

INTEGRATED PEST MANAGEMENT

Grades 2 & 3 Curriculum



Threatened and Endangered Species
Picture Card Set



Andy King, images.fws.gov

Indiana Bat

The decline is attributed to commercialization of roosting caves, wanton destruction by vandals, disturbances caused by increased numbers of spelunkers and bat banding programs, use of bats as laboratory experimental animals, and possibly insecticide poisoning. Some winter hibernacula have been rendered unsuitable as a result of blocking or impeding air flow into the caves and thereby changing the cave's climate. The Indiana bat is nearly extinct over most of its former range in the northeastern states.



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Terry Spivey, USDA Forest Service, www.forestryimages.org

Peregrine Falcon

Populations declined rapidly between 1950 and 1965 throughout the United States. This decline is directly attributed to the effect of pesticides, particularly DDT, on breeding populations. The speed and global scale of this species' decline makes it one of the most remarkable events in recent environmental history. Nesting peregrine falcons completely disappeared from Connecticut in the late 1940s and remained absent until 1997. In 1997, peregrine falcons successfully nested on the Travelers Tower in Hartford (this was also the site of the last known nesting in the 1940s).



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R.G. Tucker Jr., images.fws.gov

Bog Turtle

Intensive development in the bog turtle's range has caused the draining and filling of many wetlands. Remaining wetlands are isolated, resulting in small pockets of bog turtle populations. Bog turtles are very sensitive to changes in their environment, such as increased nutrification, altered drainage, vegetation changes or pollution. Populations of bog turtles have been documented in 5 Connecticut towns. In Connecticut, it is against the law to remove any bog turtle, including eggs, from the wild.





Photo © Stephen V. Silluzio, www.amomentonearth.com

Puritan Tiger Beetle

Populations are limited by the availability of sandy beach habitat along rivers. Some sites where beetles occurred have been lost to bank stabilization around cities and by habitat loss due to flooding behind dams. Presently, they are found at a single cluster of 3 small sites. The total population in New England is less than 1,000; more than 99 percent of the remaining New England population is found only in Connecticut.



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Jeffrey J. Jackson, University of Georgia, www.forestryimages.org

Timber Rattlesnake

Indiscriminate killing, illegal collection and loss of habitat due to human development have resulted in the severe decline of timber rattlesnake populations. The species has been eliminated from many parts of its historic range. Once documented in over 20 towns in Connecticut, this snake is now limited to isolated populations in 10 towns. Timber rattlesnakes are protected by Connecticut's threatened and endangered species legislation and cannot be killed.



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Charles T. Bryson, USDA ARS, www.forestryimages.org

Variable Sedge

This grass-like perennial once grew from southern Maine to Virginia in dense spreading colonies. Residential construction and gravel pit operation has dramatically reduced its numbers to the point of its becoming listed on the federal endangered list.



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Photo © Janet Novak, www.ct-botanical-society.org

Basil Mountain-mint

The habitat of this plant is rocky, wooded slopes that receive open sun. Once prevalent in southern New England and New York, residential building and the thickening of secondary forests have put the plant at risk.



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Photo © www.hawriverprogram.com

Devil's-bit

A member of the lily family, this perennial herb grows in soil of former farmland currently being reclaimed by young shrubs and secondary forest. Its recent decline may well be due to the shading effect of these larger neighbors. At present, the plant can be found only in the area where the borders of New York, Massachusetts, and Connecticut meet!



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Photo © Arie Tal, www.ct-botanical-society.org

Showy Lady's-slipper

A resident of conifer forests in wetland areas, this member of the orchid family is being threatened by human progress. Draining wetlands to build homes and malls from Newfoundland to New Jersey and west to Pennsylvania has destroyed this plant's natural habitat.



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Photo © Janet Novak, www.ct-botanical-society.org

Winged Loosestrife

Winged loosestrife, which is a native plant in our area, was considered extinct until recently. Now it has been upgraded to the endangered list. It grows in wet meadows and swamps and can reach a height of 4 feet. The 1/4" to 1/2" flowers bloom from June through September.



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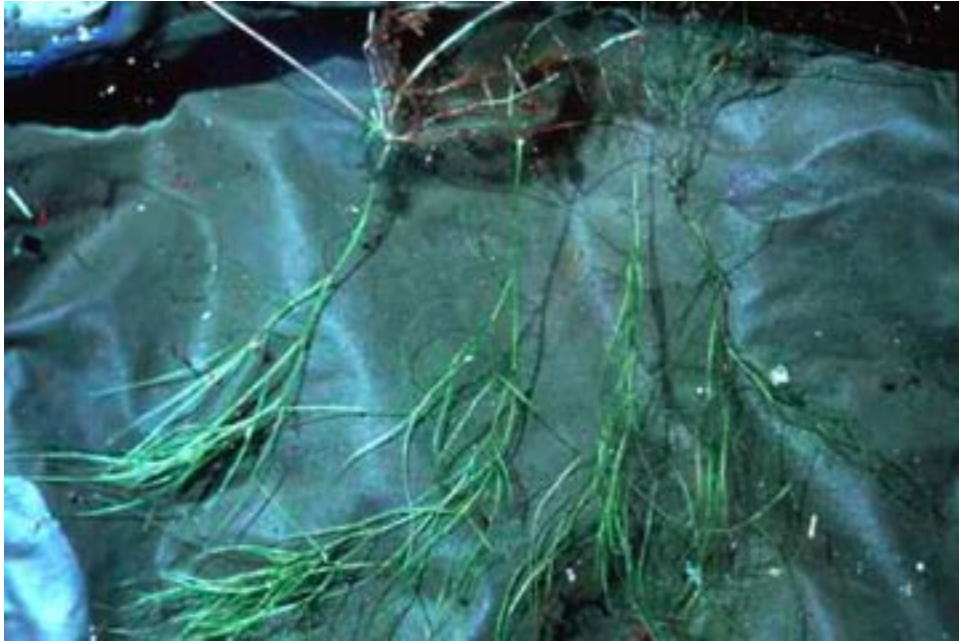


Photo © Robert W. Freckmann, biology.uwsp.edu

Pondweed

The plant once grew abundantly beneath the surface of the slow moving streams in Connecticut, Massachusetts, New Hampshire, Vermont, Pennsylvania, Ohio and Michigan. Today it has fallen victim to declining water quality due to pesticides and chemical runoff from farms, factories and highways. Further threatened by dredging and draining of its aquatic habitats, this species is now the least common member of its family.



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Photo © Janet Novak, www.ct-botanical-society.org

Coast Violet

This perennial herb grows from underground rhizomes in the moist sandy soils of river meadows and open flood plains and the adjoining woods. Occasional flooding of these areas benefits the plant's growth. However, reclaiming this land type for farmland from Maine to North Carolina and the subsequent damming and dike building to prevent flooding has put the coastal violet in danger.



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Scott Roberts, Mississippi State University, www.forestryimages.org

Dwarf Mistletoe

This parasitic plant relies on spruce trees, particularly the black spruce, to survive. A decline in the spruce population due to acid rain, fire and insect infestations as well as wetland habitat destruction for residential and commercial building has caused the demise of the mistletoe as well.



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