



Welcome everyone, thank you for coming. My name is \_\_\_\_\_. I'm with *Speaking for Wildlife*, a wildlife volunteer program run by the University of New Hampshire Cooperative Extension. *Speaking for Wildlife* is a program that brings wildlife presentations and nature walks to communities throughout the state.

In today's *Speaking for Wildlife* presentation, I'll be talking to you about wildlife in New Hampshire. Specifically, I'll be going through about a dozen species of wildlife that are relatively common throughout the state. I'll tell you a little bit about each animal and its habitat.

Our hope is that if people understand more about these common species and the habitats they need to survive, these animals will remain plentiful, and that generations of New Hampshire residents will be able to enjoy them for years to come.

I'll talk for about 35 minutes, and then we'll have some time for questions at the end. But if you have questions about the slides I'm showing, feel free to raise your hand during the presentation.

# What is Habitat?

**Food**



**Cover**



**Water**



-First we'll talk briefly about wildlife habitat. What is wildlife habitat? (Ask people directly and see if they want to answer! They might not...)

-[ADVANCE SLIDE 3 times]

-Wildlife habitat is simply the place where a certain species of wildlife can find food, cover, and water.

-Each animal has its own set of requirements. Some species use only one very specific habitat, while other species can use many different habitats.

(Presenter's Note: Habitat also includes the component of 'space' – but, this is hard to manage for or create, so we often address just the first three components)

# What is Habitat?



- Wetlands
- Open Habitats
- Forested Habitats

-For the purposes of this talk, I'm going to focus on three very general habitat types that you can find all over New Hampshire, including here in \_\_\_\_\_  
[INSERT NAME OF TOWN]: (ADVANCE SLIDE)

-Wetlands, which might include ponds, marshes, or streams.  
(ADVANCE SLIDE)

-Open Habitats (where there aren't a lot of trees), such as fields and shrubby thickets (ADVANCE SLIDE)

-And Forested Habitats

-As I go through these dozen common wildlife species, I'll tell you a little bit about the habitat used by each one.

## Redback Salamander



First, we have a salamander... has anyone ever found one of these? Do you know what it is? (ADVANCE SLIDE)

-This is a redback salamander

-Redback salamanders are small (2.5-4 inches) and are extremely common in New Hampshire.

-They are so abundant that the weight of all the redback salamanders put together is more than that of breeding birds and small mammals combined! (in Northeast forests)

-(Ask the group) If you've found one of these salamanders, where was it? (answer: under logs, rocks, etc)



- Sometimes we think of salamanders as living in wetlands
- BUT redback salamanders spend their entire lives out of water in the forest
- They are able to survive in the forest by staying in the dampest parts of the woods... under logs and stumps on the forest floor. We call this “coarse woody material” and it can be an important component of a forest habitat for wildlife.
- Turn over a few logs in any forest, especially in the spring and fall, and you are sure to find a redback salamander!
- Those logs are full of life! Don't clean up your woods!!

## Wood Frog



-Next we have another amphibian, but this time it's a frog... does anyone know this what species this is? (ADVANCE SLIDE)

-This is a wood frog, you can tell by the dark mask it wears on its face (below/behind eye – ADVANCE SLIDE and point on photo)

-Wood frogs, like redback salamanders, spend more time in the forest than you might think!

-They spend almost the entire year in the forest, usually in wetter areas, eating bugs on the forest floor.

-But in the spring they migrate to unique wetlands called vernal pools



-Vernal pools are small wetlands in the forest that usually dry up during the summer

-And because these wetlands dry up, they don't have fish in them

-This makes them ideal places for wood frogs to breed, because there are no fish to eat their tadpoles or eggs

-So, wood frogs travel to breed in these wetlands every spring, on the first rainy evening when the temperature is just above 40 degrees – it's very predictable (you'll also find some types of salamanders migrating at the same time)

-Wood frogs have a unique call that sounds like a whole gaggle of ducks quacking in the forest

-The adults lay their eggs in the vernal pool (ADVANCE SLIDE), tadpoles emerge from the eggs a few weeks later, and by the time the pool dries later in the summer, the tadpoles have become young frogs that head into the forest to spend the winter.

