUPINE

COTTONTAIL

BEAVER

SQUIRREL

WEASEL

MINK

WOODCHUCK

DEER

MUSKRAT

RED FOX

SONGBIRDS

SHARP-SHINNED HAWK

SKUNK

COOPER'S HAWK

HARRIER

BROAD-WINGED HAWK

KESTREL

HORNED OWL

BARRED OWL

OSPREY

TURKEY VULTURE

TURKEY

MOST REPTILES

GARTER SNAKE

RING-NECK SNAKE

MOST AMPHIBIANS

WOOD FROG



# Habitat Block Size Requirements for Wildlife in Maine: 1-19 ACRES

RACCOON

SMALL RODENT

COTTONTAIL

SQUIRREL

MUSKRAT

RED FOX

SONGBIRDS

SKUNK

MOST REPTILES

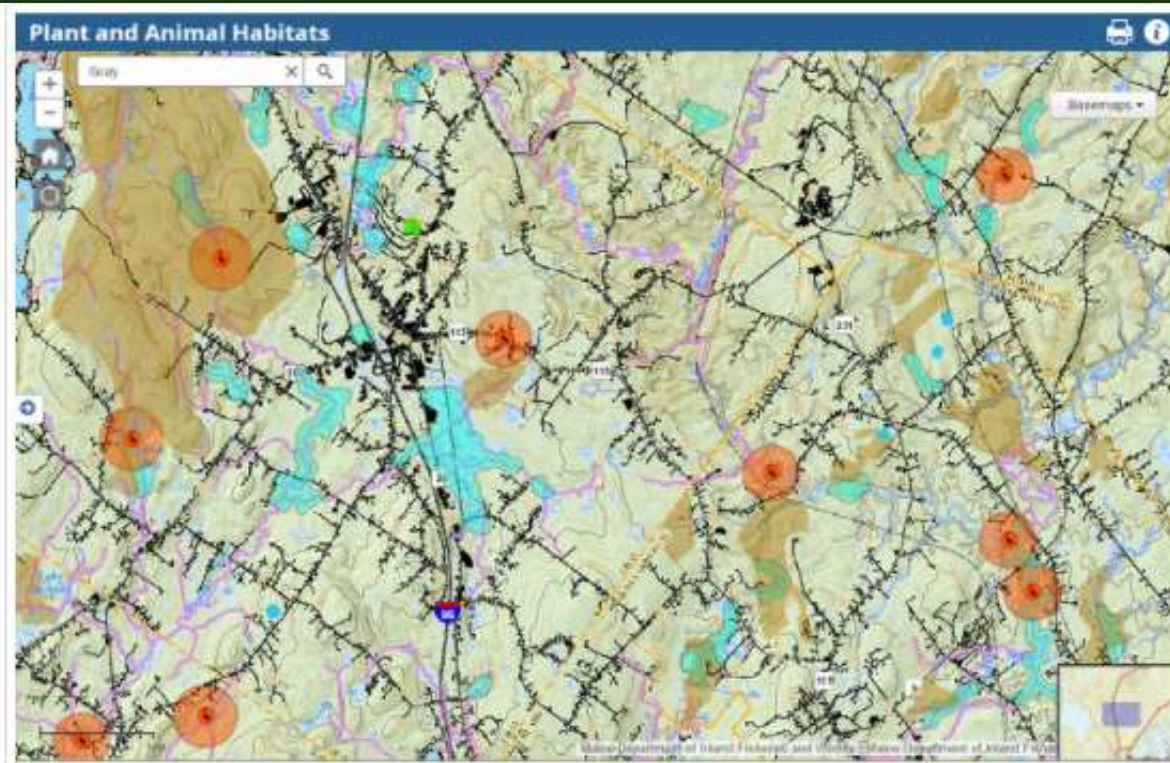
MOST AMPHIBIANS







# Use Beginning with Habitat Maps



Map 2- Plant and Animal Habitats

Beginning with Habitat Map 2 depicts known rare, threatened, or endangered plant and animal occurrences, as well as "Significant Wildlife Habitat," "Essential Wildlife Habitat," and other important wildlife habitats.

