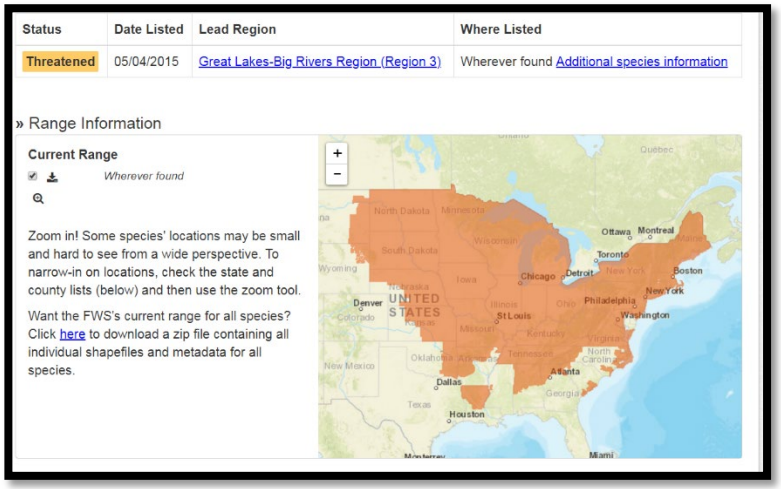
ENDANGERED SPECIES

These species are found on or near our community.

They are either endangered or threatened. Help mother nature allow the Northern Long-Eared Bat, the Puritan Tiger Beetle, the Dwarf Wedgemussel, and the Small Whorled Pogonia make a come back!!

Northern Long-Eared Bat (Myotis septentrionalis) Found in this region

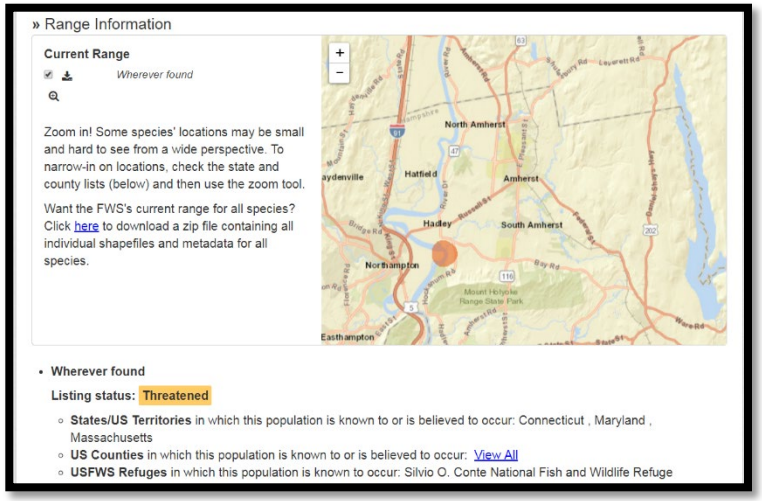
Information obtained from the US Fish and Wildlife Service



The northern long-eared bat is a medium-sized bat about 3 to 3.7 inches in length but with a wingspan of 9 to 10 inches. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, Myotis, which are actually bats noted for their small ears (Myotis means mouse-eared). The northern long-eared bat is found across much of the eastern and north central United States and all Canadian provinces from the Atlantic coast west to the southern Northwest Territories and eastern British Columbia. The species range includes 37 states. White-nose syndrome, a fungal disease known to affect bats, is currently the predominant threat to this bat, especially throughout the Northeast where the species has declined by up to 99 percent from pre-white-nose syndrome levels at many hibernation sites. Although the disease has not yet spread throughout the northern long-eared bat's entire range (white-nose syndrome is currently found in at least 25 of 37 states where the northern long-eared bat occurs), it continues to spread. Experts expect that where it spreads, it will have the same impact as seen in the Northeast.

Tiger beetle, Puritan Wherever found (*Cicindela puritana*) Not on Campus, but can be found nearby in Hadley

Information obtained from the US Fish and Wildlife Service



Tiger beetles are a family of insects that are voracious predators, capturing other invertebrates in a tiger-like manner. The Puritan tiger beetle, brownish bronze above with a metallic blue underside and narrow white lines on each wing, measures under ½ inch in length. This species was Federally listed as threatened throughout its range in 1990.

The Puritan tiger beetle is found in only two regions: along the Chesapeake Bay in Maryland and along the Connecticut River in New England. The Puritan tiger beetle populations in these two regions have probably been separated for thousands of years and have developed significant genetic and ecological differences.

In New England, only a few small populations, comprising a single metapopulation (a group of spatially separated subpopulations of the same species which interact at some level) of Puritan tiger beetles remain in New England; one along the Connecticut River, near Hadley, Massachusetts and the others near Cromwell, Connecticut. Because of dam-building and modifications of the Connecticut River, only a remnant of the once extensive Puritan tiger beetle populations remains there. In New England, Puritan tiger beetle distribution follows the sand and clay deposits formed by glacial lakes during the last ice age.

Successful propagation of Puritan tiger beetles has been developed through research at the University of Massachusetts and Randolph Macon College. Translocation of propagated Puritan tiger beetle larvae has been attempted at cliffs along the Chesapeake Bay, but was not successful, possibly due to vandalism at the translocation site. The Service intends to continue work with translocating propagated Puritan tiger beetle larvae, particularly along the Connecticut River in New England, where unoccupied sites with good potential habitat have been identified.