-So if you notice a vernal pool in the forest, be sure to check it out in early spring to see or hear these unique frogs in action

## Painted Turtle



- Anyone know what kind of turtle this is? (ADVANCE SLIDE)
- It's a painted turtle, one of the most common turtles in New Hampshire.
- You can tell it's a painted turtle because it looks like it's face has been painted with colorful stripes.





-Painted turtles spend most of their time in wetlands. You can find them in many different kinds of wetlands, including slow-moving lakes, ponds or rivers like the one shown here.

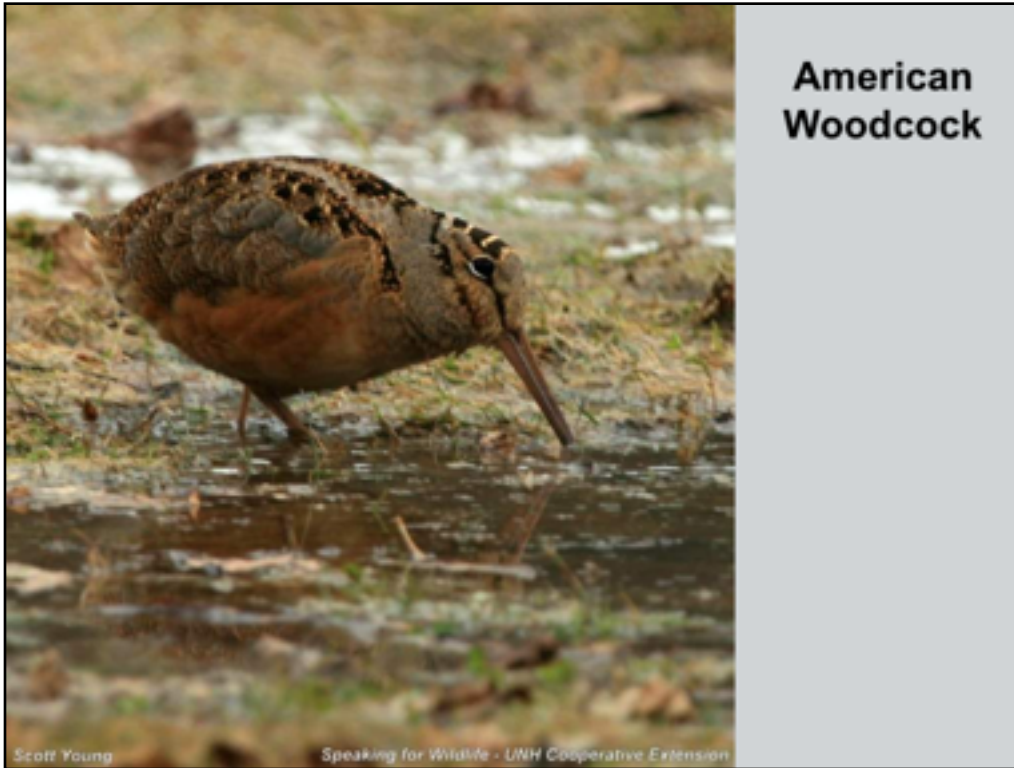
-They require logs for basking in the sun, which is also where they are most commonly seen. [ADVANCE SLIDE]

-This is why it's good to leave fallen trees in wetlands and rivers.

-One of the biggest threats to turtles in New Hampshire is getting hit by cars when they are on the move during breeding season in Spring and early Summer

-If you notice an area in your town where you see turtles crossing the road (often between 2 wetlands), you may consider talking to your town about putting up a "turtle x-ing" sign during the breeding season.

-To help a turtle cross the road: 1) Make sure it is safe for you first! 2) take turtle in the direction it was heading 3) do not take it somewhere else (it knows where it is going)



-Have you ever seen one of these funny looking birds? (ADVANCE SLIDE)

-It's an American Woodcock

-Lucky people may catch a glimpse of these birds at dusk in springtime when they put on an elaborate breeding display

-You can hear them calling (PEENT... PEENT), if you hear one, look closely and you might see it as it takes off and flies in a big circle, flying higher and higher, twittering all the while, until it comes back to the ground and continues to peent.



-Woodcock are very fussy about their habitat, which is why these birds have become increasingly rare in New Hampshire.

-They require three distinct habitats all within 2 square miles.