[Open Viewer](#)



## What can you do?

- Understand the size of your parcel
- Work to keep the parcel intact to provide larger areas for habitat
- Work with your neighbors

# Food





# Types of Food –Mast

## Hard Mast

- Acorns
- Beechnuts
- Beaked hazelnuts
- Seeds



## Soft mast

- Apples
- Raspberries
- Blueberries
- Strawberries
- Winterberries
- Viburnum berries





## Types of Food – Herbaceous browse

- Grasses
- Sedges
- Rushes
- Agricultural crops





# Types of Food-Pollen Sources

- Wildflowers
  - Goldenrods
  - Asters
- Annuals
- Perennials
- Clover





## Types of Food– Other

- Insects
- Small mammals
- Aquatic foods
  - Amphibian eggs
  - Tadpoles
  - Fish
  - Mussels/clams
  - Wetland plants



# Bird feeders





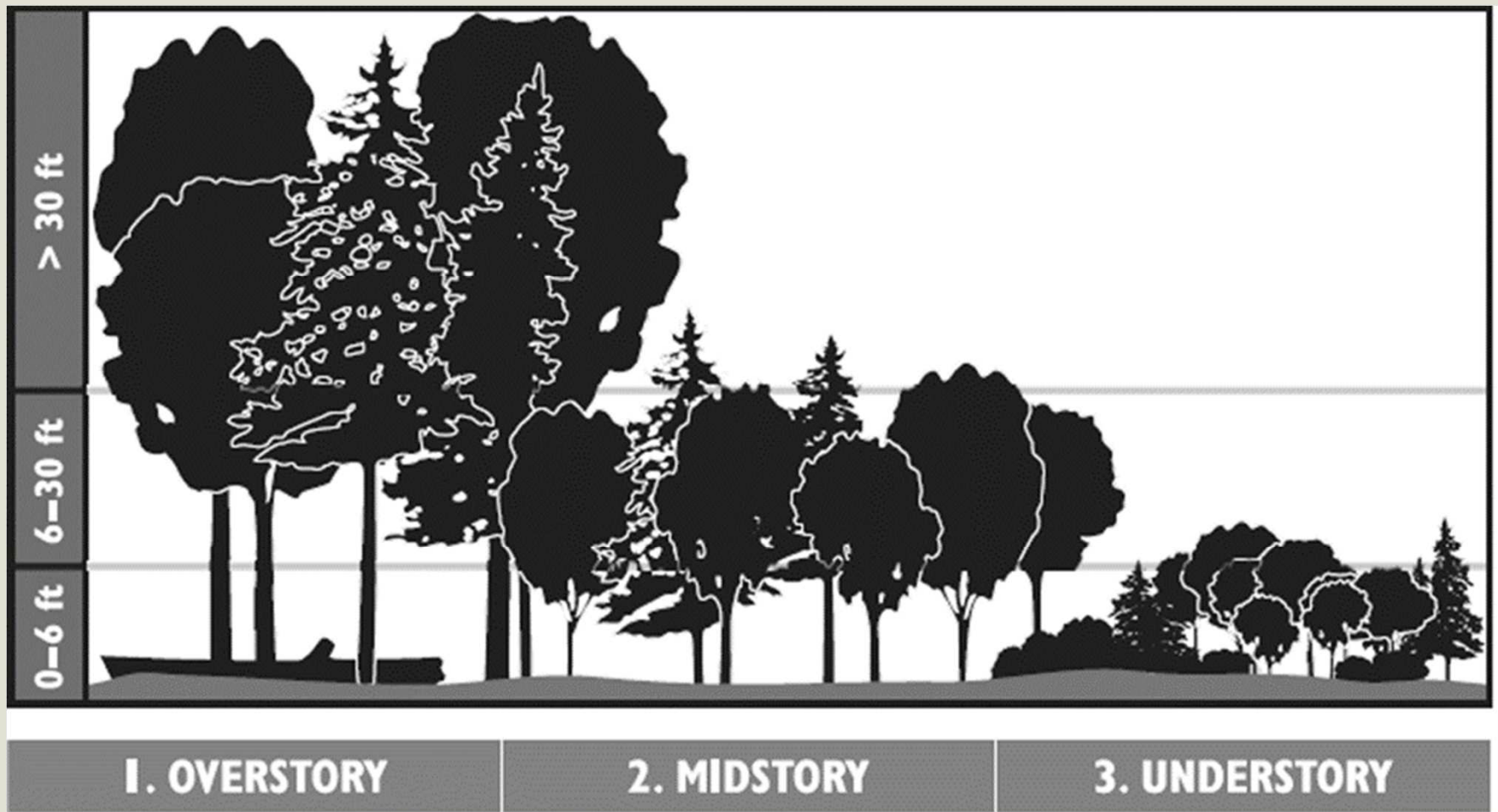


## What can you do?

- Maintain current food sources
- Promote the natural production of hard and soft mast
- Maintain open space and herbaceous areas
- Promote wildflowers and pollinator gardens
- Plant natural food sources



# Cover





# Overstory

- Forest canopy, 30+ feet tall
- Provides perching opportunities
- Provided nesting opportunities
- Hard mast (such as acorns and beechnuts) is produced in the overstory
- Maintaining an overstory is important for wildlife and for providing “seed trees” for the future
- Standing dead trees provide cover, food, and nesting locations





## Mid story

- 6–30 feet tall
- Provides nesting opportunity for a variety of species
- Contributes to the production of hard mast, soft mast, and other forage opportunities
- Provides trees for the next generation of overstory trees
- Standing dead trees provide cover, food, and nesting locations





# Understory

- 0–6 feet tall
- Consists of shrubs and small trees and saplings
- Provides nesting habitat for a variety of species
- Downed wood (also known as coarse woody material) provides perching, hiding, and drumming locations for birds
- Provides cover for small mammals and amphibians
- Brush piles, natural and artificial, provide cover habitat for insects and cover for birds and small mammals
- Leaf litter and forest debris provide cover and forage opportunities for small mammals and amphibians



# Brush piles and woody debris



# Standing dead trees





## What can you do?

- Maintain diverse age structure
- Retain standing dead trees
- Retain forest debris like twigs, sticks and leaf litter
  - delay lawn maintenance
- Create brush piles
- Delay mowing
- Provide bird, bat, and pollinator boxes to increase nesting and roosting opportunities



