



Native, Invasive, Non-Native – Are You Confused?

By Dennis Tsui, UConn Home & Garden Education Center

What do all these words mean? You might have either seen a reference to or even referred to a plant or animal by one of these monikers, but they're not necessarily interchangeable, and it is important to not mix up these terms when giving a description of what you are seeing. Let's start with the definitions.

Native species: Native plants and animals can be described as local or indigenous. They have been inhabiting a certain region and environment and have adapted well to the climate conditions around them. Native plants have the advantage of being in the proper sites for light exposure, temperature, and weather patterns. They usually require less nutrients, water, and maintenance to survive and flourish. One thing to keep in mind is that it is possible for a native species to become aggressive in nature, similar to an invasive species.

Non-native species: The U.S. National Park Service defines non-native species as organisms that do not naturally occur in an area but are introduced as the result of deliberate or accidental human activities. Not all non-native species are invasive. The species must do harm for it to be considered as such. For example, tomatoes are considered non-native because it was a plant introduced by humans for agriculture. Non-native species are sometimes referred to as exotic species, though that is an antiquated term that is being phased out.

Invasive species: According to the University of Connecticut's College of Agriculture and Natural Resources, invasive species are plants and animals that are non-native to Connecticut and cause environmental harm. The establishment and spread of invasive plants decrease biological diversity and ultimately impacts the value of natural areas, including wetlands, woodlands, and meadows.

Some examples of species that would be considered invasive in Connecticut include common mugwort, tree-of-heaven, emerald ash borer, and, most recently spotted lanternfly. The Connecticut Invasive Plant Working Group is a good resource for an updated list of invasive species in Connecticut, while the National Park Service, United States Department of Agriculture, and Environmental Protection Agency are good resources to turn to for a look at the invasive species across the US.



Native plants are the base of the trophic systems on which many organisms rely on. They provide food and shelter for local wildlife, from insects to large predatory carnivores. However, as climate change continues to affect the global and localized conditions, species that were once thought of as non-native, may soon find themselves expanding their native range depending on how climate ranges shift. Native New England species may or may not be able to adapt. Changes in plant communities will have far reaching effects from disrupting soil microbial communities to supplying food resources to native wildlife to interfering with agricultural productivity.



Some woody native trees and shrubs in Connecticut include willows, spicebush, witch hazel, flowering dogwood, shadbush, buttonbush, maples, oaks, hollies and winterberry. These species are very beneficial for our local pollinating insects, birds, and animals. For us to understand and respond to these changing environmental conditions, we must channel our inner native species and adapt to our ever-changing environment.

If you have questions on selecting native plants for your yard or for other gardening questions, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, visit our website at www.homegarden.cahnr.uconn.edu or contact your local Cooperative Extension center.