Invasive Species

by Charles "Woody" Woods

Most of us are all too aware of how "complicated" our world has become. So, it will not be a surprise that "complicated" is a concept that also applies to the natural surroundings of our beloved Seymour Lake. As we think about preserving shorelines and taking advantage of good advice and restoration programs, we are also presented with new concerns.

In this part of the Northeast Kingdom we are blessed with a natural ecosystem that includes a mix of two forest types, the mixed trees and shrubs of the Northern Hardwood Forest and the conifer dominated Lowland Spruce-Fir Forest. Each of these great northern forest types mix and are locally modified along the shores of Seymour, some with areas dominated by northern white cedar, and others with a mixture of familiar hardwoods like maple, birch and mountain ash. Figuring into these natural areas are disturbed zones and patches of lawns, agricultural fields and roadsides. It is along these disturbed corridors that very successful **non-native plants** and animals can "invade" and even dominate our otherwise beautiful and pristine lake and shoreline. **Water milfoil** is one of these that we have so far been able to keep out of our lake with much care and attention (cf. page 5 of this newsletter). But what we need also be concerned about are **"invasive species"** that are lurking out there in what appear to be natural conditions like the shoreline of Seymour and I would like to highlight three, namely **Purple loosestrife, Japanese knotweed**, and **Phagmites australis**.

Purple loosestrife, occurs in large patches of wetlands throughout the area, and its beautiful purple flower spikes and vigorous growth are captivating. It can be found everywhere in wetland areas between here and Magog and all along the highway to Montreal.

Japanese Knotweed is a prolific shrub with attractive flowers that grows along lakes, rivers, streams and in many nearby household gardens. When fully grown, it looks like bamboo. There are great thickets of knotweed along route 111 in Morgan and the banks of the Passumpsic River between Island Pond and East Burke. We should all be attentive to any and all of these invasive plants and try to keep them from spreading from our properties into natural areas along the shoreline of Seymour.

There is one invasive that is already spreading along the shoreline of Seymour that is of real concern. It is a tall grass-like plant that looks very natural and attractive in wet sandy shore areas or along roadside ditches of driveways and access areas. This large perennial grass, **Phragmites australis**, is sometimes known as the "common reed". The problem is that it looks so natural that it at first appears to be part of the natural ecosystem. Phragmites australis, often merely phragmites, (frag- mī- tēz) is very fast growing and reproduces by deep thick roots that sprout new clones. The plant is very difficult to control.

Until recently the shores of Seymour were not colonized by this plant. However, phragmites is popping up in a number of places. It is especially likely to appear in sunny, shallow areas near streams. One year it will look like a small patch of beach grass with an attractive tuft of seeds at top, resembling native grasses. After a year or so these turn into dense clumps and needs to be controlled. In sandy areas it is possible to dig down below smaller clumps and pull the rope-like root out. When that rope-like root is present an inch or so below the surface, running along horizontally, you know that you have phragmites.

Phragmites is hard to control once it gets established. The best way to control it is to cut it down in July before the seed heads appear. This will keep it from spreading by seed, and weaken the root system. If this is done with attention over several years, it is possible to eliminate or severely reduce the invasion of phragmites. Especially large patches can be burned for each of two or three years. The objective is to destroy the above ground plant parts before seeds develop, and to weaken and destroy the aggressive root system that is spreading wildly and widely underground. Phragmites is one of the most aggressive of all the invasive plant species we should watch out for on Seymour Lake. Keep in mind the other plants mentioned above are all non-native invasive species that have the potential of changing the nature of shorelines and the beautiful woodlands surrounding the lake. □

Author, Woody standing on Cranberry Road displaying a stalk of phragmites in front of the infestation..