

# Councillor Request Inquiry

## #138

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2017

Councillor Information Request Report

Ward 1 – Vic Bidzinski

Request : Herbicide Treatment for Dandelions

Please provide information on what new herbicide the City of Edmonton is using to treat dandelions and any information on the recent decisions of this treatment (Cost, use, etc.).

The City of Edmonton stopped using conventional herbicide in June of 2015. In June of 2017, The City of Edmonton revised its turf management practices as a response to an increase in the number of broad leaf weed, including dandelions, on sports fields. The City will assess all 1,465 sports fields, and apply two applications of a herbicide, Iron Chelate, where needed.

Iron Chelate is a metallic chemical element that acts as a selective herbicide. Iron acts to reduce the oxygen intake in a number of broadleaf plant species, which causes the plant to die rapidly if applied in ideal conditions. Broad leaf weeds absorb the herbicide more easily and in higher quantities impacting their health almost instantly while turf grass is left unharmed. Treated weeds will dry up, shrivel, and turn black. While this may be unsightly, it is not unsafe.

Iron Chelate does not leave a hazardous chemical residue on the fields, dries quickly, has no unpleasant odour and, as indicated by Health Canada, is of low toxicity and poses minimal environmental risks. People and pets should avoid exposure during application and until the fields are dry (between 30 minutes and three hours, depending on the weather). After the product has dried, regular use of the fields can safely continue. This time frame is the same as most herbicide applications except for those regulated by the government that require users to keep people off the areas for 24 hours as a precaution.

Control of broad leaf weeds using an Iron Chelate herbicide requires multiple applications under ideal conditions and should be combined with other beneficial maintenance practices such as aeration, over seeding, and fertilizing. Tests conducted in Canada show that the product is often not successful at eliminating the root of treated weeds and regrowth often occurs.

Estimated costs for treating a sports field with Iron Chelate is five times more expensive than a 2-4d based herbicides (\$250 per Iron Chelate application).

Dandelion control on public property in Strathcona County is done in three ways:

- Turf aeration, topdressing, and overseeding.
- Mowing
- Spraying

Maintaining healthy grass is the most effective way to reduce dandelion growth. Compacted grass/turf areas are ideal growing areas for dandelions to take root. Aerating is one of Strathcona County's first line of defense to maintaining healthy grassed areas. Sports fields are aerated multiple times throughout the season, followed by high use parks, boulevards and the remaining park areas. Having healthy soil and turf density will also choke out weeds which is why we conduct topdressing and overseeding on our fields that need it most, based on our field testing results.

Mowing of grassed areas in the County is done on a 7 to 10 day cycle, which helps reduce the dandelion growth, although it won't eliminate the growth once it takes root. Dandelion growth is visible within three days, so you will often see the dandelions growing ahead of the grass. Mowing will knock down the growth, but not eliminate it. Consistent mowing will stress the plant out to the point where it will not return.

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Spraying is our third option and is done on a five-year cycle. Due to public concern over the years with pesticide spraying, we have not increased the frequency of our spraying. Spraying at school sites scheduled for this year will be starting the first week of August as school is out and these parks can be closed without affecting the school's use. The remaining areas scheduled for spraying are typically done starting the beginning of September. Dandelions start pulling in nutrients to their root system in the fall so it is the most effective time to spray to impact their future growth. On an annual basis Strathcona County treats approximately 100 to 135 acres of park area at a cost of \$20 to \$28 per acre depending on turf condition.

### Comparison of Edmonton Spraying Application Cost vs Strathcona County

Edmonton \$250 per application

Strathcona County - \$25 to \$28 per application