





# **Contents**

Introduction	2
What is foxtail barley?	2-3
What issues does foxtail cause?	3
How can foxtail be controlled?	4-5
Mowing	4
Cover crops	4
Tillage	5
Herbicides	
How are weeds monitored and enforced?	6
What supports and resources are available?	7

#### Introduction

Foxtail barley (foxtail), a type of native perennial grass, has proliferated within Saskatoon City limits in recent years, with varying concentrations found in parks and open spaces, as well as in partially developed and un-serviced land holdings.

The City of Saskatoon has received many complaints regarding foxtail. In response, the City is managing current problem areas while taking a proactive approach to minimize the future occurrence of foxtail. This includes creating awareness and educating developers and landowners on the foxtail issues in Saskatoon and sharing viable control techniques.

## What is foxtail barley?

Foxtail barley (*Hordeum jubatum L.*), designated as a nuisance weed under the *Weed Control Act, 2010* is a short-lived native perennial grass with a shallow, fibrous root system that reproduces by seed. Narrow leaves grow in a clump and seeds have long fine brush-like hairs which make the seed head look like a "tail."



The seed heads appear fuzzy and are green to reddish in colour during development and a shiny cream colour when mature. The mature seed head breaks into seven-bristled clusters, providing effective dispersal by wind or on the coats of pets or other animals.

Adapting to a wide range of environmental conditions, foxtail has been found from Newfoundland to the Yukon, and flourishes on disturbed and un-serviced land and pastures. It is one of the few prairie weeds native to the region, growing well in all soil types, including saline soil. It is also referred to as wild barley, skunk-tail grass or tickle grass.

### What issues does foxtail cause?

Foxtail matures in summer, typically in July. At maturity, the seed heads of foxtail break up and are sharp. The barbed seed heads can become lodged in the skin, mouth, nose and eyes of dogs and other domestic animals causing severe harm. If digested, the barbed seed heads can embed in soft tissues and lead to infection and eyen death.



Foxtail is also a nuisance for people; they can work through clothing, especially fabric shoes and socks, causing discomfort to people while walking. Foxtail can also make it difficult for new homeowners wanting to establish landscaping.



### How can foxtail be controlled?

Foxtail produces thousands of seeds per plant, and the seeds primarily germinate in cool moist soil in April, May, September and October. Seeds remain viable for about two to three years, therefore controlling foxtail requires a multi-year strategy.

There are timely control techniques that landowners are encouraged to apply, such as mowing, cover crops, tillage and herbicide application.

*Mowing:* Mowing prior to seed development prevents seed set, therefore mowing is recommended in late May to early June. Mowing for a second time later in the season may be required for maintenance and prevention. Once seeds develop, mowing, bagging and disposing of seed heads is necessary. To prevent the formation of viable seeds, mowing should be conducted within 10 days of seed head emergence.

Cover crops: For large areas, a cover crop that can compete with foxtail can be planted to start reclaiming affected areas. By planting cover crops, you can reduce the density of weed populations as well as the size of the weeds. Some examples of cover crops include, alfalfa, clover, oats and rye. Cover crops are best grown in early May, as late-season cover crops may not have enough heat available to grow and provide any benefit. You may not achieve control right away, but you will get some suppression.



Tillage: Foxtail can be exceptionally well controlled with tillage because of its shallow, fibrous root system. It isn't necessary to turn the soil over, simply going in and undercutting it can be very effective. Tillage is better in fall than spring.

Herbicide: Herbicides are highly effective at destroying unwanted weeds, such as foxtail. Certain selective herbicides can be applied in late October when the soil temperature is low but above freezing. Other herbicide treatments can be applied when the plants are green and actively growing, but keep in mind that if seed heads are developing, standing seed heads may remain and continue to pose a threat to pets and animals. No matter the herbicide used, always follow the label for proper usage and safety precautions and ensure it is registered for use in Canada. Mowing or line trimming, bagging and disposal is recommended, in addition to late herbicide treatments. The City will also be monitoring herbicide application in developing areas.



