

## **Slide Script for *Here Today, Gone Tomorrow?***

### **The Story of New Hampshire's Endangered and Threatened Wildlife**

1. TITLE SLIDE – EAGLE – This is the story of New Hampshire's endangered and threatened wildlife.
2. HOURGLASS – Time is running out for some of our native wildlife species.
3. PIED-BILLED GREBE – The pied-billed grebe is one of New Hampshire's threatened species. This means that it is likely to become endangered, in the near future, unless we give it immediate help.
4. AMERICAN MARTEN – In New Hampshire, the marten, found in the spruce-fir forests of the northern part of the state, is now a species of concern. It was removed from the threatened list in 2015.
5. FEDERAL BOOK – What does it mean to be on this list? There are two important lists that you should understand. One is the federally threatened and endangered species list. The United States government has created a list of species that need protection because they are threatened or endangered over a large portion of their range across the United States. The federal Endangered Species Act of 1973 provides for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife and plants depend.
6. NH's ENDANGERED LIST - But, just because a native New Hampshire animal is not listed for protection across the whole nation, does not mean that it has healthy populations in our state. So, biologists have created a list of those species that are either threatened or endangered in NH. Right now there are 30 species on the Endangered List and 21 species on the Threatened List.
7. GRAY WOLF – The gray wolf once ranged throughout New Hampshire. They were extirpated in the 1800s – two hundred years ago. The same thing could happen to our present threatened and endangered species.
8. PASSENGER PIGEON – Or, they could become extinct like the passenger pigeon, which will never be seen again.
9. HOW DOES WILDLIFE BECOME ENDANGERED?

10. TRUCK - More people, using more resources, means more habitat destruction. Loss of habitat is the number one reason for endangerment.

11. HABITAT – FOOD, WATER, SHELTER AND SPACE

12. BEAVER – In the past commercial exploitation or using a species without good management and conservation practices, led to problems. By the mid-1700s, the beaver was trapped to extirpation in New Hampshire. Today, beaver are so abundant that they are sometimes considered nuisances and regulated trapping is an important management tool.

13. STARLING/SPARROW – European settlers brought over many non-native, or “introduced” species, like the European starling and the house sparrow. The starlings and sparrows have out-competed many native species for nest sites.

14. PURPLE MARTIN – The purple martin’s habitat has shrunk. Initially, considered a “Species of Concern”, (“on deck” for the threatened list) while the habitat needs of the purple martin will be studied to find out how they can be helped. Some people built houses like this one in order to attract purple martins to come and nest in the southern part of the state. Today, the purple martin is considered a threatened species in New Hampshire.

15. SUNAPEE TROUT – In this case, people brought in lake trout to areas where this Sunapee trout once lived. The result was that the Sunapee trout inter-bred with the lake trout. They have been preserved because they were introduced into two other lakes – one in Maine and one in Idaho.

16. YOUNG WEASELS – If you are the kind of animal that has lots of offspring each year, like the weasel, then you would have less chance of disappearing when changes occur.

17. LOON – But, if you are like the loon and only lay one or two eggs in a good year, then you would have less chance to recover from any disturbances.

18. KARNER BLUE BUTTERFLY – There are some species that run into trouble because they are so specialized. For example, the endangered Karner blue butterfly depends solely on wild lupine plants for their food. Now, captive raised Karner blues are being released in a restoration attempt in the pine

barrens of Concord, right near our state's capitol, and some have been found in the wild at this location once again.

19. **KARNER BLUE LARVAE** – The lupine also has special needs, like sandy soils and fire. By stopping fires and constructing roads and malls, the lupine and the Karner blue butterfly have disappeared from much of their former habitat in other parts of the state.

20. **LEAST TERNS** – The least terns are one of three species of terns in NH that are either endangered or threatened. One reason they are threatened is because of competition from gulls for prime nest sites in remote areas like the Isles of Shoals. Now Seavey Island is home to thousands of terns thanks to restoration efforts and the presence of biologists during the nesting season.

21. **PIPING PLOVER** – The piping plover nests on the sandy beaches in the dunes along the salt water shores. They are endangered in NH and threatened nationally. Why do you think their populations are in jeopardy?

22. **BROKEN EGGS** – While their eggs are specially camouflaged to protect them from predators, mostly mammals and night herons, the greatest threat to plover eggs does not come from other wildlife, but from people. This sneaker print shows the result of not protecting plover nesting habitat during the weeks of breeding. Between 1997 and 2019 each year there were between 3 and 11 nesting pairs of birds. The number of chicks fledged each year has ranged from zero to 20 during that time. In all, as of 2019, 184 chicks have successfully fledged from NH, contributing to the overall Atlantic coast population.

23. **BEACH SCENE** - When people and wildlife try to share the same habitats, usually it is wildlife that loses. People need to protect sensitive habitats like this one. Can you see the piping plover in this beach scene?

24. **DWARF WEDGE MUSSEL** – A combination of erosion, pesticide runoff and the building of dams on rivers, has spelled disaster for the dwarf wedge mussel, which is a state endangered species.

25. **AIR POLLUTION** – Air pollution linked to acid rain has been harmful to New Hampshire's wildlife in ways we are just beginning to understand.

