Conservation Corner January, 2012

By now many folks have heard the term *invasive species*. It has been a buzzword for many years and even garden centers and nurseries have culled invasive plants from their retail line-up. But why is it such a big deal? What's the problem with invasive species? Good questions and both deserve some exploration.

First, some definitions: When we read or hear about invasive species, usually we're talking about *invasive exotic* species and most frequently these are plants. Invasive in this case refers an organism that invades an ecosystem, natural community or habitat and can dramatically alter composition, structure and function. Exotic means that the organism evolved in a geographically or otherwise distinct ecosystem and therefore does not usually serve an integral part in a new system to which it is introduced.

Fortunately, not all exotic species are invasive. Those that are, however, usually possess characteristics or life strategies that allow them to out-compete (for sunlight, nutrients, water, etc.) native plants and gain a dominant place in a given community. Frequently, their non-native status means that there are no mechanisms in the native community to keep populations in balance. This, in a nutshell, is why they are a problem and why they may become a big deal.

In an area where invasive exotic plants become dominant, the diversity of potential food sources for wildlife (including soil organisms) is diminished accordingly. Less diverse food sources translates into a decreased diversity of wildlife, and only those species able to utilize the non-native plants can thrive. This creates a positive feedback loop which causes further disturbance in an ecosystem. That is, those animal species able to use the plants do well while others are forced to seek food elsewhere or perish. The bounty for those that benefit ensures that the plants' seeds will be spread further; thereby increasing it's share of the landscape.

This is the first of several pieces about non-native plants. The Conservation Commission welcomes your questions, comments and contributions. If you have poem, picture, essay or topic you'd like to see covered send them to us at conservation@lymenh.gov.