# Water





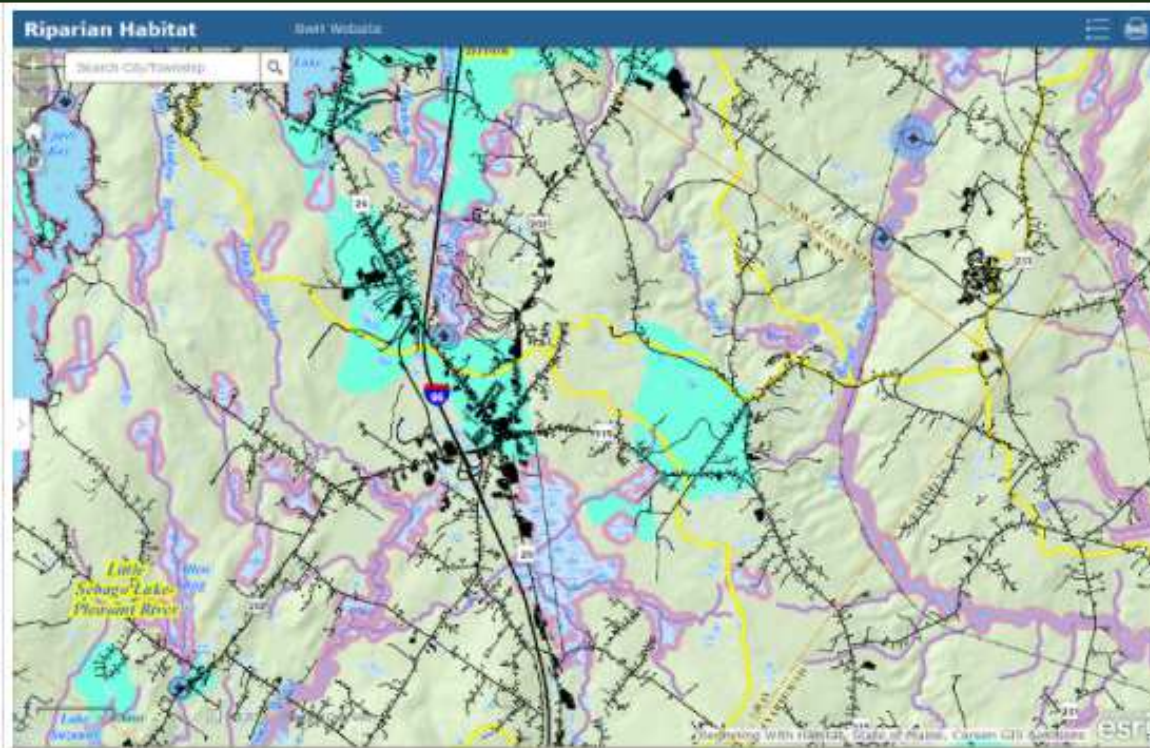
# Water sources

- Lakes & Ponds
- Rivers & Streams
- Bays & Oceans
- Coastal Wetlands & Saltmarshes
- Freshwater wetlands
- Vernal pools





# Riparian Habitat



Map 1- Riparian Habitats

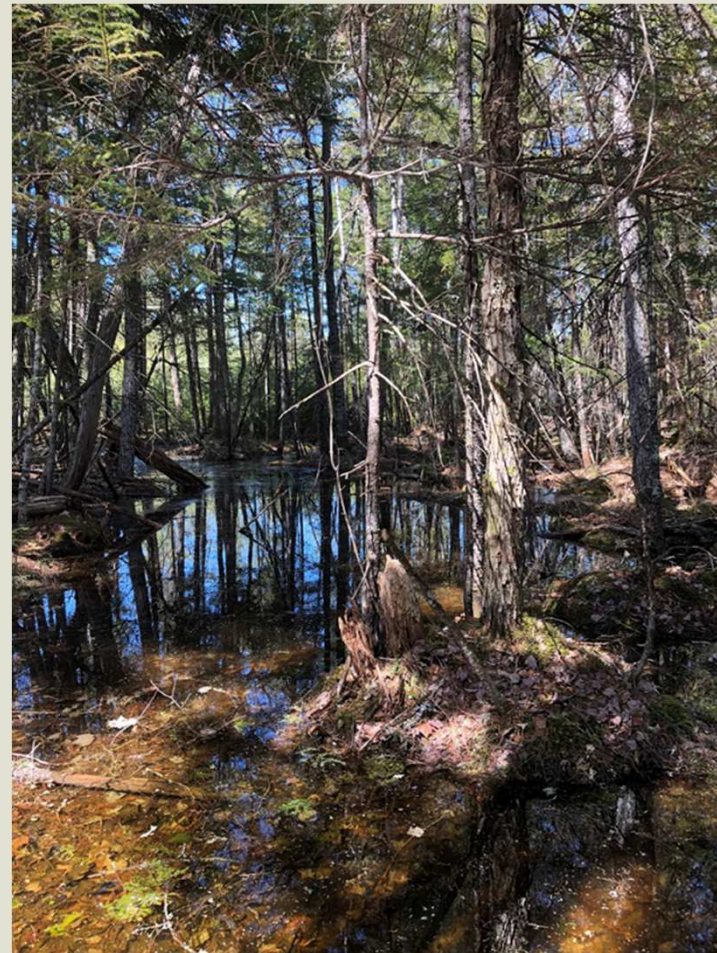
Beginning with Habitat Map 1 depicts major surface water features and drainage areas, associated shoreline habitats and riparian zones, and aquifers and wells that supply public drinking water.

[Open Viewer](#)



# Vernal pools

- Temporary hydroperiod
- Small
- Forested
- Fishless
- Provide breeding habitat





# Vernal pools



# Vernal pools





## What can you do?

- Determine what water resources you have on site
- Make sure that anthropogenic sources aren't blocking or filling your water sources
  - Undersized culverts
  - Perched culverts
  - Clogged culverts
  - Erosion
  - Garbage/debris
- Maintain a healthy vegetated buffer around your water sources

# Invasive species







## What can you do?

- Learn about the different invasive species
- Survey your property for invasive species
- Review guidance resources
- Contact your soil and water conservation district
  - They may have resources available
- Develop an invasive species management plan
- Remove invasive species



## Make it sustainable

- Learn about Maine's Current Land Use Tax Programs
- Explore conservation options with your local land trust

Questions?

