SHOWY SHRUBS ARE POTENTIAL INVADERS

Following on the heels of last week’s article on invasive trees, today’s article will focus on three shrubs that are considered to be invasive in certain areas of the Pacific Northwest.

Saltcedar or tamarisk (*Tamarix ramosissima*) is considered a shrub or small tree, growing from 1.5 - 7.0 metres (5 – 23 feet) tall. Its numerous branches are slender, with small, alternate, greyish-green overlapping or scale-like leaves. Pink or white flowers bloom in dense masses on 1 cm long spikes at branch tips from March to September. The genus *Tamarix* is native to a zone stretching from southern Europe and North Africa through the Middle East and south Asia to China and Japan. It was introduced to the western United States as an ornamental and for use in erosion control in the mid-1800s. Saltcedar is now established or known in many desert regions of the western US, including Washington, Idaho and Montana. *Tamarix ramosissima* is sold as an ornamental under the name "Pink Cascade" Tamarisk in some BC nurseries. It is considered an aggressive ornamental that should be prevented from escaping cultivation. Saltcedar reproduces from seed and by re-sprouting from roots and underground stems. A single mature plant can produce thousands of tiny, hairy seeds that are dispersed widely by wind and water. Seeds are capable of germination within 24 hours. Saltcedar most commonly grows on floodplains, along irrigation ditches and on lakeshores, tolerating a wide range of saline or alkaline soils.

Despite its attractiveness, saltcedar poses some serious environmental concerns. Its long taproot penetrates the soil to deep water tables and interferes with natural aquatic systems. Mature saltcedar stems and leaves excrete salt, forming an above and below surface crust which inhibits other plants. These characteristics make it an aggressive colonizer that will replace willows, cottonwoods and other native riparian vegetation. Saltcedar's enormous consumption of water stresses native plants by lowering ground water levels thereby drying up springs and marshes. Its massive rooting system can clog watercourses resulting in flooding. Saltcedar can provide cover for some wildlife species but its foliage and flowers contribute little in the way of food value for native wildlife consumption. It is listed as a legislated noxious weed in six U.S. states. So far, it is not known to have caused a concern in B.C., however landscapers are encouraged to plant alternate vegetation and to ensure existing plantings do not escape.

Butterfly bush (*Buddleja davidii*) is a large deciduous shrub familiar to most gardeners in the Okanagan-Similkameen region. It grows up to 3 metres (10 feet) tall. Leaves are lance-shaped and have small serrations along the edges. While the tops of the leaves are dark green in color, the undersides are given a light appearance from numerous whitish hairs. The small, fragrant, funnel-shaped flowers are usually purple, although there are also red, pink, blue, orange, yellow and white varieties. The flowers are borne in showy spikes at the ends of the stems and bloom from mid-summer into the fall. Winged seeds - up to three million per plant (!) - are easily dispersed via wind or water.

Buddleja is native to the temperate regions of China. Although cultivated as a garden ornamental, it is able to colonize disturbed and natural areas including roadsides, riverbanks and gravel bars. It is capable of growing in low-nutrient substrate, such as the gravelly substrate of streambeds. One further consideration is that while butterfly bush acts as a nectar source for many insects, it does not provide a food source for the larval stages of native butterflies. In fact, some U.S. researchers suggest that it may be displacing native nectar sources in Washington and Oregon. This shrub has been placed on the noxious weed list in these two states.

Although not as common as the first two species, sea buckthorn (*Hippophae rhamnoides*) is another shrub that occurs in our region, and has shown invasive properties in other areas of Canada as well as the U.S. Sea buckthorn is a deciduous winter-hardy shrub that reaches 2 to 5 metres (6.5 – 16.4 feet) in height. The sea buckthorn's leaves are alternate and narrow are silver-grey colored. The small, yellow flowers appear in spring before leaves. Small, yellow to orange berries remain on the shrub throughout the winter.

In 2005, sea buckthorn was as ranked as the fifteenth most invasive plant of natural habitats in Canada following presentations at the 2004 Canadian Botanical Association's second symposium on invasive alien plants in Canada. This plant has recently attracted interest worldwide for its economic value as a nutritious food, a medicine, a soil enhancer, a pollution reducer, a source of firewood, and as a landscape management tool. It has been widely planted on the Canadian prairies to improve soil through nitrogen-fixing capability, to prevent erosion in dry and especially saline areas and for use as a shelterbelt. More recently it has attracted attention in Canada as an alternative crop, the leaves and berries being processed into a range of health foods and herbal products. Oil from the plant is also used for medicinal and cosmetic purposes.
Despite its many virtues, sea buckthorn can be a serious problem. It was apparently first listed as an invasive in Canada in 1997. In Alberta, it has established extensive monocultural stands on gravel and sandbars along streams. The potential risk to BC’s natural ecosystems has been brought to the attention of the provincial government.

So, what to do if you have these shrubs? I am certainly not suggesting that if you have these shrubs on your property that you should immediately remove them. Instead, I encourage you to take measures to confine them within the bounds of your garden and remove volunteer seedlings. I also hope that this article encourages landowners to carefully consider what species to plant in their garden, based on a review of plant characteristics in relation to the location of your property. While not yet a problem in our region, these three species are examples of plants that have escaped cultivation and demonstrated detrimental impacts in natural areas that they invade, particularly riparian habitats (stream banks or lakeshores). So take extra caution if your property supports natural areas such as a creek or wetland, or if you live adjacent to such a habitat.

We will be at the Dominion Radio Astrophysical Observatory Open House this Saturday. Drop by to pick up some information and we will be available to answer your questions.

For more information on invasive plants, contact Lisa Scott, Weed Coordinator for the Okanagan-Similkameen Regional District at (250) 492-0237 or email info@rdos.bc.ca