#### How are weeds monitored and enforced?

The City's <u>Bylaw No. 8175, The Property Maintenance and Nuisance</u>
<u>Abatement Bylaw, 2003</u>, dictates that land is not to be overgrown with grass and weeds in excess of 20 centimeters. In addition, the <u>Weed Control Act, 2010</u> is provincial legislation that empowers municipalities to enforce the eradication, containment or control of prohibited, noxious and nuisance weeds by landowners within the boundaries of the municipality.

In accordance with the <u>Weed Control Act, 2010</u> a municipal weed inspector may enter a property to investigate all infestations of prohibited and noxious weeds whether reported or discovered during monitoring, and responds to all complaints of prohibited, noxious or nuisance weeds. Prohibited weeds and isolated infestations of noxious weeds must be eradicated, established infestations of noxious weeds must be contained and controlled, and nuisance weeds must be controlled.

The weed inspector will issue an agreement notice to the landowner and provide instructions for either the eradication, containment or control of the weeds found. It is the responsibility of the landowner to take measures to eradicate, contain or control the weeds found on their land in accordance with the written notice.

If the weed inspector and landowner are not able to reach an agreement, an order will be issued. If the landowner fails to comply with the order after 10 days of receipt, or if the work was not carried out to the satisfaction of the weed inspector, the City will carry out the work on the property and the associated costs will be levied to the property tax roll.



## What supports and resources are available?

#### Signage and prevention

As mentioned previously, foxtail poses significant health risks to pets; therefore, the City has placed signage in parks and open space areas alerting pet owners where foxtail is present. Some preventative measures for residents with dogs, include:

- Brushing your dog after being outdoors
- Keeping your dog on a leash
- Checking their ears and paws daily
- · Using a netted muzzle or field guard



#### Additional resources

For more information on prohibited, noxious and nuisance weeds, visit:

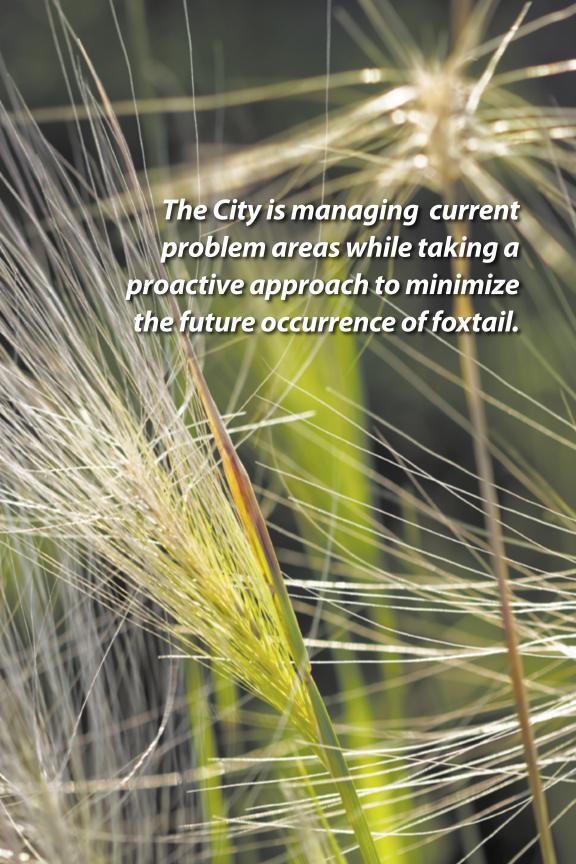
- Saskatchewan's <u>Weed Control Act, 2010</u> includes the duties of the weed inspector, owners and occupants, fines and penalties, as well as a <u>listing of plants</u> designated as prohibited, noxious and nuisance weeds in Saskatchewan.
- <u>Saskatchewan's Urban Guide to Weed Control</u> includes weed identification and management tips.

Sources: Strautman, Bill. "Consider spot tillage against foxtail barley." The Western Producer. "Weed Suppression." Cover Crops Canada.

## How do I submit a concern?

If you would like to report a weed complaint, contact Customer Care by emailing parks@saskatoon.ca or call 306-975-3300.

For more information on foxtail, visit saskatoon.ca/weedcontrol.







Urban Biological Services
1101 Avenue P North, Saskatoon, SK S7L 7K6
306-975-2890

saskatoon.ca/weedcontrol