- First, they need open areas for their breeding displays

- They also need dense shrubby areas with wet soils where they hunt for earthworms with their long beaks. (ADVANCE SLIDE). Woodcock use these thickets for eating and nesting because the dense growth gives protection from predators, such as hawks.

- Finally, they need larger open areas, 5 acres or more, where they spend the night with other woodcock

-Be sure to keep your eyes and ears open for these unique birds in early spring!



-Is anyone familiar with this bird? (ADVANCE SLIDE)

-It's a yellow warbler.

-This small, brightly colored bird spends every winter in the tropics, and returns to New Hampshire in the spring to breed.



-These warblers are brightly colored and have a “sweet” song (“sweet, sweet, sweeter than sweet”), they are often spotted in the spring during breeding season.

-Yellow warblers require shrubland habitats like this to hide their nests (ADVANCE SLIDE), shrublands contain thickets of shrubs and young trees mixed with scattered grasses and wildflowers. Large shrublands, those greater than 5 acres, are relatively rare in NH but small ones can be just as important for wildlife. Yellow warblers can be seen in even the smallest patches of thicket.

-Although shrubby areas aren’t always appealing to humans, this is already the second species we’ve discussed that requires this type of habitat, and there are over 100 other species of wildlife in New Hampshire that use shrubland habitats.

-So...LOVE YOUR SHRUBS!



**Pileated  
Woodpecker**

-This is the largest woodpecker in New Hampshire... does anyone know what it is? (ADVANCE SLIDE)

-It's a pileated woodpecker!

-These are BIG birds that can be found in New Hampshire all year round.



-Pileated woodpeckers live, breed and feed in mature forests.

-They rely on dead or decaying trees, to feed on ants and wood-boring beetles. You'll sometimes even see them feeding close to ground level on stumps and fallen logs, another good reason to leave "coarse woody material" on your property

-We're lucky in New Hampshire to have a lot of forestland. In fact, New Hampshire is 83% forested, the second most forested state behind Maine.

-[ADVANCE SLIDE] So the next time you see a dead tree, be on the lookout for the large holes made by pileated woodpeckers for feeding and nesting. After the woodpeckers have moved on, these holes may be used as den sites for flying squirrels, raccoons, bats, and lots of other animals. So woodpeckers are really important animals in the forest.



-This common hawk is relatively small and often seen around birdfeeders. Anyone know this one? (ADVANCE SLIDE)

-It's a Cooper's hawk.

-The reason you may catch a glimpse of these hawks at your birdfeeder is not because they are hunting for seeds, but because they are hunting for birds.

-If you really want to sharpen your birding skills ... you can learn to tell the difference between this hawk and the slightly smaller, but VERY similar sharp-shinned hawk.





-Other than around feeders, where would you find Cooper's hawks? Though they nest in forests like the one shown here, they use a wide variety of habitats, so they can be seen throughout the landscape.

-They build their nests out of sticks at least 20 feet off the ground, in a fork where three or more branches come together (ADVANCE SLIDE). They return to the same area each year to nest (and sometimes use the same nest) .



-The name of this species is VERY obvious... does anyone know it? [ADVANCE SLIDE]

-It's a little brown bat, and until recently, they were very common in New Hampshire.

-Bats will occasionally swoop down close to mammals to feed on the insects that swarm around them, not to make a nest in the hair. In fact, they eat up to 50% of their body weight in insects every night, so they are handy species to have around your neighborhood.



-Typically, little brown bats feed over wetlands and other still water where insects are plentiful.

-They also use trails and streams (like this one) as travel corridors to navigate through the forest at night.

-This species of bat spends the winter here, in New Hampshire, hibernating in groups in caves, old mines, and large tree cavities. In the summer females often use buildings and large bat houses to raise their young.

-Maybe you've heard about White Nose Syndrome, a fungus that is killing bats, including this species. Biologists have recorded vast numbers of bats dying as a result of this fungus.

-New Hampshire Fish and Game is leading the effort to save bats in New Hampshire. Here are a few things you can do to help prevent the spread of White Nose Syndrome:

- Stay out of caves and old mines

- Report dead bats or bats outside in winter to NH Fish and Game

- Where feasible, protect old buildings where female bats may raise their young.