Dwarf wedgemussel (Alasmidonta heterodon) Not on Campus, but can be found in the Fort River

Information obtained from the US Fish and Wildlife Service

Status	Date Listed	Lead Region	Where Listed
Endangered	03/14/1990	Northeast Region (Region 5)	Wherever found

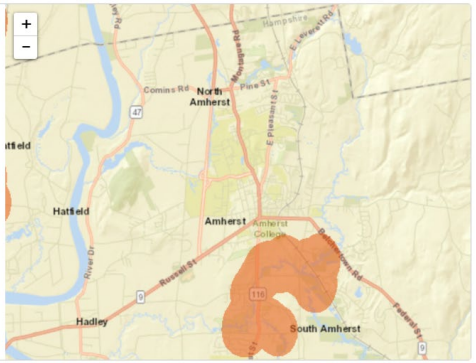
» Range Information

Current Range

Wherever found

Zoom in! Some species' locations may be small and hard to see from a wide perspective. To narrow-in on locations, check the state and county lists (below) and then use the zoom tool.

Want the FWS's current range for all species? Click here to download a zip file containing all individual shapefiles and metadata for all species.



The dwarf wedgemussel is a small bivalve, rarely exceeding 45 mm in length. Clean young shells are usually greenish-brown with green rays. As the animal ages, the shell color becomes obscured by diatoms or mineral deposits and appears black or brown. The shell is thin but does thicken somewhat with age, especially toward the anterior end. Maximum age for the dwarf wedgemussel is around twelve years. The species is a bradytictic breeder, meaning that females become gravid in the early fall and glochidia are released by mid-spring. The tessellated darter (Etheostoma olmstedi), johnny darter (Etheostoma nigrum), and mottled sulpin (Cottus bairdi) have been identified as hosts for the dwarf wedgemussel. An anadromous fish may also serve as a host species but this has not been documented for the dwarf wedgemussel in the southern portion of its range.

The dwarf wedgemussel appears to be a generalist in terms of its preference for stream size, substrate and flow conditions – it inhabits small streams less than five meters wide to large rivers more than 100 meters wide; it is found in a variety of substrate types including clay, sand, gravel and pebble, and sometimes in silt depositional areas near banks; and it usually inhabits hydrologically stable areas, including very shallow water along streambanks and under root mats, but it has also been found at depths of 25 feet in the Connecticut River. Dwarf wedgemussels are often patchily distributed in rivers. It is known from 54 locations in 15 major watersheds, with the largest populations in the Connecticut River watershed.

Short life spans, low fecundity, high degree of host specificity, limited dispersal ability of its primary host, low population densities, coupled with the threats facing the species, likely all contribute to the endangered status of the dwarf wedgemussel.

Small whorled pogonia (Isotria medeoloides) – Found on Southern part of Campus

Information obtained from the US Fish and Wildlife Service

small-whorled pogonia in Guilford County, NC. Photo by David McAdoo, CC BY-NC 2.0.

Status	Date Listed	Lead Region	Where Listed
Threatened	09/09/1982	Northeast Region (Region 5)	Wherever found

» Range Information

Current Range

Wherever found

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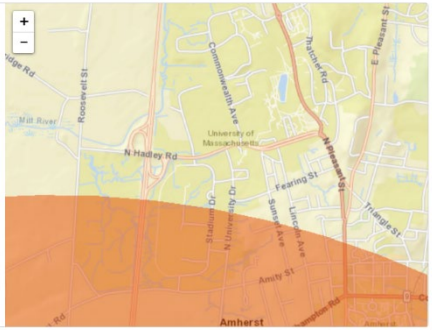

Small-whorled pogonia has a greenish-white stem that grows to between three and 13 inches tall. It gets its common name from the five or six grayish-green leaves that are displayed in a single whorl around the stem. When the leaves are well developed, a single flower or sometimes a pair rises from the center of the circle of leaves. The flowers are yellowish-green with a greenish-white lip. Each flower has three sepals of equal length that spread outward. The flowers are scentless, lack nectar, and are primarily self-pollinating. The pogonia produces fruit that ripens in the fall. The seeds contain very little food reserves and therefore need to fall on soil containing with mycorrhizal fungi in order for the seed to germinate and seedlings to become established. An over-wintering vegetative bud may form in late August or September. Occasionally small whorled-pogonia will reproduce vegetatively, without the use of seeds.

Small whorled pogonia can be limited by shade. The species seems to require small light gaps, or canopy breaks, and generally grows in areas with sparse to moderate ground cover. Too many other plants in an area can be harmful to this plant. This orchid typically grows under canopies that are relatively open or near features that create long-persisting breaks in the forest canopy such as a road or a stream. It grows in mixed-deciduous or mixed-deciduous/coniferous forests that are generally in second- or third-growth successional stages. The soils in which it lives are usually acidic, moist, and have very few nutrients.

How you can help

- Tread lightly and stay on designated trails. On some popular mountains, the vegetation has virtually been destroyed by human trampling.
- Do not disturb or touch small whorled-pogonia. The salts on your hands may attract slugs, which are serious pests for the orchid.