

## **CITY OF SASKATOON 2018 ANNUAL WEED INSPECTION REPORT**

Inspection Services, represented by the City of Saskatoon (City) weed inspectors, enforces the *Weed Control Act* (2010). *The Weed Control Act* (2010) identifies the weed species and designates these weeds as nuisance, noxious, or prohibited based on their ecological and economic impact. The enforcement of the *Weed Control Act* (2010) is done by issuing orders, which identify the weed and the control measures that are required to eradicate or control an infestation.

### **Prohibited Weeds**

There are 27 designated prohibited weeds identified in the *Weed Control Act* (2010). To date there have been no confirmed cases of prohibited weeds in Saskatoon.

### **Noxious Weeds**

There are 37 designated noxious weeds identified in the *Weed Control Act* (2010). In Saskatoon, 30 have been located and identified. Noxious weeds have been prioritized based on level of establishment and the potential for environmental and economic impact. The City's Weed Inspectors, along with associated stakeholders (Meewasin, Native Plant Society of Saskatchewan, and the Ministry of Agriculture), have identified five weeds that receive a greater focus to potentially eradicate the infestations. These are common tansy, purple loosestrife, leafy spurge, yellow toadflax, and European buckthorn.

### **Nuisance Weeds**

The provincially designated nuisance weeds are typically found in recently disturbed habitat. When found in larger numbers on private property, property owners are required to mow the infested area. Under the *Weed Control Act* (2010), dandelions are designated as a nuisance weed, which are common and established in Saskatoon. The City uses cultural practices to control weeds in turf, which can include mowing, fertilizing, irrigating, aerating, and over-seeding to help prevent weeds from establishing.

### **Specific Control Projects**

#### **Purple Loosestrife**

Purple loosestrife has been identified at nine locations in Saskatoon. The locations included natural areas, ditches along Circle Drive, 11<sup>th</sup> Street West, Lakeview Park, the river bank near the Bessborough Hotel, and near the Water Treatment Plant. Due to the labour required and inefficiency of physical removal, herbicide treatment has been employed at all locations. Seed heads were removed, bagged, and when possible, treated by selectively wicking with glyphosate. The herbicide treatment has proven to be extremely efficient and has provided better control than physical removal. City staff were successful in releasing a biological control beetle (*Gallerecella* spp. beetles). One location showed considerable feeding by the beetles, and major reduction in seed production. Going forward, we will continue to promote the spread of this biological control method.

### Common Tansy

One of the high priority locations in the natural grassland in the city is likely to persist due to established seedbank. In 2018, tansy was found on several residential properties and in each case orders for removal were issued and control was carried out by property owners. The Saskatoon Land Division was ordered to spray an infestation on unmanaged land.

### Leafy Spurge

In 2015, several small patches of leafy spurge were discovered and treated. In 2016, an infestation encroaching on the Northeast Swale had grown in size and will most likely need further treatments.

### Yellow Toadflax

There are several properties where yellow toadflax has been identified, two of which are owned by the Saskatoon Land Division. Several small patches on residential and commercial lots are being managed with herbicide and tillage. Sites on property owned by the Canadian Pacific Railway and Canadian National Railway are being controlled using a combination of mowing and herbicides.

### European Buckthorn

An invasive shrub found along the riverbank spreading rapidly due to seed dispersal from birds. Control is achieved by spraying the bark with herbicide. Ongoing control will be addressed in the Urban Biological Services service review.

### Other noxious weeds

Baby's Breath rootlets were being sold at several big box stores; however, orders were given to destroy stock and stop sales.

## **Ecologically sensitive areas in Saskatoon**

### 1. Northeast Swale

The Weed Inspectors work closely with Meewasin to protect the biodiversity of the Northeast Swale. Weeds must be controlled on adjacent properties to prevent invasion that would affect the native plant community. Surveys of the treated areas indicated a significant decrease in the noxious weed populations previously reported in 2018.

### 2. Riparian Zone

The riparian zone along the river is heavily infested with European buckthorn, Canada thistle, perennial sow-thistle, absinthe, and nodding thistle. In 2018, various natural and semi-natural areas along the river were mowed and in some cases selectively treated with herbicides to control the growth of these noxious weeds.

## **Development and Weeds**

Soil disturbance associated with development creates optimal conditions for weed invasion and establishment. Weed infestations can have long-term consequences for the surrounding land and where the soil is used. As the City grows, there is an increasing amount of area to inspect for weed related issues. Kochia and foxtail barley are two

weeds that have done very well in 2018 and will continue to cause infestations in newly developed areas of the City.

The Saskatoon Land Division manages the undeveloped commercial and residential properties. These areas are often disturbed habitat, ideal for weed invasion and establishment. Locations are added and removed, by request of the Weed Inspector, and with changes in land use, such as development. The primary method of weed control is mowing throughout the season.

In 2018, the Weed Inspector issued six orders to civic departments. These orders have demonstrated that many City-owned properties do not have a civic department that is responsible for weed management. In the absence of consistent management, weed populations typically proliferate on disturbed properties, requiring consistent and substantial financial investment to be brought back into compliance.

### **Weed Inspection Details**

In 2018, 140 weed related complaints were documented; 94% of these were dealt with by property owners. For properties that were non-compliant, the City used either Urban Biological Services employees or contractors for a combination of mowing, line trimming, herbicide application, and/or hand pulling to control the weeds. The cost of the work was billed to the property owner. Of the 140 documented complaints, 73 received registered letters. These letters provided information on the species of weed, location of the property, and appropriate control measures. Of the 73 registered orders, 8 private properties were non-compliant, which required a contractor to bring the property into compliance.

As per the *Weed Control Act* (2010), there are copies of all orders issued in 2018 available upon request.

### **Summary and Continuous Improvement**

There are several noxious weeds, which are at low levels in Saskatoon (e.g. purple loosestrife, yellow toadflax, common tansy, and leafy spurge). These weeds will continue to be a focus in 2019. Saskatoon is a significant hub for agricultural activity; therefore, weed control is of particular importance to avoid spreading weeds to other areas of the province.

To control weeds in Saskatoon, the City and its partners, continue to develop better weed management practices. In response to increasing areas of soil disturbance and weed growth associated with neighbourhood development, an Applied Biology Technician was designated as a second provincial weed inspector. This position provided additional inspection responses and will continue to support weed inspection services in 2019.