-If you want updates about this and other current wildlife research in NH, make sure you sign up for the "Taking Action for Wildlife" newsletter at the end of this presentation



-I'm sure you've all seen this next species (ADVANCE SLIDE). It's the white-tailed deer.

-Unlike some of our pickier species, deer eat a lot of different foods--twigs, young bark, leaves, grass, ferns, acorns, beech nuts, and even mushrooms.

-So they rarely have a hard time finding food. Even though it is nice to get a closer look at them, it is never a good idea for people to feed deer in their backyards. Feeding deer makes them more vulnerable to starvation, predators, disease, and vehicle collisions, among other things.



-Unlike woodcock, deer are NOT fussy about their habitat. They can be found in fields, forests, wetlands, agricultural areas, and even backyards.

-The only things deer require for survival are areas of dense cover for winter shelter, usually patches of evergreen trees, with adequate food nearby such as young saplings or acorns buried under the snow (ADVANCE SLIDE)



-Who is this crafty fellow? (ADVANCE SLIDE)

-It's a red fox.

-We actually have two species of fox in New Hampshire--the red and the gray fox. The gray fox is more reclusive and spends most of its time in the forest.



-The red fox is less shy and can be seen hunting in open fields and especially along field edges.

-Shrubby field edges, such as the one seen here, provide small patches of thicket habitat where fox can find small mammals, birds, eggs and other parts of their varied diet. They've been known to eat not only meat, but apples, corn, acorns, grasshoppers, and berries.

-So...yet another reason to LOVE YOUR SHRUBS!

## Black Bear



-Next is...(ADVANCE SLIDE)...the black bear.

-This is a photo of "Jack," a bear from Tamworth that was rehabilitated near Lyme, NH by black bear researcher Ben Kilham.

-Black bears are extremely clever animals, but this can sometimes get them into trouble, especially in areas where they come in contact with people.

-They've learned that humans often provide easy access to some tasty food. That's why it's important to take down your winter bird feeders by mid-April and don't put them up until December 1st!





-When not taking advantage of birdfeeders, a black bear's 'natural' diet changes with the seasons. In the spring, they'll head to areas that green up early, such as this wetland to eat grasses and other young plants.

-Later in the summer you will find them in the tops of cherry trees gorging themselves on a good crop, climbing up a beech tree to get at those nuts, or camped out in a good berry patch.

-Wherever they go they tend to leave behind signs (ADVANCE SLIDE) so be on the lookout!

## Monarch Butterfly



And last but not least, we have an insect. Does anyone know what type of butterfly this is? (ADVANCE SLIDE)

- Monarchs arrive in New Hampshire in late spring after traveling thousands of miles (over several generations) from central Mexico. It's an incredible journey for such a small creature.
- Historically, monarchs have been considered a common species New Hampshire as recently as 2010.
- But since then, populations of monarchs have declined verywhere in the US and Mexico, from about a billion adults in 1996 to around 56 million in 2015. That's a decline of about 94%!
- Does anyone have a guess why this might be?



Although we aren't sure, scientists think that main culprit is the destruction of monarch breeding grounds in a small mountainous area of Mexico where the entire eastern population of monarchs goes to one patch of forest. But loss of good monarch habitat here in the United States is also a problem, and the increased use of herbicides and certain pesticides in crop fields is a major factor in that habitat loss.

Monarchs, like many butterfly species, require a specific plant on which to lay their eggs. This "host plant" is the only plant the caterpillars will eat

The monarch's host plant is Milkweed, which grows in old fields that are left un-mowed until late in the season (September or later) or are mowed only every couple of years. It's the loss of this kind of "Old Field" habitat that is contributing to the loss of monarch habitat here in the U.S.

So what is so special about milkweeds and old fields? Monarchs require milkweed in order to complete their life cycle

- the adults lay their eggs on the plant (ADVANCE SLIDE)

- the caterpillars eat the leaves, which contain a toxin that makes them-- and butterfly they will soon become -- unpalatable to most birds