26. WATER POLLUTION - In other cases, water pollution from human-made chemicals and pharmaceuticals have harmed wildlife.
27. PLANE – Pesticides from agricultural runoff have contaminated many food chains.
28. PEREGRINE FALCON EATING – For example, the insecticide DDT, which was used in the United States until it was banned in 1972, caused the peregrine falcon to disappear from New Hampshire.
29. PEREGRINE SCRAPE – The pesticide would build up in the fat of the birds and cause thin-shelled eggs to be laid on these nesting “scrapes”. The eggs would be crushed when the female sat on them.
30. TIMBER RATTLESNAKE – Other species have become endangered because they seem threatening to people. The timber rattlesnake has been killed in large numbers out of misunderstanding and fear. Today there are believed to be fewer than 30 in the state.
31. BALD EAGLE – Many species, like the bald eagle, our national symbol, suffer the effects of more than one human-caused disturbance. Chemicals like DDT, lead poisoning, deliberate shooting and loss of habitat are some factors. Because of protection, eagles are once again seen flying over our lakes and rivers and nesting and raising young.
32. NO HABITAT- NO WILDLIFE!
33. SO WHAT? – So, why should we care about endangered species anyway? Well, there are many reasons. Let’s explore a few.
34. NIGHTWAWK – Every species in nature has a special role in a community’s web of life. If we lost the endangered nighthawk, which feeds on mosquitos and other insects, the balance of nature would be disturbed and many other species besides the nighthawk would be affected.
35. UPLAND SANDPIPER – If we lose the endangered upland sandpiper, we also lose some of the diversity, or variety, in our ecosystems and, therefore, some of their stability and health.

36. PINK LADYSLIPPER – Losing any species forever, even plants like the pink lady slipper, can mean losing something that could potentially help people for food, medicine or other uses.
37. SHORT-NOSED STURGEON – The health of some species can indicate the overall health of our environment. The endangered short-nosed sturgeon indicates problems in our river ecosystems.
38. KIDS – If plants and animals are becoming endangered, then what does that mean about our own health? Each of us is responsible for taking care of the environment we live in.
39. COYOTE – Normally, predators and prey work together to maintain healthy populations of each.
40. HUNTERS – While endangered species are not hunted, legal hunting helps to maintain many healthy wildlife populations. But endangered species require special management and recovery efforts.
41. NH ENDANGERED SPECIES CONSERVATION ACT – What is being done? Besides the federal and state endangered species acts which help protect threatened and endangered species by requiring recovery plans to be made, the Migratory Bird Treaty regulates the hunting, transport and sale of migratory birds like waterfowl, raptors and songbirds.
42. NEST PROTECTION SIGN – Protecting important habitats helps endangered species recover.
43. OSPREY – Wildlife biologists from the NH Fish and Game Department and other organizations have worked to bring back the once threatened osprey that you see here.
44. EAGLET – In 1989 “fostering” was used with the first pair of bald eagles to nest in NH since 1949. When the adult pair lost its chicks, a zoo-hatched chick was introduced to the nest and the eagles raised it successfully.
45. EAGLETS IN NEST – In 1990 the eagle pair raised two eaglets on their own. In 2017 a record 59 pairs made NH their home. The biggest concentration of nests is in the Lakes Region, but bald eagles now breed throughout the state, including 10 pairs on the Connecticut River. Sometimes

there are even more eagles present in NH during the winter months than in the summer. Because of this success, in 2017, the bald eagle was removed from the State's threatened and endangered list.

46. PREDATOR GUARD – Predator guards like this one around an osprey nest tree keep animals like raccoons and other predators away from eggs and young.

47. MOUNTAINS – peregrine falcons were reintroduced to NH in the 1970s to cliffs suitable for nesting in the White Mountains.

48. PEREGRINE CHICKS – Falcons were raised in captivity.

49. PEREGRINE HACKING SITE – Over 100 young peregrines were released in NH in the first decade of the project.

50. CATHEDRAL LEDGE/CLIMBERS - Volunteers and biologists observe peregrine nest sites and protect them from hikers and climbers. And even today, trails may be closed during nesting time.

51. PEREGRINE IN FLIGHT – The peregrine has been making slow but steady progress on its own. In 2018, 17 territorial pairs were recorded with a record 43 young.

52. LOON SIGN – Protecting sensitive nest sites and feeding areas from humans has restored the loon from an endangered to a threatened species in New Hampshire.

53. BOATERS – The Loon Preservation Committee has been educating boaters about how sensitive the loon is to people and the importance of protecting this beautiful symbol of wilderness.

54. LOON ON NEST PLATFORM – They also help build and manage nesting platforms that are anchored to the bottom, allowing the nest to rise and fall with changing water levels and keeping the eggs and young protected from predators like raccoons and foxes.

55. WHAT POSITIVE THINGS CAN WE DO TO HELP?

56. CHILD LOOKING – Learn all you can about New Hampshire’s wildlife and what is being done to protect it. Join in and help!
57. TRASH – Help clean up trash in our communities and work to limit pollution in the first place.
58. ROCK WITH SIGN – Enjoy the natural world, but respect it and the efforts of others to conserve it.
59. DEVELOPMENT - Work with your school, community and your family to find out more ways to help protect valuable wildlife habitat.
60. ORGANIZATIONS - Join these and other organizations and tell your elected government officials about your concern for New Hampshire’s wildlife.
61. LOON – It will take all of our efforts together in order to hear the call of the loon;
62. OSPREY – to see the osprey dive into our rivers and lakes;
63. EAGLE – and to preserve our national symbol forever.
64. (Nongame and Endangered Wildlife Program)