

Regular Meeting of Council
2023 December 12

ISC: UNRESTRICTED
C2023-1357

Foxtail Barley Briefing Note

PURPOSE OF BRIEFING

This Briefing is in response to the motion arising passed at the 2023 July 4 Regular Meeting of Council related to report CD2023-0374, Addressing Foxtail Barley. This Briefing will provide background and current state Foxtail Barley management practices, and outline resources required to control Foxtail Barley on City property to a height of 8cm.

SUPPORTING INFORMATION

Background:

Foxtail Barley is a native, naturally occurring plant in Calgary that provides some benefits to local ecosystems but does pose some risks to pets. It is not classified as a noxious weed and its removal is not legislated. As such, Administration does not apply a proactive approach to controlling the spread of Foxtail Barley, but rather responds to problematic areas as they are identified by staff or submitted through 3-1-1.

The Bylaw provisions for Foxtail Barley apply to *“land, or any portion thereof, that shows signs of a serious disregard for general maintenance and upkeep, that adversely affects the safety or health of surrounding residents, or land that is used in a manner which interferes with the use or enjoyment of surrounding properties”*. The Bylaw as written provides a mechanism to address nuisance properties of land. City-owned properties are regularly monitored and evaluated for excessive weed issues, including Foxtail Barley. 311 service requests for Foxtail Barley are nominal within Parks and Open Spaces. From January 2020 until August 2023 (a 3.5 year timespan), there were 279 Foxtail Barley related 3-1-1 service requests, representing 0.2 per cent of the total number of service requests to Parks & Open Spaces over this timeframe. All requests to date have been managed within the existing operating budget.

Specific to private property, from July 04, 2023 to October 15, 2023 (a 3.5 month timespan), there were 777 Bylaw “Long Grass - Weeds Infraction” 3-1-1 service requests, where the primary concern reported was “Foxtail Barley over 8 centimeters”. This represents 16.3 per cent within this category of infraction calls. Of these private property service requests, 198 (26 per cent) resulted in a warning issued, 35 (5 per cent) were sent for corrective action, and zero resulted in a summons issued.

All unkept or untidy properties within Calgary are governed consistently, regardless if they are public or private lands.

Current Foxtail Barley management practices:

The City of Calgary controls Foxtail Barley on public property through regular operations and maintenance:

- Mowing within manicured Parks and Open Spaces and along roadways to a standard cutting height of 8 centimeters
- Keeping grass below 15 centimeters on vacant land parcels
- Adjusting mowing practices as required (ie. frequency and mower blade heights)
- Removing by hand and bagging for disposal

- Improving soil management practices such as aeration and fertilizing, which allows turfgrass to become more prolific providing less opportunity for the establishment of weeds
- Planting various mixes of micro clover and grass seed in high traffic / high-use greenspaces, boulevards and medians that will outcompete weeds
- Replanting native grasses, small woody species, and spreading mulch in shrub beds
- Applying non-selective herbicides in shrub beds to eliminate unwanted vegetation

Our approach is to implement agronomic practices that improve overall turf health and help control excessive spreading of weeds.

The City also educates and communicates with the public and partners about the identification, prevention and management of Foxtail Barley on private properties. In July 2023, the Community Standards Bylaw was amended to require owners of nuisance property to control Foxtail Barley over 8 centimeters. The City can issue fines and remedial orders to enforce the Bylaw, if necessary, however the overwhelming majority of calls are resolved through education and warnings.

Cost estimate to control Foxtail Barley City-Wide:

Allowing Foxtail Barley to reach no higher than 8 centimeters across all City managed land would be a significant change to implement and require a comprehensive approach that would include the control measures as outlined above.

Within the Parks and Open Spaces land base, it is estimated adding two mow cycles and site-specific spot treatment would be required. A class 5 cost estimate for this additional work is in the order of \$2 million annually.

For vacant land parcels, increased service levels to mow at 8 centimeters will be required. Based on a class 5 cost estimate for this additional work there is the potential annual increase to costs of approximately \$200,000.

A detailed study would need to be undertaken for a more thorough cost analysis.

Implications to consider for a city-wide approach include:

- Inspection and quality control resource allocation: The City would need to allocate additional resources, beyond those noted above, to monitor, inspect and enforce the new mandate
- Operations budgetary requirements: increased need of supplies and labour dependent on approach taken for removal (manual removal, chemical application, or seed mix)
- Capacity: City forces and contracted service providers would struggle to increase service beyond current levels, as such, this capacity would need to be scaled up over time
- Environmental impacts: As Foxtail Barley is not a noxious weed, consideration to the environmental impacts of removal must also be evaluated. The effects on biodiversity and naturalization would require further study as there are some areas where Foxtail Barley removal would not be recommended or a best practice. Further, water use would need to increase commensurately with elevated turf management practices
- Perception: Spot treatments may be publicly perceived as unnecessary and as an unequitable level of service. Comparison to dandelion control would likely occur and providing rationale to prioritize one weed over another would be difficult

Before allocating any additional resources to control Foxtail Barley, the cost/benefit of implementing this approach should be evaluated in detail. City properties are considered tidy properties and have existing processes in place to address Foxtail Barley where it becomes a concern. Moving forward, The City will continue to address site specific Foxtail Barley issues on City property as they arise utilizing one or more of the control measures outlined above for treatment.