- the caterpillars transform themselves into a cocoon called a chrysalis

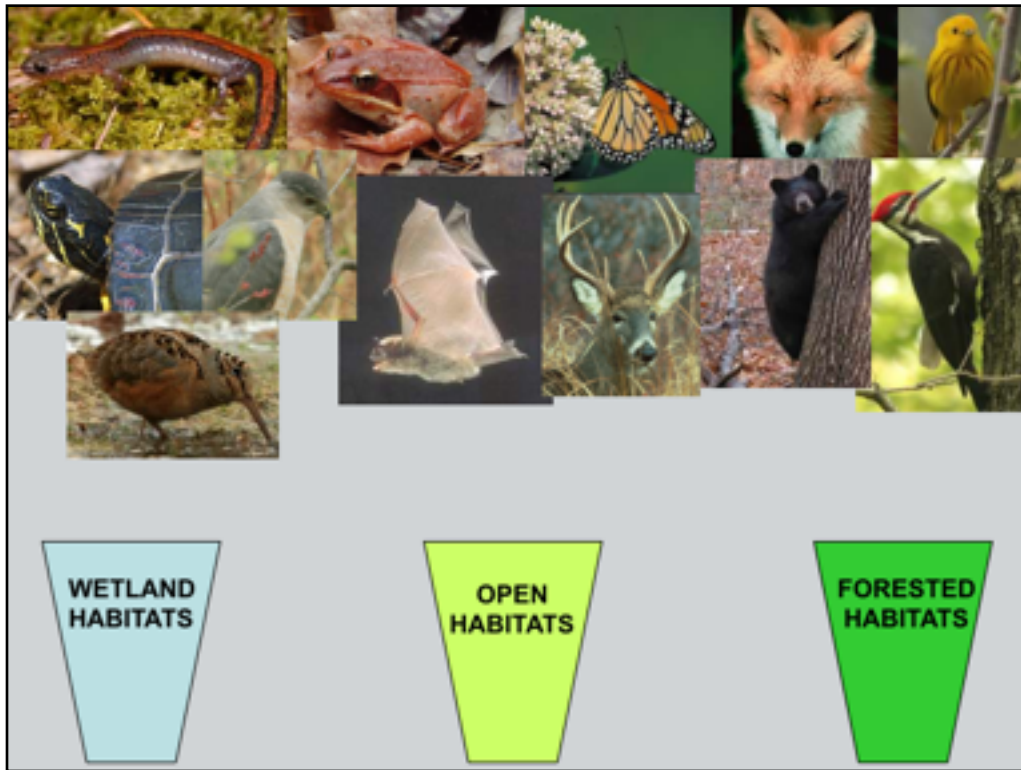
after about two weeks, the beautiful orange and black butterflies emerge

At the end of the summer, you might see the adult monarchs flying south on the breeze, back to Mexico for the winter

If you have a small field, you can attract monarchs by simply allowing a part of the field to go unmowed through a few seasons, or you can even plant milkweed in your garden. Make sure your garden plants are not pretreated with pesticides before you buy them.

The important thing to remember is that without milkweed and old fields, we won't have a place for monarchs to breed.

You can also help to conserve monarch butterflies and help keep them common here in New Hampshire by participating in national citizen-science based monitoring programs, like Monarch Watch.



