WEED OF THE WEEK SERIES

FOR IMMEDIATE RELEASE
5 AUGUST 2009

Sulphur Cinquefoil

Thanks to all those readers who have been reporting sightings of buffalobur, the plant I focused on in last week's article. This week I am highlighting another yellow flowering invader, but unfortunately this species is much more widespread and is significantly impacting our grasslands and lower elevation forests. I am speaking of sulphur cinquefoil (*Potentilla recta*), a native of Europe, Asia and northern Africa, which was introduced into North America before 1900. It is established across much of the United States and southern Canada. It occurs from British Columbia east to Newfoundland and Nova Scotia, south to Florida, and west to eastern Texas.

This long-lived perennial infests disturbed areas, meadows, pastures and rangelands and can dominate a site within two to three years of first appearance. Its seeds are spread by grazing ungulates, especially deer and elk, as well as human activities, including ATV and off-road recreation. Recent increases in sulphur cinquefoil density may also be associated with density reductions in knapweed, due to stress resulting from attack by biological control agents (natural insect enemies).

In British Columbia, sulphur cinquefoil is most common in the Southern Interior, where it has become rapidly abundant in the last decade. The insidious nature of sulphur cinquefoil poses both a significant environmental and economic threat. Once established, this weed can produce dense populations that reduce or eliminate forage production and biodiversity. It is unpalatable to most livestock and wildlife due to a high concentration of bitter tasting compounds.

Sulphur cinquefoil is a member of the rose family (Rosaceae), and is one of over 20 herbaceous cinquefoils in BC. Plants grow upright, reaching heights of 15-70 cm, with one or more hairy stems. Leaves are divided into 5-7 hairy, toothed leaflets, each 5-10 cm long. Flowers are pale yellow with five heart-shaped petals around a bright yellow centre. Sulphur cinquefoil most closely resembles graceful cinquefoil (*P. gracilis*), a native plant which is shorter, has white woolly hair on the undersurface of the leaves, more basal leaves, deeper and less uniform leaf serrations, and bright yellow flowers.

Sulphur cinquefoil grows very early in the spring from a woody root. The plant begins blooming in mid-June and produces flowers throughout the summer if growing conditions are favourable, until setting seed in late July. Above-ground portions of the plant completely dry up by late August but fall re-growth of bottom leaves is possible under moist, mild conditions.

As with all invasive plants, prevention is number one. Due to its aggressive tendencies and challenges in controlling, this is one species you are best preventing from invading your property. This can be accomplished by maintaining your land in a healthy, vigorous condition to ensure a productive plant community. Competitive perennial grasses and forbs utilize water and nutrients that would otherwise be readily available to cinquefoil. Cooperate with adjacent landowners and encourage them to control sulphur cinquefoil. Reducing soil disturbance is also important, in addition to immediately re-seeding disturbed, bare soils with a suitable seed mix that provides dense, early colonization to reduce weed invasion. Hand pulling, with regular follow up, can be effective on new and small infestations.

Unfortunately, no biological controls have been approved for sulphur cinquefoil in North America and chances of ever getting approval are slim. Acceptable agents are difficult to find because insects and diseases damaging to this weed may also attack closely related cinquefoils or strawberry plants, which are also a close relative.

For anyone who wishes to view Weed of the Week articles on the Internet, note the NEW Direct Link to the Invasive Plant Program on the home page of the RDOS website www.rdos.bc.ca. For more information on invasive plants, contact Lisa Scott, Invasive Plant Program Coordinator for the Okanagan-Similkameen Regional District at (250) 492-0237 or email info@rdos.bc.ca