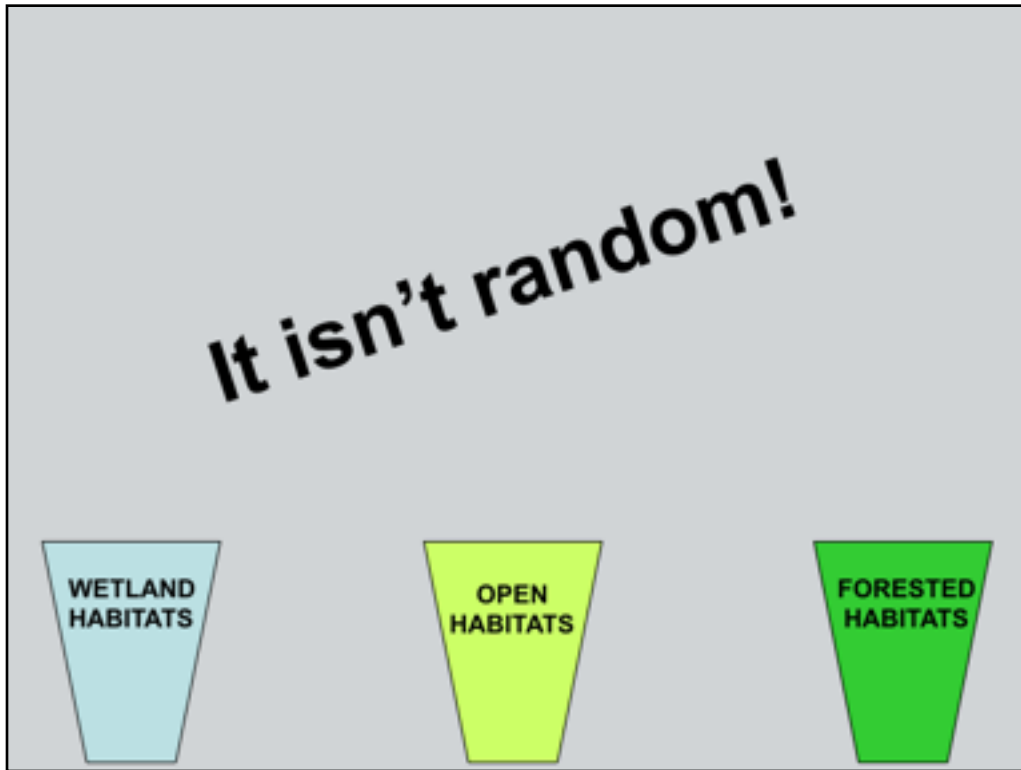
-So that's a dozen! Now that you've heard about these species, and learned a bit about each one, you've realized that these animals don't just occur randomly across the landscape, but that each has distinct needs that determine where we find them

-So if we break habitats down very generally into wetland, open and forested habitats (point to the bins), we can see which species occur where (ADVANCE SLIDE)

-In wetlands we have the woodfrog, painted turtle, and woodcock (ADVANCE SLIDE)

-In open habitats we can find woodcock, monarchs, red fox, yellow warbler and deer (ADVANCE SLIDE)

-And in forested habitats we see the Cooper's hawk, little brown bat, redback salamander, black bear, and pileated woodpecker and deer.



[AFTER ALL PICTURES ARE SORTED]

-So the basic message when it comes to seeing wildlife in your backyard, in your town, or in a unique habitat...

- Is that...it's not random! Those species are there because the habitat they need is nearby.

## What you can do...

Explore your property or local town forest

- Take an inventory
  - What habitats are there?
  - What species are there?
- Are you a landowner? Contact your UNH Cooperative Extension County Forester for a free site visit
- Request a field walk with a *Speaking for Wildlife* volunteer



So, if you are interested in wildlife and their habitats, what can you do to learn more?

- Inventory for different wildlife species [Order forms & sample copy of Guide in kit]
- County Forester can help
- Speaking for Wildlife* also offers walks on public lands to learn in an outdoor setting

## Learn More!

- Sign up for *Taking Action for Wildlife* e-newsletter
- Learn about other workshops from UNH Cooperative Extension
- **NHWoods.org**
- **WildNH.com**
- **takingactionforwildlife.org**



There are some great resources out there to learn about wildlife.

I'll be passing out a questionnaire in a minute where you can sign up for an e-newsletter called "Taking Action for Wildlife" – you can learn about upcoming events, new research, and new programs related to wildlife in New Hampshire

UNH Cooperative Extension hosts many workshops on wildlife and forest topics – if you fill out the questionnaire, be sure to provide your contact information so you will hear about similar workshops in your region.

### Good Websites:

**NHWoods.org** = Cooperative Extension's Forestry & Wildlife Website – learn about workshops, habitats, and land stewardship

**WildNH.com** = NH Fish & Game's website – learn about wildlife species and new research



**Takingactionforwildlife.org** = a partnership between NH Fish & Game and UNH Cooperative Extension – learn about conservation actions that landowners, communities, and conservation groups can take to help wildlife



That's the end of my presentation. Before I take questions, I'd like to thank the organizations who sponsor the Speaking for Wildlife project:

- The **New Hampshire Charitable Foundation** and the **Davis Conservation Foundation** for grants that supported the creation of Speaking for Wildlife,
- UNH Cooperative Extension** for the support of the Speaking for Wildlife volunteers that are the underpinnings of this project,
- And New Hampshire Fish and Game, whose research, presentations, and work on the Wildlife Action Plan are the basis for this presentation and who continue to support the program.

Thank you for listening! Questions?